2009

WEED RESEARCH ANNUAL REPORT



Southern Illinois University

Department of Plant, Soil and Agricultural Systems

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SOUTHERN ILLINOIS UNIVERSITY

WEED CONTROL ANNUAL REPORTS

2009

DEPARTMENT OF PLANT, SOIL AND AGRICULTURAL SYSTEMS

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GENERAL STATEMENT

These reports are published for the purpose of providing current information to industry collaborators, colleagues at other universities, and other people interested in weed science conducted at Southern Illinois University.

Results from these studies are preliminary and are intended as a source of information on the performance of commercially available and experimental herbicides, safeners, surfactants, etc. It is not intended to serve as a recommendation or endorsement of specific practices or products. Current recommendations for weed control in Illinois are available from University of Illinois Extension.

Data or information in these reports is not for publication or reproduction without the consent of the authors. If you have any questions or suggestions for improving our data reporting or discover errors, we would appreciate your comments.

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The following firms provided financial support for the conduct of these studies for which we are sincerely grateful. Without this support, it would be impossible to conduct a meaningful program in weed control or other aspects of crop production.

Agro-Kanesho

Amvac

Asgrow

BASF Corp.

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Cheminova

Chemtura

Croda

DeKalb

Dow AgroSciences

DuPont Agr. Products

FMC Corp.

Floratine BioSciences

Georgia Pacific

Gowan Company

Golden Harvest

Growmark

Helena Chemical Co.

Huntsman

Illinois Soybean Association (ISA)

Isagro

Makhteshim Agan (MANA)

MEY

Monsanto

Nutrapathic

Pioneer Hi-Bred International

Precision Labs

Rosen's

Syngenta

Tessenderlo-Kerly

UAP/Loveland

United Suppliers

USDA

Valent U.S.A.

Winfield Solutions

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Adjuvant Studies, Corn or Soybean

Southern Illinois University

Laudis Oil Adjuvant Study.

Trial ID: 09-10C-W80 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Evaluate various oil-based adjuvants for use with Laudis in corn.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-73 **Description:** RR2/YGCB
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN			grasses, annual
Pest 2 Type: W	**Code:** AMATA	Amaranthus rudis Sauer		waterhemp, common
Pest 3 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus		velvetleaf
Pest 4 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.		morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.1 **Texture:** SILT LOAM
pH: 5.6 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1 80 LB/A, K 435 LB/A

Application Description

	A
Application Date:	07-20-09
Time of Day:	15:45
Application Method:	Spray
Application Timing:	4"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	80 F
% Relative Humidity:	70
Wind Velocity, Unit:	4 MPH
Wind Direction:	E
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	15
	07-20-09
Crop stage at application:	V5
Height Min, Max (inch):	8 10

Pest Stage At Each Application

Application Date:	07-20-09
Weed Code:	GGGAN
Stage Majority (leaves):	4
Stage Min, Max:	2 6
Height Majority:	4 IN
Height Min, Max:	1.5 6.5
Density, Unit:	3 FT2
Weed Code:	AMATA
Stage Majority (leaves):	6
Stage Min, Max:	3 8
Height Majority:	3 IN
Height Min, Max:	1 4
Density, Unit:	10 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	2
Stage Min, Max:	1 4
Height Majority:	3 IN
Height Min, Max:	1 4
Density, Unit:	1 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	6
Stage Min, Max:	4 8
Height Majority:	4 IN
Height Min, Max:	2 6
Density, Unit:	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Laudis Oil Adjuvant Study.

Trial ID: 09-10C-W80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 08-03-09 Injury Percent 14 DA-A	ZEAMD 08-17-09 Injury Percent 28 DA-A	ZEAMD 08-31-09 Injury Percent 42 DA-A	GGGAN 08-03-09 Control Percent 14 DA-A	GGGAN 08-17-09 Control Percent 28 DA-A	GGGAN 08-31-09 Control Percent 42 DA-A
1	NONTREATED									0 a	0 a	0 a	0 d	0 d	0 c
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	96 a	93 abc	91 ab
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
2	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
3	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	96 a	93 abc	92 ab
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
3	MSO CONCENTRATE	100	SL	0.75	% v/v	0.75	% v/v	4"W	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
4	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	96 ab	93 abc	91 ab
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
4	MSO CONCENTRATE	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	97 a	94 ab	92 ab
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
5	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	93 c	90 c	88 b
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
6	DYNE-AMIC	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	96 ab	95 ab	93 a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
7	SUNDANCE II	100	SL	1	% v/v	1	% v/v	4"W	A						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
8	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	94 bc	92 bc	91 ab
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
8	SOY-STIK	100	SL	1	% v/v	1	% v/v	4"W	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
9	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	96 ab	95 ab	94 a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
9	SUCCEED	100	SL	1	% v/v	1	% v/v	4"W	A						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
10	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	97 a	96 a	95 a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
10	PERSIST ULTRA	100	SL	1	% v/v	1	% v/v	4"W	A						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	0 a	0 a	0 a	96 a	94 ab	94 a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
11	SUPERSPREAD MSO	100	SL	1.5	pt/a	1.5	pt/a	4"W	A						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
LSD (P=.05)										0.0	0.0	0.0	2.0	3.4	4.2
Replicate F										0.000	0.000	0.000	4.434	1.928	3.452
Replicate Prob(F)										1.0000	1.0000	1.0000	0.0255	0.1716	0.0516
Treatment F										0.000	0.000	0.000	1869.674	596.075	377.547
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Laudis Oil Adjuvant Study.

Trial ID: 09-10C-W80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 08-03-09 Control Percent 14 DA-A	AMATA 08-17-09 Control Percent 28 DA-A	AMATA 08-31-09 Control Percent 42 DA-A	ABUTH 08-03-09 Control Percent 14 DA-A	ABUTH 08-17-09 Control Percent 28 DA-A	ABUTH 08-31-09 Control Percent 42 DA-A
1	NONTREATED									0 b	0 b	0 b	0 b	0 b	0 c
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	98 a	99 a	97 b
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
2	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
3	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	99 a	99 a	97 b
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
3	MSO CONCENTRATE	100	SL	0.75	% v/v	0.75	% v/v	4"W	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
4	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	98 a	99 a	97 b
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
4	MSO CONCENTRATE	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	99 a	99 a	97 b
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
5	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	99 a	99 a	97 b
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
6	DYNE-AMIC	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	99 a	99 a	98 ab
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
7	SUNDANCE II	100	SL	1	% v/v	1	% v/v	4"W	A						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
8	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	99 a	99 a	97 b
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
8	SOY-STIK	100	SL	1	% v/v	1	% v/v	4"W	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
9	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	98 a	99 a	97 b
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
9	SUCCEED	100	SL	1	% v/v	1	% v/v	4"W	A						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
10	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	98 a	98 a	97 b
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
10	PERSIST ULTRA	100	SL	1	% v/v	1	% v/v	4"W	A						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99 a	99 a	99 a	99 a	99 a	98 a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
11	SUPERSPREAD MSO	100	SL	1.5	pt/a	1.5	pt/a	4"W	A						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A						
LSD (P=.05)										0.0	0.0	0.0	0.9	0.9	0.8
Replicate F										0.000	0.000	0.000	1.000	1.928	4.756
Replicate Prob(F)										1.0000	1.0000	1.0000	0.3855	0.1716	0.0204
Treatment F										0.000	0.000	0.000	9702.801	10578.098	10392.928
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Laudis Oil Adjuvant Study.

Trial ID: 09-10C-W80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
	Pest Code									IPOHE		IPOHE		IPOHE
	Crop Code													
	Rating Date									08-03-09		08-17-09		08-31-09
	Rating Data Type									Control		Control		Control
	Rating Unit									Percent		Percent		Percent
	Rating Timing													
	Trt-Eval Interval									14 DA-A		28 DA-A		42 DA-A
1	NONTREATED									0	d	0	d	0 c
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	98	abc	97	abc	97 ab
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
2	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
3	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	98	abc	98	abc	98 a
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
3	MSO CONCENTRATE	100	SL	0.75	% v/v	0.75	% v/v	4"W	A					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
4	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	98	abc	97	abc	97 ab
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
4	MSO CONCENTRATE	100	SL	0.5	% v/v	0.5	% v/v	4"W	A					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	98	abc	98	ab	98 a
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
5	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	4"W	A					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	97	c	97	abc	97 ab
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
6	DYNE-AMIC	100	SL	0.5	% v/v	0.5	% v/v	4"W	A					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	97	bc	96	bc	97 ab
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
7	SUNDANCE II	100	SL	1	% v/v	1	% v/v	4"W	A					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
8	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	97	bc	97	abc	97 ab
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
8	SOY-STIK	100	SL	1	% v/v	1	% v/v	4"W	A					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
9	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99	ab	98	a	98 a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
9	SUCCEED	100	SL	1	% v/v	1	% v/v	4"W	A					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
10	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	99	a	98	ab	97 ab
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
10	PERSIST ULTRA	100	SL	1	% v/v	1	% v/v	4"W	A					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	oz/a	4"W	A	97	c	96	c	96 b
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
11	SUPERSPREAD MSO	100	SL	1.5	pt/a	1.5	pt/a	4"W	A					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	A					
	LSD (P=.05)									1.6		1.7		1.3
	Replicate F									6.982		3.548		2.908
	Replicate Prob(F)									0.0050		0.0480		0.0779
	Treatment F									3024.021		2496.763		4339.215
	Treatment Prob(F)									0.0001		0.0001		0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (DLY).
2. Ratings: CI/WC at 14, 28 + 42 DAT.
3. Estimate percent ground cover of each weed species at each application and evaluation timing.
4. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
5. Percent ground cover at application A for GGGAN, AMATA, ABUTH and IPOHE was 16, 10, 2 and 2, respectively.
   Percent ground cover at 14 DA-A for GGGAN, AMATA, ABUTH and IPOHE was 20, 30, 30 and 20, respectively.
   Percent ground cover at 28 DA-A for GGGAN, AMATA, ABUTH and IPOHE was 20, 30, 30 and 30, respectively.
6. Not harvested.

Laudis Deposition Aid Study.

Trial ID: 09-19B-N65 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-22-09

Objectives: Evaluate various deposition aid adjuvants to determine their influence on the corn response or efficacy on weeds with Laudis applications.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 3 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 5 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common
Pest 6 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 50 LB/A, K2O 100 LB/A

% OM: 2.9 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1 79 LB/A, K 557 LB/A

Application Description	A
Application Date:	06-12-09
Time of Day:	16:15
Application Method:	Spray
Application Timing:	4"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	72 F
% Relative Humidity:	92
Wind Velocity, Unit:	2 MPH
Wind Direction:	S
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	90
	06-12-09
Crop stage at application:	V3-4
Height Min, Max (inch):	10 16

Laudis Deposition Aid Study.

Trial ID: 09-19B-N65 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	06-12-09
Weed Code:	SETFA
Stage Majority (leaves):	2
Stage Min, Max:	COTY 3
Height Majority:	4 IN
Height Min, Max:	1 6
Density, Unit:	25 FT2
Weed Code:	PANDI
Stage Majority (leaves):	2
Stage Min, Max:	1 4
Height Majority:	5 IN
Height Min, Max:	2 7
Density, Unit:	1 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	3
Stage Min, Max:	1 6
Height Majority:	4 IN
Height Min, Max:	1 5
Density, Unit:	0.75 FT2
Weed Code:	AMATA
Stage Majority (leaves):	2
Stage Min, Max:	COTY 4
Height Majority:	2 IN
Height Min, Max:	0.5 3
Density, Unit:	3 FT2
Weed Code:	XANST
Stage Majority (leaves):	3
Stage Min, Max:	2 5
Height Majority:	4 IN
Height Min, Max:	2 6
Density, Unit:	0.25 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	2
Stage Min, Max:	COTY 3
Height Majority:	1.5 IN
Height Min, Max:	1 2.5
Density, Unit:	0.75 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Laudis Deposition Aid Study.

Trial ID: 09-19B-N65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 06-26-09 Injury Percent 14 DA-A	ZEAMD 07-10-09 Injury Percent 28 DA-A	ZEAMD 07-24-09 Injury Percent 42 DA-A	SETFA 06-26-09 Control Percent 14 DA-A	SETFA 07-10-09 Control Percent 28 DA-A	SETFA 07-24-09 Control Percent 42 DA-A
1	NONTREATED									0 a	0 a	0 a	0 c	0 e	0 d
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	87 b	72 d	68 c
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
2	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
2	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	A	0 a	0 a	0 a	97 a	97 a	97 a
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
3	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	97 a	78 cd	78 bc
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
4	MSO CONCENTRATE	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	95 a	92 abc	90 ab
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
5	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
5	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
5	COMPADRE	100	SL	0.125	% v/v	1	pt/100 gal	4"W	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	94 a	88 abc	88 ab
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
6	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
6	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
6	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	4"W	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	96 a	96 ab	96 a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
7	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
7	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
7	GROUNDED	100	SL	1	% v/v	1	gal/100 gal	4"W	A						
8	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	93 a	83 bcd	84 abc
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
8	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
8	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	4"W	A						
9	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	97 a	92 abc	93 ab
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
9	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
9	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
9	GARDIAN	100	SL	0.5	% v/v	2	qt/100 gal	4"W	A						
10	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	95 a	87 abc	89 ab
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
10	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
10	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
10	AFFECT GC	100	SL	0.0313	% v/v	4	fl oz/100 gal	4"W	A						
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	95 a	90 abc	92 ab
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
11	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
11	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
11	BORDER EG	100	SG	0.075	% w/w	10	oz/100 gal	4"W	A						
12	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	0 a	0 a	0 a	94 a	87 abc	87 ab
12	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
12	IN-PLACE	100	SL	1.1875	fl oz/a	1.1875	fl oz/a	4"W	A						
12	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
12	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
LSD (P=.05)										0.0	0.0	0.0	4.8	14.3	17.0
Replicate F										0.000	0.000	0.000	0.536	1.311	1.258
Replicate Prob(F)										1.0000	1.0000	1.0000	0.5928	0.2897	0.3037
Treatment F										0.000	0.000	0.000	279.282	29.008	20.872
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Laudis Deposition Aid Study.

Trial ID: 09-19B-N65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	PANDI 06-26-09 Control Percent 14 DA-A	PANDI 07-10-09 Control Percent 28 DA-A	PANDI 07-24-09 Control Percent 42 DA-A	AMBTR 06-26-09 Control Percent 14 DA-A	AMBTR 07-10-09 Control Percent 28 DA-A	AMBTR 07-24-09 Control Percent 42 DA-A
1	NONTREATED									0 d	0 c	0 d	0 b	0 b	0 b
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	28 bc	18 b	27 b	99 a	99 a	99 a
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
2	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
2	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	A	93 a	87 a	86 a	99 a	99 a	99 a
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
3	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	A	98 a	93 a	92 a	99 a	99 a	99 a
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
4	MSO CONCENTRATE	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	30 b	13 b	20 bc	99 a	99 a	99 a
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
5	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
5	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
5	COMPADRE	100	SL	0.125	% v/v	1	pt/100 gal	4"W	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	30 b	12 b	15 bc	99 a	99 a	99 a
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
6	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
6	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
6	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	4"W	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	27 bc	15 b	20 bc	99 a	99 a	98 a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
7	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
7	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
7	GROUNDED	100	SL	1	% v/v	1	gal/100 gal	4"W	A						
8	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	26 bc	10 b	13 c	99 a	99 a	98 a
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
8	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
8	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	4"W	A						
9	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	26 bc	12 b	13 c	99 a	99 a	99 a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
9	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
9	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
9	GARDIAN	100	SL	0.5	% v/v	2	qt/100 gal	4"W	A						
10	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	23 c	10 b	13 c	99 a	99 a	98 a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
10	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
10	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
10	AFFECT GC	100	SL	0.0313	% v/v	4	fl oz/100 gal	4"W	A						
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	27 bc	10 b	12 cd	99 a	99 a	99 a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
11	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
11	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
11	BORDER EG	100	SG	0.075	% w/w	10	oz/100 gal	4"W	A						
12	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	23 c	10 b	13 c	99 a	98 a	98 a
12	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
12	IN-PLACE	100	SL	1.1875	fl oz/a	1.1875	fl oz/a	4"W	A						
12	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
12	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
LSD (P=.05)										6.0	9.2	11.9	0.5	0.9	1.5
Replicate F										0.159	0.923	0.528	1.000	0.681	1.438
Replicate Prob(F)										0.8537	0.4123	0.5972	0.3840	0.5163	0.2589
Treatment F										196.913	98.710	52.854	29349.821	8545.160	2926.383
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Laudis Deposition Aid Study.

Trial ID: 09-19B-N65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 06-26-09 Control Percent 14 DA-A	AMATA 07-10-09 Control Percent 28 DA-A	AMATA 07-24-09 Control Percent 42 DA-A	XANST 06-26-09 Control Percent 14 DA-A	XANST 07-10-09 Control Percent 28 DA-A	XANST 07-24-09 Control Percent 42 DA-A
1	NONTREATED									0 b	0 c	0 c	0 c	0 b	0 b
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	99 a	98 ab	97 a	97 a
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
2	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
2	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	A	98 a	95 b	97 b	98 ab	98 a	98 a
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
3	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	98 ab	98 ab	98 a	96 a
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
4	MSO CONCENTRATE	100	SL	0.5	% v/v	0.5	% v/v	4"W	A						
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	99 a	98 ab	96 a	98 a
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
5	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
5	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
5	COMPADRE	100	SL	0.125	% v/v	1	pt/100 gal	4"W	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	98 ab	99 a	98 a	97 a
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
6	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
6	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
6	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	4"W	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	99 a	99 a	99 a	99 a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
7	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
7	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
7	GROUNDED	100	SL	1	% v/v	1	gal/100 gal	4"W	A						
8	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	99 a	98 ab	98 a	98 a
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
8	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
8	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	4"W	A						
9	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	99 a	98 ab	98 a	95 a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
9	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
9	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
9	GARDIAN	100	SL	0.5	% v/v	2	qt/100 gal	4"W	A						
10	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99 a	99 a	99 a	97 b	97 a	97 a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
10	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
10	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
10	AFFECT GC	100	SL	0.0313	% v/v	4	fl oz/100 gal	4"W	A						
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	98 a	98 ab	99 a	98 ab	95 a	96 a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
11	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
11	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
11	BORDER EG	100	SG	0.075	% w/w	10	oz/100 gal	4"W	A						
12	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	98 a	98 a	99 a	98 ab	98 a	99 a
12	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A						
12	IN-PLACE	100	SL	1.1875	fl oz/a	1.1875	fl oz/a	4"W	A						
12	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A						
12	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A						
LSD (P=.05)										1.4	3.2	1.2	1.8	3.8	4.7
Replicate F										0.155	0.327	0.391	5.200	1.639	3.007
Replicate Prob(F)										0.8574	0.7243	0.6811	0.0141	0.2170	0.0701
Treatment F										3400.602	664.567	4893.727	2163.134	482.163	308.093
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Laudis Deposition Aid Study.

Trial ID: 09-19B-N65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										ABUTH		ABUTH		ABUTH
Crop Code														
Rating Date										06-26-09		07-10-09		07-24-09
Rating Data Type										Control		Control		Control
Rating Unit										Percent		Percent		Percent
Rating Timing														
Trt-Eval Interval										14 DA-A		28 DA-A		42 DA-A
1	NONTREATED									0	c	0	c	0 d
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99	ab	99	a	99 a
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
2	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
2	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	A	98	ab	98	ab	98 bc
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
3	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	A	99	a	98	ab	98 c
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
4	MSO CONCENTRATE	100	SL	0.5	% v/v	0.5	% v/v	4"W	A					
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	98	ab	98	ab	99 a
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
5	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
5	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
5	COMPADRE	100	SL	0.125	% v/v	1	pt/100 gal	4"W	A					
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99	a	99	a	99 a
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
6	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
6	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
6	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	4"W	A					
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99	ab	99	a	99 a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
7	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
7	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
7	GROUNDED	100	SL	1	% v/v	1	gal/100 gal	4"W	A					
8	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	98	ab	98	ab	99 a
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
8	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
8	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	4"W	A					
9	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	98	ab	98	ab	99 a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
9	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
9	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
9	GARDIAN	100	SL	0.5	% v/v	2	qt/100 gal	4"W	A					
10	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99	ab	98	ab	99 a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
10	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
10	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
10	AFFECT GC	100	SL	0.0313	% v/v	4	fl oz/100 gal	4"W	A					
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	98	b	96	b	99 a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
11	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
11	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
11	BORDER EG	100	SG	0.075	% w/w	10	oz/100 gal	4"W	A					
12	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	A	99	a	99	a	99 ab
12	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4"W	A					
12	IN-PLACE	100	SL	1.1875	fl oz/a	1.1875	fl oz/a	4"W	A					
12	MSO CONCENTRATE	100	SL	1	% v/v	1	% v/v	4"W	A					
12	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	4"W	A					
LSD (P=.05)										1.3		2.6		0.6
Replicate F										4.296		1.151		0.579
Replicate Prob(F)										0.0266		0.3348		0.5688
Treatment F										4122.112		1000.289		16962.580
Treatment Prob(F)										0.0001		0.0001		0.0001

Laudis Deposition Aid Study.

Trial ID: 09-19B-N65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 06-26-09 Control Percent 14 DA-A	ABUTH 07-10-09 Control Percent 28 DA-A	ABUTH 07-24-09 Control Percent 42 DA-A

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (DLX).
2. Ratings: CI/WC at 14, 28 + 42 DAT.
3. Target should be 4"W or greater grass species.
4. Estimate percent ground cover of each weed species at each application and evaluation timing.
5. On 6-26-09 percent ground cover for SETFA, PANDI, AMBTR, AMATA, XANST, and ABUTH was 50, 20, 2, 2, 2, and 2, respectively.
   On 7-10-09 percent ground cover for SETFA, PANDI, AMBTR, AMATA, XANST, and ABUTH was 60, 20, 3, 3, 3, and 3, respectively.
   On 7-24-09 percent ground cover for SETFA, PANDI, AMBTR, AMATA, XANST, and ABUTH was 65, 25, 4, 1, 4, and 1, respectively.
6. Not harvested.

Ignite and Laudis - AMS and Deposition Aides.

Trial ID: 09-52-MMW50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-24-09

Objectives: Evaluate the crop tolerance and weed control of Ignite and Laudis applied with several commercial AMS and deposition aid adjuvant products.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 05-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN		grasses, annual
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.9 **Soil Name:** PIERRON
CEC: 9 **Fert. Level:** P1: 107 LB/A, K: 420 LB/A

Application Description

	A
Application Date:	06-18-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	4-6"WH
Application Placement:	BROFOL
Applied By:	DKT
Air Temperature, Unit:	80 F
% Relative Humidity:	92
Wind Velocity, Unit:	4 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	5
	06-18-09
Crop stage at application:	V3-4
Height Min, Max (inch):	20 26

Pest Stage At Each Application

Application Date:	06-18-09
Weed Code:	GGGAN
Stage Majority (leaves):	3
Stage Min, Max:	1 5
Height Majority:	7 IN
Height Min, Max:	3 12
Density, Unit:	1.5 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	8
Stage Min, Max:	3 12
Height Majority:	10 IN
Height Min, Max:	4 24
Density, Unit:	3 FT2
Weed Code:	AMATA
Stage Majority (leaves):	5
Stage Min, Max:	3 8
Height Majority:	5 IN
Height Min, Max:	2 8
Density, Unit:	2 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	2
Stage Min, Max:	1 4
Height Majority:	4 IN
Height Min, Max:	3 6
Density, Unit:	0.25 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Ignite and Laudis - AMS and Deposition Aides.

Trial ID: 09-52-MMW50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code													GGGAN	GGGAN
Crop Code										ZEAMD	ZEAMD	ZEAMD		
Rating Date										06-25-09	07-02-09	07-16-09	07-02-09	07-16-09
Rating Data Type										Injury	Injury	Injury	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
1	NONTREATED									0 b	0 a	0 a	0 f	0 f
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	65 cd	53 b-e
2	AMS	100	SG	1.2	% w/w	1.5	lb/a	4-6"WH	A					
3	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A	0 b	0 a	0 a	17 e	0 f
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	4-6"WH	A					
3	AMS	100	SG	1.2	% w/w	1.5	lb/a	4-6"WH	A					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	72 abc	53 b-e
4	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
4	AMS	100	SG	1.2	% w/w	1.5	lb/a	4-6"WH	A					
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	67 bcd	47 de
5	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
5	WEATHER GUARD COMPLETE	100	SL	0.5	% v/v	2	qt/100 gal	4-6"WH	A					
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	1 a	0 a	0 a	70 bc	60 bc
6	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
6	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	4-6"WH	A					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	72 abc	50 cde
7	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
7	CLASS ACT NG	100	SL	1.25	% v/v	5	qt/100 gal	4-6"WH	A					
7	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	4-6"WH	A					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	78 a	73 a
8	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
8	GARDIAN PLUS	100	SL	2.5	% v/v	2.5	gal/100 gal	4-6"WH	A					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	70 bc	60 bc
9	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
9	ACCUZONE DC	100	SG	1.08	% w/w	9	lb/100 gal	4-6"WH	A					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	73 ab	65 ab
10	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
10	DOUBLEDOWN	100	SL	2.5	% v/v	2.5	gal/100 gal	4-6"WH	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	68 bc	58 bcd
11	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
11	BORDER XTRA 8L	100	SL	2.5	% v/v	2.5	gal/100 gal	4-6"WH	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	0 b	0 a	0 a	60 d	45 e
12	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A					
12	BRONC MAX	100	SL	0.5	% v/v	2	qt/100 gal	4-6"WH	A					
LSD (P=.05)										0.8	0.0	0.0	7.4	13.2
Replicate F										1.000	0.000	0.000	2.686	1.690
Replicate Prob(F)										0.3840	1.0000	1.0000	0.0905	0.2077
Treatment F										1.000	0.000	0.000	95.314	27.063
Treatment Prob(F)										0.4767	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite and Laudis - AMS and Deposition Aides.

Trial ID: 09-52-MMW50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-02-09 Control Percent 14 DA-A	AMBTR 07-16-09 Control Percent 28 DA-A	AMATA 07-02-09 Control Percent 14 DA-A	AMATA 07-16-09 Control Percent 28 DA-A	ABUTH 07-02-09 Control Percent 14 DA-A	ABUTH 07-16-09 Control Percent 28 DA-A
1	NONTREATED									0 c	0 c	0 g	0 f	0 e	0 e
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	93 b	33 f	27 e	40 d	40 d
2	AMS	100	SG	1.2	% w/w	1.5	lb/a	4-6"WH	A						
3	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A	96 b	99 a	89 a	96 a	85 b	93 ab
3	MSO (DESTINY)	100	SL	1	pt/a	1	pt/a	4-6"WH	A						
3	AMS	100	SG	1.2	% w/w	1.5	lb/a	4-6"WH	A						
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	98 a	68 bc	47 b-e	98 a	98 a
4	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
4	AMS	100	SG	1.2	% w/w	1.5	lb/a	4-6"WH	A						
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	98 a	73 bc	65 b	99 a	99 a
5	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
5	WEATHER GUARD COMPLETE	100	SL	0.5	% v/v	2	qt/100 gal	4-6"WH	A						
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	99 a	63 cde	47 b-e	99 a	93 ab
6	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
6	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	4-6"WH	A						
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	97 a	67 bcd	57 bcd	96 a	85 ab
7	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
7	CLASS ACT NG	100	SL	1.25	% v/v	5	qt/100 gal	4-6"WH	A						
7	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	4-6"WH	A						
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	98 a	78 ab	67 b	99 a	96 ab
8	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
8	GARDIAN PLUS	100	SL	2.5	% v/v	2.5	gal/100 gal	4-6"WH	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	98 a	53 de	43 b-e	83 b	80 b
9	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
9	ACCUZONE DC	100	SG	1.08	% w/w	9	lb/100 gal	4-6"WH	A						
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	98 a	73 bc	59 bc	99 a	98 a
10	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
10	DOUBLEDOWN	100	SL	2.5	% v/v	2.5	gal/100 gal	4-6"WH	A						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	98 a	67 bcd	37 cde	98 a	89 ab
11	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
11	BORDER XTRA 8L	100	SL	2.5	% v/v	2.5	gal/100 gal	4-6"WH	A						
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	98 a	97 a	50 e	33 de	73 c	60 c
12	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4-6"WH	A						
12	BRONC MAX	100	SL	0.5	% v/v	2	qt/100 gal	4-6"WH	A						
LSD (P=.05)										0.6	2.3	13.9	23.8	10.1	18.0
Replicate F										1.453	4.710	0.307	0.667	0.361	1.066
Replicate Prob(F)										0.2555	0.0198	0.7387	0.5231	0.7012	0.3624
Treatment F										17858.191	1291.103	24.832	8.679	80.584	24.432
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (JNA).
2. Ratings: CI at 6-10 DAT; CI/WC at 14 + 28 DAT.
3. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
4. Not harvested.

Oil Adjuvants for Glyphosate plus Atrazine - Winfield Solutions.

Trial ID: 09-T3-MS50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-26-09

Objectives: Determine the efficacy of oil adjuvants in combination with glyphosate and atrazine in corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-26-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 2 Type: W **Code:** IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf
Pest 3 Type: W **Code:** PANDI Panicum dichotomiflorum Michx. panicum, fall

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1: 118 LB/A, K: 466 LB/A

Application Description

	A
Application Date:	07-27-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	6-8"W
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	72 F
% Relative Humidity:	90
Wind Velocity, Unit:	0 MPH
Dew Presence (Y/N):	Y
Soil Moisture:	NORMAL
% Cloud Cover:	10
	07-27-09
Crop stage at application:	V8-V9
Height Min, Max (inch):	36 42

Pest Stage At Each Application

Application Date:	07-27-09
Weed Code:	AMATA
Stage Majority (leaves):	10
Stage Min, Max:	6 14
Height Majority:	8 IN
Height Min, Max:	4 12
Density, Unit:	20 FT2
Weed Code:	IPOSS
Stage Majority (leaves):	8
Stage Min, Max:	8 12
Height Majority:	7 IN
Height Min, Max:	6 8
Density, Unit:	0.1 FT2
Weed Code:	PANDI
Stage Majority (leaves):	3
Stage Min, Max:	3 6
Height Majority:	5 IN
Height Min, Max:	2 7
Density, Unit:	0.01 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Oil Adjuvants for Glyphosate plus Atrazine - Winfield Solutions.

Trial ID: 09-T3-MS50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 08-10-09 Injury Percent 14 DA-A	ZEAMD 08-24-09 Injury Percent 28 DA-A	AMATA 08-10-09 Control Percent 14 DA-A	AMATA 08-24-09 Control Percent 28 DA-A	IPOHE 08-10-09 Control Percent 14 DA-A	IPOHE 08-24-09 Control Percent 28 DA-A	PANDI 08-10-09 Control Percent 14 DA-A	PANDI 08-24-09 Control Percent 28 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	63 d	77 d	70 d	78 e	65 b	82 c
1	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
2	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	75 c	90 bc	78 c	89 cd	77 a	83 bc
2	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
3	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	86 ab	92 abc	78 c	88 d	83 a	87 abc
3	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
3	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
4	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	88 a	94 ab	81 bc	91 bcd	80 a	86 abc
4	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
4	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
4	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6-8"W	A								
5	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	85 ab	90 bc	83 ab	93 abc	83 a	92 ab
5	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	6-8"W	A								
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
6	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	83 ab	95 a	78 c	93 ab	83 a	95 a
6	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	6-8"W	A								
6	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
7	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	88 a	94 ab	86 a	95 a	83 a	96 a
7	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	6-8"W	A								
7	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
7	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6-8"W	A								
8	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	86 ab	94 ab	81 bc	95 a	82 a	95 a
8	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
8	HSOC (DESTINY HC)	100	SL	0.5	% v/v	0.5	% v/v	6-8"W	A								
8	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
9	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	89 a	93 ab	85 ab	93 ab	80 a	92 ab
9	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
9	HSOC (DESTINY HC)	100	SL	0.5	% v/v	0.5	% v/v	6-8"W	A								
9	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
9	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6-8"W	A								
10	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A	0 a	0 a	80 bc	87 c	82 abc	91 bcd	80 a	94 a
10	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	6-8"W	A								
10	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"W	A								
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W	A								
LSD (P=.05)										0.0	0.0	6.9	5.0	4.6	4.2	8.7	9.9
Replicate F										0.000	0.000	1.036	0.084	16.949	1.112	7.462	8.448
Replicate Prob(F)										1.0000	1.0000	0.3750	0.9198	0.0001	0.3506	0.0044	0.0026
Treatment F										0.000	0.000	11.412	10.723	8.722	12.073	3.661	2.391
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0092	0.0552

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Winfield Solutions.
2. Ratings: CI/WC 14 and 28 DAT.
3. Not harvested.

Capreno Adjuvant Packages.

Trial ID: 09-2C-E65 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Determine the influence of commercial adjuvant products on the efficacy of Capreno on fall panicum and other weed species.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 2 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 3 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** PIERRON
CEC: 8 **Fert. Level:** P1: 92 LB/A, K: 365 LB/A

Application Description

	A
Application Date:	07-16-09
Time of Day:	14:45
Application Method:	Spray
Application Timing:	3-4"FP
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	84 F
% Relative Humidity:	58
Wind Velocity, Unit:	3 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	10
	07-16-09
Crop stage at application:	V4
Height Min, Max (inch):	10 14

Pest Stage At Each Application

Application Date:	07-16-09
Weed Code:	PANDI
Stage Majority (leaves):	3
Stage Min, Max:	COTY 10
Height Majority:	4 IN
Height Min, Max:	1 14
Density, Unit:	0.01 FT2
Weed Code:	AMATA
Stage Majority (leaves):	4
Stage Min, Max:	3 7
Height Majority:	2 IN
Height Min, Max:	1 4
Density, Unit:	0.7 FT2
Weed Code:	AMBEL
Stage Majority (leaves):	2
Stage Min, Max:	COTY 4
Height Majority:	2 IN
Height Min, Max:	0.5 3
Density, Unit:	0.6 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	1
Stage Min, Max:	COTY 2
Height Majority:	1 IN
Height Min, Max:	0.5 2.5
Density, Unit:	0.6 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Capreno Adjuvant Packages.

Trial ID: 09-2C-E65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 07-30-09 Injury Percent 14 DA-A	ZEAMD 08-13-09 Injury Percent 28 DA-A	ZEAMD 08-27-09 Injury Percent 42 DA-A	PANDI 07-30-09 Control Percent 14 DA-A	PANDI 08-13-09 Control Percent 28 DA-A	PANDI 08-27-09 Control Percent 42 DA-A
1	NONTREATED									0 f	0 a	0 a	0 e	0 c	0 d
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	11 a	2 a	0 a	97 ab	99 a	98 b
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
2	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A						
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	3-4"FP	A	1 ef	0 a	0 a	98 a	95 b	95 c
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
3	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A						
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	3 c-f	0 a	0 a	95 c	99 a	99 ab
4	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
4	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	3-4"FP	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A						
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	6 bc	1 a	0 a	96 bc	99 a	98 b
5	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A						
5	WEATHER GUARD COMPLETE	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
6	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	5 bcd	0 a	0 a	97 ab	99 a	98 ab
6	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"FP	A						
6	CLASS ACT NG	100	SL	1.25	% v/v	5	qt/100 gal	3-4"FP	A						
6	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	3-4"FP	A						
7	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	4 cde	0 a	0 a	96 bc	99 a	98 ab
7	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
7	DYNE-AMIC	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
7	ACCUZONE DC	100	SG	1.08	% w/w	9	lb/100 gal	3-4"FP	A						
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	4 cde	0 a	0 a	97 ab	99 a	98 ab
8	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
8	SUNDANCE II	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
8	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	3-4"FP	A						
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	2 def	0 a	0 a	92 d	99 a	99 a
9	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
9	SOY-STIK	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
9	GARDIAN PLUS	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	4 cde	0 a	0 a	97 ab	99 a	99 a
10	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
10	SUCCEED	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
10	DOUBLEDOWN	100	SL	2.5	% v/v	2.5	gal/100 gal	3-4"FP	A						
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	8 ab	2 a	0 a	97 ab	99 a	99 a
11	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
11	PERSIST ULTRA	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
11	BORDER XTRA 8L	100	SL	2.5	% v/v	2.5	gal/100 gal	3-4"FP	A						
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	10 a	2 a	0 a	97 ab	99 a	99 ab
12	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
12	SUPERSPREAD MSO	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
12	BRONC MAX E.D.T.	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
LSD (P=.05)										3.5	2.6	0.0	1.5	1.3	0.8
Replicate F										4.013	1.650	0.000	0.138	1.000	2.655
Replicate Prob(F)										0.0327	0.2149	1.0000	0.8723	0.3840	0.0927
Treatment F										8.220	1.028	0.000	2874.400	4169.767	10987.863
Treatment Prob(F)										0.0001	0.4558	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Adjuvant Packages.

Trial ID: 09-2C-E65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 07-30-09 Control Percent 14 DA-A	AMATA 08-13-09 Control Percent 28 DA-A	AMATA 08-27-09 Control Percent 42 DA-A	AMBEL 07-30-09 Control Percent 14 DA-A	AMBEL 08-13-09 Control Percent 28 DA-A	AMBEL 08-27-09 Control Percent 42 DA-A
1	NONTREATED									0 b	0 b	0 b	0 b	0 b	0 b
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
2	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A						
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
3	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A						
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
4	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
4	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	3-4"FP	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A						
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
5	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A						
5	WEATHER GUARD COMPLETE	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
6	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
6	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"FP	A						
6	CLASS ACT NG	100	SL	1.25	% v/v	5	qt/100 gal	3-4"FP	A						
6	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	3-4"FP	A						
7	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
7	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
7	DYNE-AMIC	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
7	ACCUZONE DC	100	SG	1.08	% w/w	9	lb/100 gal	3-4"FP	A						
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
8	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
8	SUNDANCE II	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
8	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	3-4"FP	A						
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
9	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
9	SOY-STIK	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
9	GARDIAN PLUS	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
10	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
10	SUCCEED	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
10	DOUBLEDOWN	100	SL	2.5	% v/v	2.5	gal/100 gal	3-4"FP	A						
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
11	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
11	PERSIST ULTRA	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
11	BORDER XTRA 8L	100	SL	2.5	% v/v	2.5	gal/100 gal	3-4"FP	A						
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a	99 a	99 a	99 a
12	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A						
12	SUPERSPREAD MSO	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A						
12	BRONC MAX E.D.T.	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A						
LSD (P=.05)										0.0	0.0	0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Adjuvant Packages.

Trial ID: 09-2C-E65 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										ABUTH	ABUTH	ABUTH
Crop Code												
Rating Date										07-30-09	08-13-09	08-27-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing												
Trt-Eval Interval										14 DA-A	28 DA-A	42 DA-A
1	NONTREATED									0 b	0 b	0 b
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
2	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A			
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A			
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	3-4"FP	A	99 a	99 a	99 a
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
3	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A			
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A			
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
4	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
4	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	3-4"FP	A			
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3-4"FP	A			
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
5	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	3-4"FP	A			
5	WEATHER GUARD COMPLETE	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A			
6	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
6	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"FP	A			
6	CLASS ACT NG	100	SL	1.25	% v/v	5	qt/100 gal	3-4"FP	A			
6	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	3-4"FP	A			
7	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
7	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
7	DYNE-AMIC	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A			
7	ACCUZONE DC	100	SG	1.08	% w/w	9	lb/100 gal	3-4"FP	A			
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
8	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
8	SUNDANCE II	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A			
8	ARRAY	100	SG	1.08	% w/w	9	lb/100 gal	3-4"FP	A			
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
9	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
9	SOY-STIK	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A			
9	GARDIAN PLUS	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A			
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
10	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
10	SUCCEED	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A			
10	DOUBLEDOWN	100	SL	2.5	% v/v	2.5	gal/100 gal	3-4"FP	A			
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
11	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
11	PERSIST ULTRA	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A			
11	BORDER XTRA 8L	100	SL	2.5	% v/v	2.5	gal/100 gal	3-4"FP	A			
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	3-4"FP	A	99 a	99 a	99 a
12	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	3-4"FP	A			
12	SUPERSPREAD MSO	100	SL	1.5	pt/a	1.5	pt/a	3-4"FP	A			
12	BRONC MAX E.D.T.	100	SL	0.5	% v/v	2	qt/100 gal	3-4"FP	A			
LSD (P=.05)										0.0	0.0	0.0
Replicate F										0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (DLZ).
2. Ratings: CI/WC at 14, 28 + 42 DAT.
3. Target Fall panicum.
4. Crop injury was stunting.
5. Not harvested.

Capreno Adjuvant Study - Precision Labs.

Trial ID: 09-52-E30 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-24-09

Objectives: Evaluate experimental oil-based adjuvants for use with Capreno in corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 05-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.9 **Soil Name:** PIERRON
CEC: 9 **Fert. Level:** P1: 107 LB/A, K: 420 LB/A

Application Description

	A
Application Date:	06-18-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	4-6"W
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	80 F
% Relative Humidity:	92
Wind Velocity, Unit:	4 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	5
	06-18-09
Crop stage at application:	V2-V3
Height Min, Max (inch):	10 18

Pest Stage At Each Application

Application Date:	06-18-09
Weed Code:	SETFA
Stage Majority (leaves):	2
Stage Min, Max:	1 4
Height Majority:	6 IN
Height Min, Max:	2 12
Density, Unit:	4 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	8
Stage Min, Max:	3 12
Height Majority:	5 IN
Height Min, Max:	3 10
Density, Unit:	3 FT2
Weed Code:	AMATA
Stage Majority (leaves):	6
Stage Min, Max:	3 8
Height Majority:	3 IN
Height Min, Max:	2 6
Density, Unit:	1 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	2
Stage Min, Max:	1 4
Height Majority:	4 IN
Height Min, Max:	3 6
Density, Unit:	0.75 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Capreno Adjuvant Study - Precision Labs.

Trial ID: 09-52-E30 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code												SETFA	SETFA	AMBTR	AMBTR	AMATA	AMATA
Crop Code												ZEAMD	ZEAMD				
Rating Date												07-02-09	07-16-09	07-02-09	07-16-09	07-02-09	07-16-09
Rating Data Type												Injury	Injury	Control	Control	Control	Control	Control	Control
Rating Unit												Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing																			
Trt-Eval Interval												14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
1	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	0	a	0	a	18	ab	22	ab	89	b	85	bc	23	c	23	c
1	COC	100	SL	1	% v/v	1	% v/v	4-6"W	A																
1	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A																
2	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	0	a	0	a	20	ab	18	bc	93	ab	94	a	27	abc	35	ab
2	PERSIST ULTRA	100	SL	1	% v/v	1	% v/v	4-6"W	A																
2	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A																
3	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	0	a	0	a	22	a	25	a	96	a	94	a	32	a	35	ab
3	MSO ULTRA	100	SL	1	% v/v	1	% v/v	4-6"W	A																
3	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A																
4	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	0	a	0	a	18	ab	22	ab	84	c	78	e	28	abc	25	bc
4	HSO/MSO	100	SL	0.375	% v/v	0.375	% v/v	4-6"W	A																
4	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A																
5	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	0	a	0	a	22	a	25	a	91	b	88	b	30	ab	42	a
5	HSO/MSO	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A																
5	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A																
6	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	0	a	0	a	22	a	15	cd	91	b	83	cd	25	bc	20	c
6	HSO/COC	100	SL	0.375	% v/v	0.375	% v/v	4-6"W	A																
6	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A																
7	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	0	a	0	a	17	b	12	d	91	b	80	de	28	abc	28	bc
7	HSO/COC	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A																
7	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A																
8	NONTREATED									0	a	0	a	0	c	0	e	0	d	0	f	0	d	0	d
LSD (P=.05)										0.0		0.0		4.3		6.2		4.4		4.5		5.6		11.4	
Replicate F										0.000		0.000		1.195		1.565		1.525		3.936		1.928		1.780	
Replicate Prob(F)										1.0000		1.0000		0.3317		0.2436		0.2516		0.0440		0.1822		0.2047	
Treatment F										0.000		0.000		25.732		16.741		499.482		441.692		29.913		11.369	
Treatment Prob(F)										1.0000		1.0000		0.0001		0.0001		0.0001		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Adjuvant Study - Precision Labs.

Trial ID: 09-52-E30 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Code										ABUTH	ABUTH
Crop Code											
Rating Date										07-02-09	07-16-09
Rating Data Type										Control	Control
Rating Unit										Percent	Percent
Rating Timing											
Trt-Eval Interval										14 DA-A	28 DA-A
1	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	70 b	43 a
1	COC	100	SL	1	% v/v	1	% v/v	4-6"W	A		
1	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
2	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	80 a	45 a
2	PERSIST ULTRA	100	SL	1	% v/v	1	% v/v	4-6"W	A		
2	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
3	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	72 b	48 a
3	MSO ULTRA	100	SL	1	% v/v	1	% v/v	4-6"W	A		
3	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
4	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	70 b	45 a
4	HSO/MSO	100	SL	0.375	% v/v	0.375	% v/v	4-6"W	A		
4	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
5	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	73 b	48 a
5	HSO/MSO	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A		
5	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
6	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	75 ab	43 a
6	HSO/COC	100	SL	0.375	% v/v	0.375	% v/v	4-6"W	A		
6	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
7	CAPRENO	3.45	SC	0.027	lb ai/a	1	fl oz/a	4-6"W	A	80 a	48 a
7	HSO/COC	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A		
7	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
8	NONTREATED									0 c	0 b
LSD (P=.05)										5.2	10.2
Replicate F										3.529	0.970
Replicate Prob(F)										0.0739	0.4120
Treatment F										262.429	25.416
Treatment Prob(F)										0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Precision Labs.
2. Ratings: CI/WC at 14 + 28 DAT.
3. A dense mat of grass choked out most broadleaf weeds by 14 DAT.
4. Not harvested.

GlyStar Adjuvant Evaluation in Roundup Ready Corn - United Suppliers.

Trial ID: 09-11A-W45 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Evaluate the performance of commercial and experimental surfactants for use with glyphosate.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-73 **Description:** RR2/YGCB
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN		grasses, annual
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2 **Texture:** SILT LOAM
pH: 5.6 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1 75 LB/A, K 348 LB/A

Application Description

	A
Application Date:	07-20-09
Time of Day:	16:00
Application Method:	Spray
Application Timing:	4-6"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	80 F
% Relative Humidity:	70
Wind Velocity, Unit:	5 MPH
Wind Direction:	E
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	20
	07-20-09
Crop stage at application:	V5
Height Min, Max (inch):	8 10

Pest Stage At Each Application

Application Date:	07-20-09
Weed Code:	GGGAN
Stage Majority (leaves):	5
Stage Min, Max:	1 10
Height Majority:	5 IN
Height Min, Max:	2 10
Density, Unit:	1 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	4
Stage Min, Max:	COTY 7
Height Majority:	5 IN
Height Min, Max:	0.5 10
Density, Unit:	0.5 FT2
Weed Code:	AMATA
Stage Majority (leaves):	5
Stage Min, Max:	3 8
Height Majority:	3 IN
Height Min, Max:	1 4
Density, Unit:	3 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	4
Stage Min, Max:	3 6
Height Majority:	4.5 IN
Height Min, Max:	2 6
Density, Unit:	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

GlyStar Adjuvant Evaluation in Roundup Ready Corn - United Suppliers.

Trial ID: 09-11A-W45 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 08-03-09 Injury Percent 14 DA-A	ZEAMD 08-17-09 Injury Percent 28 DA-A	GGGAN 08-03-09 Control Percent 14 DA-A	GGGAN 08-17-09 Control Percent 28 DA-A	AMBTR 08-03-09 Control Percent 14 DA-A	AMBTR 08-17-09 Control Percent 28 DA-A	AMATA 08-03-09 Control Percent 14 DA-A	AMATA 08-17-09 Control Percent 28 DA-A
1	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	96 b	97 a	99 a	99 ab
1	CHEMSURF 80	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A								
2	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	96 ab	97 a	97 ab	98 bc
2	CHEMSURF 90	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A								
3	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	98 ab	97 a	99 a	98 abc
3	USEX109	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A								
4	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	97 ab	97 a	98 a	98 abc
4	USEX109	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A								
5	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	98 a	98 a	99 a	99 a
5	USEX209	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A								
6	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	97 ab	97 a	95 b	97 c
6	USEX209	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A								
7	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	96 ab	97 a	98 a	98 bc
8	NONTREATED									0 a	0 a	0 b	0 b	0 c	0 b	0 c	0 d
LSD (P=.05)										0.0	0.0	0.0	0.0	1.9	1.5	3.1	1.3
Replicate F										0.000	0.000	0.000	0.000	1.276	0.168	0.524	4.586
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	0.3097	0.8470	0.6033	0.0294
Treatment F										0.000	0.000	0.000	0.000	2915.463	4756.480	1159.968	6976.725
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

GlyStar Adjuvant Evaluation in Roundup Ready Corn - United Suppliers.

Trial ID: 09-11A-W45 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Code									IPOHE	IPOHE
	Crop Code										
	Rating Date									08-03-09	08-17-09
	Rating Data Type									Control	Control
	Rating Unit									Percent	Percent
	Rating Timing										
	Trt-Eval Interval									14 DA-A	28 DA-A
1	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	89 a	94 a
1	CHEMSURF 80	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A		
2	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	86 ab	93 a
2	CHEMSURF 90	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A		
3	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	87 a	94 a
3	USEX109	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A		
4	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	80 d	89 c
4	USEX109	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A		
5	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	87 a	94 a
5	USEX209	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A		
6	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	84 bc	92 ab
6	USEX209	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A		
7	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	82 cd	90 bc
8	NONTREATED									0 e	0 d
	LSD (P=.05)									3.1	2.3
	Replicate F									0.781	2.177
	Replicate Prob(F)									0.4770	0.1502
	Treatment F									896.368	1800.870
	Treatment Prob(F)									0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: United Suppliers.
2. Ratings: CI/WC at 14 + 28 DAT.
3. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
4. Not harvested.

Ignite Adjuvant Study - United Suppliers.

Trial ID: 09-T3-S30 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-26-09

Objectives: Evaluate efficacy of United Suppliers adjuvants for use with Ignite in corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-26-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** GGGAN grasses, annual
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 3 Type: W **Code:** IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1: 118 LB/A, K: 466 LB/A

Application Description

	A
Application Date:	07-23-09
Time of Day:	8:30
Application Method:	Spray
Application Timing:	4-6"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	70 F
% Relative Humidity:	92
Wind Velocity, Unit:	3 MPH
Wind Direction:	W
Dew Presence (Y/N):	Y
Soil Moisture:	NORMAL
% Cloud Cover:	80
	07-23-09
Crop stage at application:	V6
Height Min, Max (inch):	16 18

Pest Stage At Each Application

Application Date:	07-23-09
Weed Code:	GGGAN
Stage Majority (leaves):	2
Stage Min, Max:	1 4
Height Majority:	4.5 IN
Height Min, Max:	3 6
Density, Unit:	0.2 FT2
Weed Code:	AMATA
Stage Majority (leaves):	6
Stage Min, Max:	3 10
Height Majority:	5 IN
Height Min, Max:	2 8
Density, Unit:	10 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	4
Stage Min, Max:	1 7
Height Majority:	5 IN
Height Min, Max:	1 6
Density, Unit:	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15

Ignite Adjuvant Study - United Suppliers.

Trial ID: 09-T3-S30 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 08-06-09 Injury Percent 14 DA-A	ZEAMD 08-20-09 Injury Percent 28 DA-A	GGGAN 08-06-09 Control Percent 14 DA-A	GGGAN 08-20-09 Control Percent 28 DA-A	AMATA 08-06-09 Control Percent 14 DA-A	AMATA 08-20-09 Control Percent 28 DA-A	IPOHE 08-06-09 Control Percent 14 DA-A	IPOHE 08-20-09 Control Percent 28 DA-A
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"W	A	0 a	0 a	83 b	92 a	91 b	93 b	84 a	88 a
1	AMSOL	100	SL	5	% v/v	5	% v/v	4-6"W	A								
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"W	A	0 a	0 a	90 a	95 a	96 a	97 a	88 a	93 a
2	AMSOL	100	SL	5	% v/v	5	% v/v	4-6"W	A								
2	CHEMSURF 80	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A								
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"W	A	0 a	0 a	92 a	95 a	97 a	97 a	88 a	92 a
3	AMSOL	100	SL	5	% v/v	5	% v/v	4-6"W	A								
3	WETCIT	100	SL	25	fl oz/a	25	fl oz/a	4-6"W	A								
4	NONTREATED									0 a	0 a	0 c	0 b	0 c	0 c	0 b	0 b
LSD (P=.05)										0.0	0.0	5.5	4.6	2.2	3.0	5.2	6.2
Replicate F										0.000	0.000	5.727	2.347	0.467	0.470	1.324	1.634
Replicate Prob(F)										1.0000	1.0000	0.0406	0.1766	0.6481	0.6463	0.3340	0.2713
Treatment F										0.000	0.000	771.182	1231.544	5379.800	2975.807	827.093	645.542
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: United Suppliers.
2. Ratings: CI/WC at 14 and 28 DAT.
3. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).

Ignite Application Methods.

Trial ID: 09-HRC-WU12-IgApplic Location: Horticulture Res. Ctr.

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 07-23-09

Objectives: Evaluate application methods for optimal activity with Ignite.

Crop 1: YACKR Arable land **Variety:** NON-CROP

Pest 1 Type: W **Code:** IPOSS morningglory, species
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 50 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Factorial

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6.7
CEC: 10 **Fert. Level:** P1: 92 LB/A, K: 334 LB/A

Application Description	A
Application Date:	07-23-09
Time of Day:	17:00
Application Method:	Spray
Application Timing:	6"W
Application Placement:	BROFOL
Applied By:	DT JK
Air Temperature, Unit:	90 F
% Relative Humidity:	56
Wind Velocity, Unit:	1 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Temperature, Unit:	82 F
Soil Moisture:	NORMAL
% Cloud Cover:	20
	07-23-09
Crop stage at application:	NA

Pest Stage At Each Application	
Application Date:	07-23-09
Weed Code:	IPOSS
Stage Majority (leaves):	5
Stage Min, Max:	2 7
Height Majority:	5 IN
Height Min, Max:	3 8
Density, Unit:	4 FT2
Weed Code:	AMATA
Stage Majority (leaves):	5
Stage Min, Max:	3 7
Height Majority:	5 IN
Height Min, Max:	4 8
Density, Unit:	2 FT2

Application Equipment

Appl. Equipment: CO2 sprayer
Operating Pressure: 30 PSI
Nozzle Type: See
Nozzle Size: comments
Boom Length, Unit: 6.67 FT

Ignite Application Methods.

Trial ID: 09-HRC-WU12-IgApplic Location: Horticulture Res. Ctr.

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
	Pest Code									IPOSS		IPOSS		AMATA		AMATA	
	Crop Code																
	Rating Date									08-06-09		08-20-09		08-06-09		08-20-09	
	Rating Data Type									Control		Control		Control		Control	
	Rating Unit									Percent		Percent		Percent		Percent	
	Rating Timing																
	Trt-Eval Interval									14 DA-A		28 DA-A		14 DA-A		28 DA-A	
1	XR11003 at 10 GPA and 7 MPH									91	a-h	82	d-i	77	gh	49	k
1	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
2	XR11003 at 10 GPA and 7 MPH									90	a-i	87	a-f	92	a-d	82	a-g
2	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
2	AMS	100	SG	3	lb/a	3	lb/a	6"W	A								
3	XR11003 at 10 GPA and 7 MPH									89	c-j	85	b-f	92	abc	81	a-g
3	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
3	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
4	XR11003 at 10 GPA and 7 MPH									90	a-i	90	a-d	92	abc	84	a-f
4	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
4	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
4	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A								
5	XR11003 at 10 GPA and 7 MPH									87	e-l	80	e-i	90	a-d	85	a-e
5	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
5	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A								
5	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
5	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A								
6	XR11004 at 10 GPA and 10 MPH									96	a	91	a-d	89	a-d	77	e-h
6	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
7	XR11004 at 10 GPA and 10 MPH									91	a-h	88	a-e	89	a-d	77	d-h
7	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
7	AMS	100	SG	3	lb/a	3	lb/a	6"W	A								
8	XR11004 at 10 GPA and 10 MPH									95	ab	93	ab	93	ab	89	a
8	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
8	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
9	XR11004 at 10 GPA and 10 MPH									89	c-k	83	d-h	92	abc	87	abc
9	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
9	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
9	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A								
10	XR11004 at 10 GPA and 10 MPH									85	h-n	80	e-i	87	b-f	82	a-g
10	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
10	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A								
10	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
10	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A								
11	AIXR110015 at 10 GPA and 3.5 MPH									83	j-o	74	h-k	82	efg	64	j
11	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
12	AIXR110015 at 10 GPA and 3.5 MPH									87	d-l	90	a-d	90	a-d	81	a-g
12	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
12	AMS	100	SG	3	lb/a	3	lb/a	6"W	A								
13	AIXR110015 at 10 GPA and 3.5 MPH									83	k-p	78	f-i	86	c-f	80	a-g
13	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
13	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
14	AIXR110015 at 10 GPA and 3.5 MPH									87	e-l	82	d-i	88	a-e	81	a-g
14	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
14	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
14	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A								
15	AIXR110015 at 10 GPA and 3.5 MPH									78	op	66	kl	82	efg	72	g-j
15	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								
15	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A								
15	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A								
15	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A								
16	AIXR11003 at 10 GPA and 7.5 MPH									92	a-f	84	b-f	86	c-f	86	a-d
16	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A								

Ignite Application Methods.

Trial ID: 09-HRC-WU12-IgApplic Location: Horticulture Res. Ctr.

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS 08-06-09 Control Percent 14 DA-A	IPOSS 08-20-09 Control Percent 28 DA-A	AMATA 08-06-09 Control Percent 14 DA-A	AMATA 08-20-09 Control Percent 28 DA-A
17	AIXR11003 at 10 GPA and 7.5 MPH									94 abc	85 b-f	93 ab	88 ab
17	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
17	AMS	100	SG	3	lb/a	3	lb/a	6"W	A				
18	AIXR11003 at 10 GPA and 7.5 MPH									93 a-d	83 d-h	85 def	77 e-h
18	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
18	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
19	AIXR11003 at 10 GPA and 7.5 MPH									91 a-h	85 b-f	93 abc	81 a-g
19	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
19	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
19	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
20	AIXR11003 at 10 GPA and 7.5 MPH									85 g-m	83 d-h	92 a-d	83 a-f
20	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
20	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A				
20	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
20	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
21	XR11003 at 15 GPA and 5 MPH									90 b-i	81 e-i	88 a-e	67 ij
21	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
22	XR11003 at 15 GPA and 5 MPH									91 a-g	88 a-e	92 a-d	79 b-h
22	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
22	AMS	100	SG	3	lb/a	3	lb/a	6"W	A				
23	XR11003 at 15 GPA and 5 MPH									93 a-e	88 a-e	93 abc	81 a-g
23	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
23	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
24	XR11003 at 15 GPA and 5 MPH									94 abc	93 abc	91 a-d	85 a-e
24	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
24	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
24	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
25	XR11003 at 15 GPA and 5 MPH									88 c-l	81 e-i	85 def	75 f-i
25	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
25	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A				
25	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
25	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
26	XR11004 at 15 GPA and 7 MPH									90 b-i	73 ijk	89 a-d	77 e-h
26	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
27	XR11004 at 15 GPA and 7 MPH									91 a-h	90 a-d	95 a	88 abc
27	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
27	AMS	100	SG	3	lb/a	3	lb/a	6"W	A				
28	XR11004 at 15 GPA and 7 MPH									92 a-f	88 a-e	94 a	84 a-f
28	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
28	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
29	XR11004 at 15 GPA and 7 MPH									96 ab	95 a	92 a-d	82 a-g
29	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
29	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
29	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
30	XR11004 at 15 GPA and 7 MPH									80 m-p	74 h-k	91 a-d	78 c-h
30	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
30	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A				
30	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
30	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
31	AIXR110015 at 15 GPA and 2.4 MPH									82 l-p	75 g-j	92 a-d	82 a-f
31	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
32	AIXR110015 at 15 GPA and 2.4 MPH									91 a-g	83 d-h	91 a-d	83 a-f
32	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
32	AMS	100	SG	3	lb/a	3	lb/a	6"W	A				

Ignite Application Methods.

Trial ID: 09-HRC-WU12-IgApplic Location: Horticulture Res. Ctr.

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS 08-06-09 Control Percent 14 DA-A	IPOSS 08-20-09 Control Percent 28 DA-A	AMATA 08-06-09 Control Percent 14 DA-A	AMATA 08-20-09 Control Percent 28 DA-A
33	AIXR110015 at 15 GPA and 2.4 MPH									84 i-o	82 d-i	94 a	77 d-h
33	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
33	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
34	AIXR110015 at 15 GPA and 2.4 MPH									93 a-e	85 b-f	91 a-d	76 e-i
34	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
34	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
34	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
35	AIXR110015 at 15 GPA and 2.4 MPH									70 q	63 l	80 fg	76 e-i
35	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
35	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A				
35	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
35	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
36	AIXR11003 at 15 GPA and 4.95 MPH									79 nop	80 e-i	81 fg	70 hij
36	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
37	AIXR11003 at 15 GPA and 4.95 MPH									94 abc	84 c-g	94 ab	87 abc
37	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
37	AMS	100	SG	3	lb/a	3	lb/a	6"W	A				
38	AIXR11003 at 15 GPA and 4.95 MPH									86 f-m	80 e-i	85 def	80 a-g
38	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
38	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
39	AIXR11003 at 15 GPA and 4.95 MPH									87 d-l	80 e-i	88 a-e	88 abc
39	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
39	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
39	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
40	AIXR11003 at 15 GPA and 4.95 MPH									77 p	67 jkl	72 h	64 j
40	IGNITE 280	2.34	EC	0.293	lb ai/a	16	fl oz/a	6"W	A				
40	SELECT	2	EC	0.0313	lb ai/a	2	fl oz/a	6"W	A				
40	CLASS ACT NG	100	SL	2.5	% v/v	2.5	% v/v	6"W	A				
40	INTERLOCK	100	SL	4	fl oz/a	4	fl oz/a	6"W	A				
LSD (P=.05)										6.2	9.1	7.3	9.3
Replicate F										2.987	2.494	11.156	1.315
Replicate Prob(F)										0.0563	0.0892	0.0001	0.2744
Treatment F										6.636	5.089	4.004	5.706
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Winfield Solutions.
2. Ratings: WC at 14 and 28 DAT.
3. Application equipment and spray volume are per treatment, see treatment list.
4. Mixing instructions; see attached bulk mixing instructions, requires 2.5 gallon containers.
5. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
6. Not harvested (non-crop).

Flexstar GT Adjuvant Study.

Trial ID: 09-DeSoto-FlexGT-Adj Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-23-09

Objectives: Determine the influence of adjuvant on the efficacy of Flexstar GT on glyphosate-resistant waterhemp.

Crop 1: GLXMA Soybean **Variety:** AG 3905 **Description:** RR
Planting Method: SEEDED **Planting Date:** 05-23-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

	Prior Crops, Year
1.	GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A
Application Date:	06-17-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	6-8"WH
Application Placement:	BROFOL
Applied By:	DKT
Air Temperature, Unit:	82 F
% Relative Humidity:	85
Wind Velocity, Unit:	2 MPH
Wind Direction:	SW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	78 F
Soil Moisture:	ABONOR
% Cloud Cover:	30
	06-17-09
Crop stage at application:	V2-3
Height Min, Max (inch):	7 9

Pest Stage At Each Application

Application Date:	06-17-09
Weed Code:	AMATA
Stage Majority (leaves):	12
Stage Min, Max:	4 20
Height Majority:	6 IN
Height Min, Max:	2 10
Density, Unit:	35 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	6.67 FT
Spray Volume, Unit:	15 GPA

Flexstar GT Adjuvant Study.

Trial ID: 09-DeSoto-FlexGT-Adj Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code													AMATA-HR	AMATA-HR	AMATA-HR
Crop Code										GLXMA	GLXMA	GLXMA			
Rating Date										06-24-09	07-01-09	07-15-09	07-01-09	07-15-09	07-29-09
Rating Data Type										Injury	Injury	Injury	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	42 DA-A
1	NONTREATED									0 h	0 g	0 a	0 f	0 f	0 d
2	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A	4 g	0 g	0 a	67 d	40 cd	30 abc
3	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A	8 f	0 g	0 a	73 bcd	37 de	37 ab
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	6-8"WH	A						
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A	12 cde	4 d	0 a	76 abc	37 de	27 bc
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
5	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A	15 c	3 de	0 a	68 d	45 bcd	32 abc
5	HSOC (DESTINY HC)	100	SL	0.5	% v/v	0.5	% v/v	6-8"WH	A						
6	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A	12 de	2 ef	0 a	73 cd	53 abc	43 a
6	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	4 g	0 g	0 a	67 d	43 cd	30 abc
7	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	10 ef	1 fg	0 a	72 cd	33 de	28 bc
8	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	6-8"WH	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	13 cd	4 cd	0 a	79 abc	58 ab	40 ab
9	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A						
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	12 cde	3 de	0 a	68 d	40 cd	35 ab
10	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A						
10	HSOC (DESTINY HC)	100	SL	0.5	% v/v	0.5	% v/v	6-8"WH	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	14 cd	4 d	0 a	80 ab	60 a	37 ab
11	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"WH	A						
11	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	19 b	6 c	0 a	83 a	43 cd	30 abc
12	FLEXSTAR	1.88	EC	0.25	lb ai/a	1.06	pt/a	6-8"WH	A						
12	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	6-8"WH	A						
12	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	24 a	10 a	0 a	68 d	23 e	20 c
13	COBRA	2	EC	0.156	lb ai/a	10	fl oz/a	6-8"WH	A						
13	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	6-8"WH	A						
13	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	24 a	8 b	0 a	81 a	62 a	40 ab
14	ULTRA BLAZER	2	EC	0.25	lb ai/a	1	pt/a	6-8"WH	A						
14	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	6-8"WH	A						
14	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-8"WH	A	4 g	0 g	0 a	37 e	25 e	20 c
15	RESOURCE	0.86	EC	0.0202	lb ai/a	3	fl oz/a	6-8"WH	A						
15	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	6-8"WH	A						
15	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	6-8"WH	A						
LSD (P=.05)										2.9	1.6	0.0	7.5	14.8	14.1
Replicate F										5.143	1.712	0.000	8.174	0.275	1.084
Replicate Prob(F)										0.0125	0.1989	1.0000	0.0016	0.7617	0.3522
Treatment F										52.000	33.803	0.000	67.155	9.789	4.835
Treatment Prob(F)										0.0001	0.0001	1.0000	0.0001	0.0001	0.0002

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (FM051A4).
2. Ratings: CI at 7, 14 + 28 da A; WC at 14, 28 + 42 da A.
3. Yield not necessary.
4. Blanket burndown application of Touchdown Total (36 floz/A) + 2,4-D LV4 (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
5. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
6. Not harvested.

GlyStar Original Adjuvant Evaluation in Soybean - United Suppliers.

Trial ID: 09-50W-N50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-28-09

Objectives: Evaluate efficacy of United Suppliers adjuvants for use with GlyStar Original in soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-28-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN			grasses, annual
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.		ragweed, giant
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer		waterhemp, common
Pest 4 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.		morningglory, ivyleaf
Pest 5 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus		velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.3 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 67 LB/A, K: 376 LB/A

Application Description

	A
Application Date:	07-22-09
Time of Day:	12:00
Application Method:	Spray
Application Timing:	4-6"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	72 F
% Relative Humidity:	92
Wind Velocity, Unit:	5 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	85
	07-22-09
Crop stage at application:	V3
Height Min, Max (inch):	4 6

Pest Stage At Each Application

Application Date:	07-22-09
Weed Code:	GGGAN
Stage Majority (leaves):	4
Stage Min, Max:	2 7
Height Majority:	5 IN
Height Min, Max:	2 7
Density, Unit:	1.5 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	4
Stage Min, Max:	2 6
Height Majority:	5 IN
Height Min, Max:	3 8
Density, Unit:	0.3 FT2
Weed Code:	AMATA
Stage Majority (leaves):	5
Stage Min, Max:	3 8
Height Majority:	4.5 IN
Height Min, Max:	2 6
Density, Unit:	0.75 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	4
Stage Min, Max:	1 7
Height Majority:	3 IN
Height Min, Max:	1 4
Density, Unit:	0.9 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	2
Stage Min, Max:	1 4
Height Majority:	3.5 IN
Height Min, Max:	1 4
Density, Unit:	.001 FT2

GlyStar Original Adjuvant Evaluation in Soybean - United Suppliers.

Trial ID: 09-50W-N50 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

GlyStar Original Adjuvant Evaluation in Soybean - United Suppliers.

Trial ID: 09-50W-N50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code												GGGAN	GGGAN	AMBTR	AMBTR	AMATA	AMATA
Crop Code										GLXMA	GLXMA						
Rating Date										08-05-09	08-19-09	08-05-09	08-19-09	08-05-09	08-19-09	08-05-09	08-19-09
Rating Data Type										Injury	Injury	Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing																	
Trt-Eval Interval										14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
1	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	98 a	98 a	98 a	98 a
1	CHEMSURF 80	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A								
2	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	97 ab	97 a	98 a	97 a
2	CHEMSURF 90	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A								
3	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	96 ab	98 a	99 a	97 a
3	USEX109	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A								
4	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	95 b	95 a	97 a	96 a
4	USEX109	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A								
5	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	97 ab	97 a	98 a	97 a
5	USEX209	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A								
6	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	98 ab	97 a	98 a	97 a
6	USEX209	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A								
7	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	0 a	0 a	99 a	99 a	97 ab	98 a	98 a	96 a
8	NONTREATED									0 a	0 a	0 b	0 b	0 c	0 b	0 b	0 b
LSD (P=.05)										0.0	0.0	0.0	0.0	3.5	3.3	1.9	2.4
Replicate F										0.000	0.000	0.000	0.000	2.842	3.589	1.657	1.602
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	0.0920	0.0552	0.2260	0.2363
Treatment F										0.000	0.000	0.000	0.000	897.259	1014.499	2920.768	1856.702
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

GlyStar Original Adjuvant Evaluation in Soybean - United Suppliers.

Trial ID: 09-50W-N50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOHE	IPOHE	ABUTH	ABUTH
Pest Code										IPOHE	IPOHE	ABUTH	ABUTH
Crop Code													
Rating Date										08-05-09	08-19-09	08-05-09	08-19-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										14 DA-A	28 DA-A	14 DA-A	28 DA-A
1	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	60 a	64 a	83 ab	82 a
1	CHEMSURF 80	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A				
2	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	62 a	63 a	82 ab	77 ab
2	CHEMSURF 90	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A				
3	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	60 a	63 a	75 bc	77 ab
3	USEX109	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A				
4	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	52 b	60 a	60 d	44 c
4	USEX109	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A				
5	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	60 a	63 a	73 c	78 ab
5	USEX209	100	SL	0.125	% v/v	0.125	% v/v	4-6"W	A				
6	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	60 a	60 a	84 a	75 ab
6	USEX209	100	SL	0.25	% v/v	0.25	% v/v	4-6"W	A				
7	GLY STAR ORIGINAL	3	SL	0.75	lb ae/a	32	fl oz/a	4-6"W	A	58 a	62 a	77 abc	73 b
8	NONTREATED									0 c	0 b	0 e	0 d
LSD (P=.05)										4.3	7.1	8.2	8.0
Replicate F										1.195	2.779	2.073	2.834
Replicate Prob(F)										0.3317	0.0963	0.1627	0.0926
Treatment F										217.146	89.584	108.116	114.702
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: United Suppliers.
2. Ratings: CI/WC at 14 and 28 DAT.
3. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).

Glyphosate AMS Replacements - Precision Labs.

Trial ID: 09-10A-E110 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 07-01-09

Objectives: Evaluate the efficacy of AMS replacements for glyphosate applications applied with deionized and hard water as the carrier.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 07-01-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 2 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 5 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 20 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1 77 LB/A, K 441 LB/A

Application Description

	A
Application Date:	07-30-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	6-8"W
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	73 F
% Relative Humidity:	92
Wind Velocity, Unit:	1 MPH
Wind Direction:	E
Dew Presence (Y/N):	Y
Soil Moisture:	NORMAL
% Cloud Cover:	95
	07-30-09
Crop stage at application:	V2-V3
Height Min, Max (inch):	6 10

Pest Stage At Each Application

Application Date:	07-30-09
Weed Code:	IPOHE
Stage Majority (leaves):	12
Stage Min, Max:	8 16
Height Majority:	7 IN
Height Min, Max:	5 9
Density, Unit:	1 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	6
Stage Min, Max:	4 8
Height Majority:	8 IN
Height Min, Max:	6 10
Density, Unit:	0.25 FT2
Weed Code:	AMATA
Stage Majority (leaves):	8
Stage Min, Max:	4 14
Height Majority:	8 IN
Height Min, Max:	4 16
Density, Unit:	8 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	8
Stage Min, Max:	6 12
Height Majority:	8 IN
Height Min, Max:	5 14
Density, Unit:	0.5 FT2
Weed Code:	SETFA
Stage Majority (leaves):	5
Stage Min, Max:	3 7
Height Majority:	8 IN
Height Min, Max:	5 14
Density, Unit:	4 FT2

Glyphosate AMS Replacements - Precision Labs.

Trial ID: 09-10A-E110 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Glyphosate AMS Replacements - Precision Labs.

Trial ID: 09-10A-E110 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code										
Pest Code														IPOHE		IPOHE		ABUTH	
Crop Code												GLXMA		GLXMA					
Rating Date												08-13-09		08-27-09		08-13-09		08-27-09	
Rating Data Type												Injury		Injury		Control		Control	
Rating Unit												Percent		Percent		Percent		Percent	
Rating Timing																			
Trt-Eval Interval												14 DA-A		28 DA-A		14 DA-A		28 DA-A	
1	DEIONIZED WATER									0	a	0	a	53	bcd	52	cd	57	bcd	63	b-e
1	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
1	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8"W	A												
2	DEIONIZED WATER									0	a	0	a	52	bcd	52	cd	57	bcd	52	f
2	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
2	AMS	100	SG	0.15	% w/w	1.25	lb/100 gal	6-8"W	A												
3	DEIONIZED WATER									0	a	0	a	52	bcd	53	bcd	55	b-e	55	ef
3	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
3	OMNIX LDF	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A												
4	DEIONIZED WATER									0	a	0	a	47	d	50	cd	50	c-f	58	c-f
4	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
4	OMNIX LDF	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A												
5	DEIONIZED WATER									0	a	0	a	50	bcd	50	cd	45	ef	52	f
5	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
5	SYNURGIZE	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A												
6	DEIONIZED WATER									0	a	0	a	52	bcd	55	bc	48	def	53	f
6	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
6	SYNURGIZE	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A												
7	DEIONIZED WATER									0	a	0	a	57	bc	55	bc	45	ef	52	f
7	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
7	IMPORT	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A												
8	DEIONIZED WATER									0	a	0	a	68	a	64	a	60	abc	63	b-e
8	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
8	IMPORT	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A												
9	DEIONIZED WATER									0	a	0	a	58	b	58	ab	55	b-e	57	def
9	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
9	IMPORT	100	SL	0.75	% v/v	3	qt/100 gal	6-8"W	A												
10	DEIONIZED WATER									0	a	0	a	57	bc	62	a	60	abc	66	bc
10	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
10	IMPORT	100	SL	1	% v/v	4	qt/100 gal	6-8"W	A												
11	HARD WATER (350 PPM)									0	a	0	a	58	b	62	a	70	a	75	a
11	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
11	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8"W	A												
12	HARD WATER (350 PPM)									0	a	0	a	55	bcd	58	ab	56	bcd	64	bcd
12	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
12	AMS	100	SG	0.15	% w/w	1.25	lb/100 gal	6-8"W	A												
13	HARD WATER (350 PPM)									0	a	0	a	53	bcd	52	cd	45	ef	52	f
13	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
13	OMNIX LDF	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A												
14	HARD WATER (350 PPM)									0	a	0	a	52	bcd	52	cd	50	c-f	53	f
14	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
14	OMNIX LDF	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A												
15	HARD WATER (350 PPM)									0	a	0	a	53	bcd	51	cd	43	f	53	f
15	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
15	SYNURGIZE	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A												
16	HARD WATER (350 PPM)									0	a	0	a	48	cd	48	d	50	c-f	55	ef
16	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
16	SYNURGIZE	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A												
17	HARD WATER (350 PPM)									0	a	0	a	52	bcd	58	ab	60	abc	59	b-f
17	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
17	IMPORT	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A												
18	HARD WATER (350 PPM)									0	a	0	a	57	bc	54	bc	48	def	53	f
18	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A												
18	IMPORT	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A												

Glyphosate AMS Replacements - Precision Labs.

Trial ID: 09-10A-E110 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code												IPOHE	IPOHE	ABUTH	ABUTH
Crop Code										GLXMA	GLXMA				
Rating Date										08-13-09	08-27-09	08-13-09	08-27-09	08-13-09	08-27-09
Rating Data Type										Injury	Injury	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
19	HARD WATER (350 PPM)									0 a	0 a	52 bcd	55 bc	63 ab	65 bcd
19	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
19	IMPORT	100	SL	0.75	% v/v	3	qt/100 gal	6-8"W	A						
20	HARD WATER (350 PPM)									0 a	0 a	57 bc	55 bc	65 ab	67 ab
20	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
20	IMPORT	100	SL	1	% v/v	4	qt/100 gal	6-8"W	A						
21	NONTREATED									0 a	0 a	0 e	0 e	0 g	0 g
LSD (P=.05)										0.0	0.0	9.4	5.8	10.5	8.8
Replicate F										0.000	0.000	0.086	0.356	2.381	1.762
Replicate Prob(F)										1.0000	1.0000	0.9179	0.7024	0.1054	0.1848
Treatment F										0.000	0.000	14.804	38.869	14.400	21.372
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Glyphosate AMS Replacements - Precision Labs.

Trial ID: 09-10A-E110 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 08-13-09 Control Percent 14 DA-A	AMATA 08-27-09 Control Percent 28 DA-A	AMBTR 08-13-09 Control Percent 14 DA-A	AMBTR 08-27-09 Control Percent 28 DA-A	SETFA 08-13-09 Control Percent 14 DA-A	SETFA 08-27-09 Control Percent 28 DA-A
1	DEIONIZED WATER									79 def	86 abc	58 bc	71 abc	99 a	99 a
1	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
1	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8"W	A						
2	DEIONIZED WATER									86 a-e	70 e	55 c	73 abc	99 a	99 a
2	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
2	AMS	100	SG	0.15	% w/w	1.25	lb/100 gal	6-8"W	A						
3	DEIONIZED WATER									86 a-e	83 abc	58 abc	71 abc	99 b	98 b
3	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
3	OMNIX LDF	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A						
4	DEIONIZED WATER									82 c-f	82 a-d	57 bc	76 ab	99 a	99 a
4	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
4	OMNIX LDF	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A						
5	DEIONIZED WATER									78 def	78 cde	58 bc	80 a	99 a	99 a
5	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
5	SYNURGIZE	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A						
6	DEIONIZED WATER									88 abc	88 ab	50 c	75 ab	99 a	99 a
6	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
6	SYNURGIZE	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A						
7	DEIONIZED WATER									89 abc	85 abc	52 c	81 a	99 b	98 b
7	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
7	IMPORT	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A						
8	DEIONIZED WATER									93 ab	88 ab	74 a	85 a	99 a	99 a
8	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
8	IMPORT	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A						
9	DEIONIZED WATER									90 abc	79 bcd	73 ab	85 a	99 a	99 a
9	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
9	IMPORT	100	SL	0.75	% v/v	3	qt/100 gal	6-8"W	A						
10	DEIONIZED WATER									88 abc	87 abc	58 abc	79 ab	99 a	99 a
10	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
10	IMPORT	100	SL	1	% v/v	4	qt/100 gal	6-8"W	A						
11	HARD WATER (350 PPM)									94 a	90 a	63 abc	85 a	99 a	99 a
11	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
11	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8"W	A						
12	HARD WATER (350 PPM)									73 f	73 de	62 abc	78 ab	99 a	99 a
12	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
12	AMS	100	SG	0.15	% w/w	1.25	lb/100 gal	6-8"W	A						
13	HARD WATER (350 PPM)									78 ef	82 a-d	60 abc	73 abc	99 a	99 a
13	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
13	OMNIX LDF	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A						
14	HARD WATER (350 PPM)									84 cde	80 bcd	50 c	65 bc	99 a	99 a
14	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
14	OMNIX LDF	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A						
15	HARD WATER (350 PPM)									86 a-e	73 de	50 c	60 c	99 a	99 a
15	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
15	SYNURGIZE	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A						
16	HARD WATER (350 PPM)									85 b-e	82 a-d	48 c	65 bc	99 a	99 a
16	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
16	SYNURGIZE	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A						
17	HARD WATER (350 PPM)									85 b-e	80 bcd	53 c	73 abc	99 a	99 a
17	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
17	IMPORT	100	SL	0.25	% v/v	1	qt/100 gal	6-8"W	A						
18	HARD WATER (350 PPM)									88 abc	83 abc	50 c	73 abc	99 a	99 a
18	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
18	IMPORT	100	SL	0.5	% v/v	2	qt/100 gal	6-8"W	A						

Glyphosate AMS Replacements - Precision Labs.

Trial ID: 09-10A-E110 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA	AMATA	AMBTR	AMBTR	SETFA	SETFA
	Pest Code									AMATA	AMATA	AMBTR	AMBTR	SETFA	SETFA
	Crop Code														
	Rating Date									08-13-09	08-27-09	08-13-09	08-27-09	08-13-09	08-27-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing														
	Trt-Eval Interval									14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
19	HARD WATER (350 PPM)									87 a-d	83 abc	53 c	77 ab	99 a	99 a
19	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
19	IMPORT	100	SL	0.75	% v/v	3	qt/100 gal	6-8"W	A						
20	HARD WATER (350 PPM)									83 cde	80 bcd	52 c	73 abc	99 a	99 a
20	ROUNDUP WEATHERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6-8"W	A						
20	IMPORT	100	SL	1	% v/v	4	qt/100 gal	6-8"W	A						
21	NONTREATED									0 g	0 f	0 d	0 d	0 c	0 c
LSD (P=.05)										8.6	9.1	15.8	14.8	0.3	0.6
	Replicate F									1.349	8.011	4.788	0.204	2.105	2.105
	Replicate Prob(F)									0.2710	0.0012	0.0149	0.8165	0.1351	0.1351
	Treatment F									41.240	34.028	6.682	11.743	46395.532	11591.817
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Precision Labs.
2. Ratings: CI/WC at 14 and 28 DAT.
3. Use hardwater (350 ppm) and DI water, see treatment list.
4. Not harvested.

AMS Replacements with Glyphosate - Winfield Solutions.

Trial ID: 09-11B-W60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 07-01-09

Objectives: Evaluate the efficacy of adjuvants intended to replace standard AMS with glyphosate.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 07-01-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 2 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.3 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** BETHALTO
CEC: 12 **Fert. Level:** P1 87 LB/A, K 446 LB/A

Application Description

	A
Application Date:	07-29-09
Time of Day:	13:30
Application Method:	Spray
Application Timing:	4-6"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	81 F
% Relative Humidity:	74
Wind Velocity, Unit:	4 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
	07-29-09
Crop stage at application:	V3-V4
Height Min, Max (inch):	6 8

Pest Stage At Each Application

Application Date:	07-29-09
Weed Code:	IPOHE
Stage Majority (leaves):	5
Stage Min, Max:	3 8
Height Majority:	5 IN
Height Min, Max:	2 7
Density, Unit:	0.9 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	4
Stage Min, Max:	2 5
Height Majority:	5 IN
Height Min, Max:	4 8
Density, Unit:	0.6 FT2
Weed Code:	AMATA
Stage Majority (leaves):	7
Stage Min, Max:	4 12
Height Majority:	5 IN
Height Min, Max:	3 8
Density, Unit:	0.9 FT2
Weed Code:	SETFA
Stage Majority (leaves):	3
Stage Min, Max:	1 4
Height Majority:	6 IN
Height Min, Max:	2.5 8
Density, Unit:	1.6 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

AMS Replacements with Glyphosate - Winfield Solutions.

Trial ID: 09-11B-W60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 08-12-09 Injury Percent 14 DA-A	GLXMA 08-26-09 Injury Percent 28 DA-A	IPOHE 08-12-09 Control Percent 14 DA-A	IPOHE 08-26-09 Control Percent 28 DA-A	ABUTH 08-12-09 Control Percent 14 DA-A	ABUTH 08-26-09 Control Percent 28 DA-A	AMATA 08-12-09 Control Percent 14 DA-A	AMATA 08-26-09 Control Percent 28 DA-A
1	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	40 c	32 d	25 e	30 d	30 f	32 f
2	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	55 b	51 ab	62 a	73 a	45 de	57 cd
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A								
3	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	57 ab	47 bc	60 ab	68 ab	75 a	77 a
3	ALLIANCE	100	SL	1.25	% v/v	1.25	% v/v	4-6"W	A								
4	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	57 ab	48 abc	60 ab	70 ab	68 abc	73 ab
4	AG 08014	100	SL	1	% v/v	1	% v/v	4-6"W	A								
5	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	57 ab	50 abc	57 abc	67 ab	70 ab	75 ab
5	AG 08015	100	SL	1	% v/v	1	% v/v	4-6"W	A								
6	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	55 b	48 abc	48 bcd	43 c	57 cd	60 cd
6	AG 08031	100	SL	1	% v/v	1	% v/v	4-6"W	A								
7	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	65 a	57 a	60 ab	60 b	62 bc	64 bc
7	AG 08034	100	SL	1	% v/v	1	% v/v	4-6"W	A								
8	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	53 b	41 cd	45 cd	38 cd	38 ef	42 ef
8	AG 07090	100	SL	1.25	% v/v	1.25	% v/v	4-6"W	A								
9	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	50 b	42 bc	42 d	42 c	42 ef	43 e
9	AG 03019	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A								
10	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	0 a	0 a	55 b	49 abc	46 cd	43 c	47 de	50 de
10	AG 07043	100	SL	1	% v/v	1	% v/v	4-6"W	A								
LSD (P=.05)										0.0	0.0	8.6	9.9	12.3	10.7	12.0	11.1
Replicate F										0.000	0.000	1.220	0.218	0.032	0.210	0.860	1.984
Replicate Prob(F)										1.0000	1.0000	0.3186	0.8061	0.9686	0.8124	0.4397	0.1665
Treatment F										0.000	0.000	4.703	4.254	7.941	19.049	14.072	16.985
Treatment Prob(F)										1.0000	1.0000	0.0026	0.0044	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

AMS Replacements with Glyphosate - Winfield Solutions.

Trial ID: 09-11B-W60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Code										SETFA	SETFA
Crop Code											
Rating Date										08-12-09	08-26-09
Rating Data Type										Control	Control
Rating Unit										Percent	Percent
Rating Timing											
Trt-Eval Interval										14 DA-A	28 DA-A
1	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	94 d	96 b
2	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	96 c	97 ab
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A		
3	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	98 ab	98 a
3	ALLIANCE	100	SL	1.25	% v/v	1.25	% v/v	4-6"W	A		
4	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	97 bc	99 a
4	AG 08014	100	SL	1	% v/v	1	% v/v	4-6"W	A		
5	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	98 ab	98 ab
5	AG 08015	100	SL	1	% v/v	1	% v/v	4-6"W	A		
6	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	98 abc	98 a
6	AG 08031	100	SL	1	% v/v	1	% v/v	4-6"W	A		
7	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	99 ab	99 a
7	AG 08034	100	SL	1	% v/v	1	% v/v	4-6"W	A		
8	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	98 ab	98 a
8	AG 07090	100	SL	1.25	% v/v	1.25	% v/v	4-6"W	A		
9	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	99 a	99 a
9	AG 03019	100	SL	0.5	% v/v	0.5	% v/v	4-6"W	A		
10	TOUCHDOWN HI-TECH	5	SL	0.215	lb ae/a	5.5	fl oz/a	4-6"W	A	98 abc	98 ab
10	AG 07043	100	SL	1	% v/v	1	% v/v	4-6"W	A		
LSD (P=.05)										1.6	1.7
Replicate F										4.333	2.815
Replicate Prob(F)										0.0291	0.0864
Treatment F										6.852	2.703
Treatment Prob(F)										0.0003	0.0347

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Winfield Solutions.
2. Ratings: CI/WC 14 and 28 DAT.
3. Not harvested.

Glyphosate Formulation Evaluation - Winfield Solutions.

Trial ID: 09-51E-N60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Evalaute experimental formulations of glyphosate for weed control and crop injury in Roundup Ready soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 2 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 3 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 5 Type: W	**Code:** GGGAN		grasses, annual

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.7 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 90 LB/A, K: 409 LB/A

Application Description	A
Application Date:	07-29-09
Time of Day:	15:45
Application Method:	Spray
Application Timing:	6-8"W
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	88 F
% Relative Humidity:	40
Wind Velocity, Unit:	3 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	10
	07-29-09
Crop stage at application:	V3-V4
Height Min, Max (inch):	5 7

Pest Stage At Each Application	
Application Date:	06-29-09
Weed Code:	AMBTR
Stage Majority (leaves):	6
Stage Min, Max:	4 10
Height Majority:	7 IN
Height Min, Max:	3.5 10
Density, Unit:	0.7 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	4
Stage Min, Max:	3 6
Height Majority:	5 IN
Height Min, Max:	1.5 6
Density, Unit:	0.5 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	4
Stage Min, Max:	3 7
Height Majority:	6 IN
Height Min, Max:	2 7
Density, Unit:	0.9 FT2
Weed Code:	AMATA
Stage Majority (leaves):	5
Stage Min, Max:	3 10
Height Majority:	4 IN
Height Min, Max:	1 5
Density, Unit:	0.9 FT2
Weed Code:	GGGAN
Stage Majority (leaves):	3
Stage Min, Max:	1 5
Height Majority:	6 IN
Height Min, Max:	3 8
Density, Unit:	0.9 FT2

Glyphosate Formulation Evaluation - Winfield Solutions.

Trial ID: 09-51E-N60 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Glyphosate Formulation Evaluation - Winfield Solutions.

Trial ID: 09-51E-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 08-12-09 Injury Percent 14 DA-A	GLXMA 08-26-09 Injury Percent 28 DA-A	AMBTR 08-12-09 Control Percent 14 DA-A	AMBTR 08-26-09 Control Percent 28 DA-A	ABUTH 08-12-09 Control Percent 14 DA-A	ABUTH 08-26-09 Control Percent 28 DA-A	IPOHE 08-12-09 Control Percent 14 DA-A	IPOHE 08-26-09 Control Percent 28 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	6-8"W	A	0 a	0 a	86 bc	87 d	72 b	57 bcd	67 b	58 bc
2	CORNERSTONE PLUS	3	SL	0.56	lb ae/a	24	fl oz/a	6-8"W	A	0 a	0 a	88 b	87 cd	70 b	55 cd	65 b	63 bc
3	AGH 09001		SL	24	fl oz/a	24	fl oz/a	6-8"W	A	0 a	0 a	84 c	87 cd	72 b	50 d	65 b	60 bc
4	AGH 09002		SL	19.5	fl oz/a	19.5	fl oz/a	6-8"W	A	0 a	0 a	86 bc	91 b	76 ab	64 b	63 b	65 b
5	AGH 09003		SL	24	fl oz/a	24	fl oz/a	6-8"W	A	0 a	0 a	95 a	94 a	83 a	83 a	77 a	78 a
6	AGH 09004		SL	19.5	fl oz/a	19.5	fl oz/a	6-8"W	A	0 a	0 a	87 bc	90 bc	72 b	59 bc	63 b	57 bc
7	AGH 09005		SL	24	fl oz/a	24	fl oz/a	6-8"W	A	0 a	0 a	93 a	94 a	70 b	63 bc	70 ab	63 bc
8	AGH 09006		SL	19.5	fl oz/a	19.5	fl oz/a	6-8"W	A	0 a	0 a	85 bc	82 e	67 b	50 d	65 b	55 c
9	NONTREATED									0 a	0 a	0 d	0 f	0 c	0 e	0 c	0 d
10	NONTREATED									0 a	0 a	0 d	0 f	0 c	0 e	0 c	0 d
LSD (P=.05)										0.0	0.0	3.0	3.2	9.4	8.4	8.9	9.3
Replicate F										0.000	0.000	6.379	1.827	6.336	7.596	0.654	2.795
Replicate Prob(F)										1.0000	1.0000	0.0081	0.1895	0.0083	0.0041	0.5319	0.0877
Treatment F										0.000	0.000	1348.275	1237.641	96.099	90.927	90.896	75.319
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Glyphosate Formulation Evaluation - Winfield Solutions.

Trial ID: 09-51E-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										AMATA		AMATA		GGGAN		GGGAN	
Crop Code																	
Rating Date										08-12-09		08-26-09		08-12-09		08-26-09	
Rating Data Type										Control		Control		Control		Control	
Rating Unit										Percent		Percent		Percent		Percent	
Rating Timing																	
Trt-Eval Interval										14 DA-A		28 DA-A		14 DA-A		28 DA-A	
1	ROUNDUP POWERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	6-8"W	A	87	ab	79	bcd	99	a	99	a
2	CORNERSTONE PLUS	3	SL	0.56	lb ae/a	24	fl oz/a	6-8"W	A	88	ab	83	abc	99	a	99	a
3	AGH 09001		SL	24	fl oz/a	24	fl oz/a	6-8"W	A	85	b	76	cd	96	b	96	b
4	AGH 09002		SL	19.5	fl oz/a	19.5	fl oz/a	6-8"W	A	91	ab	88	ab	99	a	98	a
5	AGH 09003		SL	24	fl oz/a	24	fl oz/a	6-8"W	A	93	ab	92	a	99	a	99	a
6	AGH 09004		SL	19.5	fl oz/a	19.5	fl oz/a	6-8"W	A	85	b	75	cd	98	a	98	ab
7	AGH 09005		SL	24	fl oz/a	24	fl oz/a	6-8"W	A	94	a	88	ab	98	a	98	a
8	AGH 09006		SL	19.5	fl oz/a	19.5	fl oz/a	6-8"W	A	75	c	70	d	98	a	98	ab
9	NONTREATED									0	d	0	e	0	c	0	c
10	NONTREATED									0	d	0	e	0	c	0	c
LSD (P=.05)										8.6		10.9		1.6		1.8	
Replicate F										0.037		1.498		1.218		0.863	
Replicate Prob(F)										0.9637		0.2501		0.3190		0.4386	
Treatment F										164.072		91.512		6068.389		4754.192	
Treatment Prob(F)										0.0001		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Winfield Solutions.
2. Ratings: CI/WC at 14 and 28 DAT.
3. Treatment 9 was TBA and no treatment was ever assigned.
4. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
5. Not harvested.

Loveland Experimental Glyphosate Formulations.

Trial ID: 09-ARC-13-W70 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 06-02-09

Objectives: Evaluate LI 6285 and other glyphosate products with and without LI6262 for efficacy and crop tolerance in Roundup Ready soybean.

Crop 1: GLXMA Soybean **Variety:** P94YO1 **Description:** RR
Planting Method: SEEDED **Planting Date:** 06-02-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** SETFA Setaria faberi Herrm. foxtail, giant
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 3 Type: W **Code:** IPOSS morningglory, species

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.4 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** WEIR
CEC: 74 **Fert. Level:** P1: 69 LB/A, K: 402 LB/A

Application Description

	A	B
Application Date:	07-01-09	07-31-09
Time of Day:	9:45	11:00
Application Method:	Spray	Spray
Application Timing:	V3	V3+30D
Application Placement:	BROFOL	BROFOL
Applied By:	DKT	DKT
Air Temperature, Unit:	75 F	80 F
% Relative Humidity:	49	50
Wind Velocity, Unit:	2 MPH	4 MPH
Wind Direction:	E	W
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	80 F	78 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	60	60
	07-01-09	07-31-09
Crop stage at application:	V3	R3
Height Min, Max (inch):	6 8	24 28

Pest Stage At Each Application

Application Date:	07-01-09	07-31-09
Weed Code:	SETFA	SETFA
Stage Majority (leaves):	3	4
Stage Min, Max:	2 5	2 5
Height Majority:	6 IN	8 IN
Height Min, Max:	3 9	3 10
Density, Unit:	3 FT2	3 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	8	10
Stage Min, Max:	4 12	4 16
Height Majority:	3 IN	8 IN
Height Min, Max:	1 5	2 12
Density, Unit:	1 FT2	1 FT2
Weed Code:	IPOSS	IPOSS
Stage Majority (leaves):	6	12
Stage Min, Max:	COTY 10	4 20
Height Majority:	4 IN	5 IN
Height Min, Max:	1 6	2 6
Density, Unit:	1 FT2	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 110015	XR 110015
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	10 GPA	10 GPA

Loveland Experimental Glyphosate Formulations.

Trial ID: 09-ARC-13-W70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 07-08-09 Injury Percent 7 DA-A	GLXMA 07-15-09 Injury Percent 14 DA-A	GLXMA 08-07-09 Injury Percent 7 DA-B	GLXMA 08-14-09 Injury Percent 14 DA-B
1	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	10.9 ab	52 a	0 b	0 a	0 a	0 a
1	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
1	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
1	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
1	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
1	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
2	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3	A	10.9 ab	56 a	0 b	0 a	0 a	0 a
2	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
2	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
2	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3+30D	B						
2	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
2	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
3	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	10.9 ab	52 a	0 b	0 a	0 a	0 a
3	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
3	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
3	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
3	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
3	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
4	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	10.9 ab	56 a	0 b	0 a	0 a	0 a
4	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
4	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
4	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
4	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
4	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
5	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	11.0 ab	52 a	0 b	0 a	0 a	0 a
5	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
5	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
5	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
5	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
5	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
6	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	10.8 b	53 a	0 b	0 a	0 a	0 a
6	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
6	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
6	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
6	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
6	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
7	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	10.9 ab	55 a	0 b	0 a	0 a	0 a
7	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
7	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
7	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
7	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
7	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
8	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3	A	11.0 a	51 a	1 a	0 a	0 a	0 a
8	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
8	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
8	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3+30D	B						
8	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
8	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
9	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	10.8 b	55 a	0 b	0 a	0 a	0 a
9	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
9	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
9	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
9	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
9	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
10	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	11.0 ab	54 a	0 b	0 a	0 a	0 a
10	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
10	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
10	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
10	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
10	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						

Loveland Experimental Glyphosate Formulations.

Trial ID: 09-ARC-13-W70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 07-08-09 Injury Percent 7 DA-A	GLXMA 07-15-09 Injury Percent 14 DA-A	GLXMA 08-07-09 Injury Percent 7 DA-B	GLXMA 08-14-09 Injury Percent 14 DA-B
11	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	10.9 ab	53 a	0 b	0 a	0 a	0 a
11	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
11	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
11	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
11	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
11	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
12	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	11.0 ab	55 a	1 ab	0 a	0 a	0 a
12	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
12	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
12	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
12	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
12	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
LSD (P=.05)										0.16	5.9	1.2	0.0	0.0	0.0
Replicate F										4.522	0.537	0.688	0.000	0.000	0.000
Replicate Prob(F)										0.0092	0.6599	0.5661	1.0000	1.0000	1.0000
Treatment F										1.184	0.731	0.896	0.000	0.000	0.000
Treatment Prob(F)										0.3351	0.7017	0.5540	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Loveland Experimental Glyphosate Formulations.

Trial ID: 09-ARC-13-W70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										GGGAN		GGGAN		GGGAN		GGGAN	
Crop Code																	
Rating Date										07-08-09		07-15-09		08-07-09		08-14-09	
Rating Data Type										Control		Control		Control		Control	
Rating Unit										Percent		Percent		Percent		Percent	
Rating Timing																	
Trt-Eval Interval										7 DA-A		14 DA-A		7 DA-B		14 DA-B	
1	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	59	c	98	a	97	c	99	a
1	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
1	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A								
1	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B								
1	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
1	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B								
2	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3	A	59	c	98	a	99	ab	99	a
2	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
2	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A								
2	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3+30D	B								
2	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
2	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B								
3	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	59	c	98	a	99	a	99	a
3	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
3	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A								
3	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B								
3	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
3	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B								
4	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	60	bc	98	a	99	a	99	a
4	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
4	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A								
4	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B								
4	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
4	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B								
5	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	60	bc	98	a	99	a	99	a
5	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
5	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A								
5	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B								
5	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
5	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B								
6	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	60	bc	98	a	99	a	99	a
6	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
6	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A								
6	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B								
6	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
6	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B								
7	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	60	bc	98	a	99	ab	99	b
7	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
7	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A								
7	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B								
7	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
7	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B								
8	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3	A	59	c	98	a	99	ab	99	a
8	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
8	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A								
8	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3+30D	B								
8	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
8	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B								
9	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	63	ab	98	a	99	b	99	a
9	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
9	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A								
9	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B								
9	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
9	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B								
10	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	60	bc	98	a	99	a	99	a
10	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A								
10	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A								
10	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B								
10	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B								
10	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B								

Loveland Experimental Glyphosate Formulations.

Trial ID: 09-ARC-13-W70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										GGGAN	GGGAN	GGGAN	GGGAN
Crop Code													
Rating Date										07-08-09	07-15-09	08-07-09	08-14-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										7 DA-A	14 DA-A	7 DA-B	14 DA-B
11	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	60 bc	98 a	99 a	99 a
11	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A				
11	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A				
11	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B				
11	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B				
11	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B				
12	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	64 a	98 a	99 a	99 a
12	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A				
12	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A				
12	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B				
12	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B				
12	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B				
LSD (P=.05)										3.2	0.8	0.5	0.2
Replicate F										0.387	2.099	1.571	1.000
Replicate Prob(F)										0.7634	0.1192	0.2148	0.4051
Treatment F										1.946	1.168	9.429	1.000
Treatment Prob(F)										0.0689	0.3454	0.0001	0.4671

Means followed by same letter do not significantly differ (P=.05, LSD)

Loveland Experimental Glyphosate Formulations.

Trial ID: 09-ARC-13-W70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 07-08-09 Control Percent 7 DA-A	AMATA 07-15-09 Control Percent 14 DA-A	AMATA 08-07-09 Control Percent 7 DA-B	AMATA 08-14-09 Control Percent 14 DA-B	IPOSS 07-08-09 Control Percent 7 DA-A	IPOSS 07-15-09 Control Percent 14 DA-A
1	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	35 b	93 a	97 abc	98 ab	28 c	74 a
1	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
1	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
1	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
1	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
1	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
2	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3	A	38 ab	91 a	98 ab	98 ab	30 bc	75 a
2	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
2	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
2	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3+30D	B						
2	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
2	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
3	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	36 b	91 a	94 cd	98 ab	33 abc	72 a
3	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
3	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
3	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
3	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
3	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
4	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	38 ab	96 a	96 a-d	97 abc	33 abc	78 a
4	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
4	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
4	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
4	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
4	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
5	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	39 ab	93 a	90 ef	96 bc	37 ab	80 a
5	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
5	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
5	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
5	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
5	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
6	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	38 ab	92 a	87 f	91 d	33 abc	79 a
6	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
6	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3	A						
6	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
6	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
6	LIBERATE	100	SL	0.25	% v/v	0.25	% v/v	V3+30D	B						
7	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	40 ab	97 a	99 a	99 a	37 ab	83 a
7	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
7	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
7	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
7	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
7	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
8	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3	A	40 ab	91 a	96 abc	97 abc	38 ab	76 a
8	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
8	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
8	LI 6303		SL	22	fl oz/a	22	fl oz/a	V3+30D	B						
8	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
8	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
9	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	39 ab	94 a	96 a-d	97 abc	38 ab	76 a
9	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
9	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
9	MAD DOG PLUS	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
9	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
9	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
10	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	43 a	92 a	96 bcd	98 abc	39 a	78 a
10	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
10	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
10	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3+30D	B						
10	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
10	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						

Loveland Experimental Glyphosate Formulations.

Trial ID: 09-ARC-13-W70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 07-08-09 Control Percent 7 DA-A	AMATA 07-15-09 Control Percent 14 DA-A	AMATA 08-07-09 Control Percent 7 DA-B	AMATA 08-14-09 Control Percent 14 DA-B	IPOSS 07-08-09 Control Percent 7 DA-A	IPOSS 07-15-09 Control Percent 14 DA-A
11	MAKAZE	3	SL	0.75	lb ae/a	32	fl oz/a	V3	A	39 ab	93 a	93 de	94 cd	35 abc	74 a
11	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
11	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
11	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
11	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
11	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
12	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3	A	43 a	95 a	98 ab	99 ab	37 ab	73 a
12	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3	A						
12	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3	A						
12	LI 6285		SL	32	fl oz/a	32	fl oz/a	V3+30D	B						
12	CHOICE WEATHER MASTER	100	SL	0.5	% v/v	0.5	% v/v	V3+30D	B						
12	LI 6262	100	SL	0.25	% v/v	3.2	fl oz/10 gal	V3+30D	B						
LSD (P=.05)										5.4	6.6	3.3	3.4	7.9	12.6
Replicate F										4.459	2.208	2.449	2.182	1.395	5.243
Replicate Prob(F)										0.0098	0.1056	0.0810	0.1088	0.2650	0.0053
Treatment F										1.459	0.799	9.427	3.359	1.551	0.569
Treatment Prob(F)										0.1940	0.6404	0.0001	0.0034	0.1687	0.8375

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Loveland.
2. Ratings: CI/WC 7 + 14 da each POST application.
3. Yield.
4. Apply a broadcast treatment of glyphosate at 14 da last POST application 10 ft wide to all plots to maintain the area close to weed-free through harvest.
5. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
   IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
6. Harvested 11-5-09, (2) 30 inch rows by 108.5 ft

Glyphosate with Acidic AMS Replacement Adjuvants - Deionized Water.

Trial ID: 09-11C-E90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Evaluate the efficacy of acidic AMS replacement adjuvant products with glyphosate in the absence of hard water cations.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 2 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A

% OM: 2.3 **Texture:** SILT LOAM
pH: 5.8 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1 84 LB/A, K 456 LB/A

Application Description

	A
Application Date:	07-30-09
Time of Day:	8:30
Application Method:	Spray
Application Timing:	6-8"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	72 F
% Relative Humidity:	92
Wind Velocity, Unit:	1 MPH
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	75
	07-30-09
Crop stage at application:	V4
Height Min, Max (inch):	6 8

Pest Stage At Each Application

Application Date:	07-30-09
Weed Code:	ABUTH
Stage Majority (leaves):	4
Stage Min, Max:	2 5
Height Majority:	7 IN
Height Min, Max:	1.5 9
Density, Unit:	0.2 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	6
Stage Min, Max:	4 8
Height Majority:	6.5 IN
Height Min, Max:	3.5 8
Density, Unit:	0.5 FT2
Weed Code:	AMATA
Stage Majority (leaves):	8
Stage Min, Max:	6 12
Height Majority:	7 IN
Height Min, Max:	3 7
Density, Unit:	15 FT2
Weed Code:	SETFA
Stage Majority (leaves):	3
Stage Min, Max:	2 5
Height Majority:	7.5 IN
Height Min, Max:	4 10
Density, Unit:	10 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	TT 110015
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	10 GPA

Glyphosate with Acidic AMS Replacement Adjuvants - Deionized Water.

Trial ID: 09-11C-E90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	07-30-09 Spray sol. pH after mixing	GLXMA 08-13-09 Injury Percent 14 DAT	GLXMA 08-27-09 Injury Percent 28 DAT	ABUTH 08-13-09 Control Percent 14 DAT	ABUTH 08-27-09 Control Percent 28 DAT	IPOHE 08-13-09 Control Percent 14 DAT	IPOHE 08-27-09 Control Percent 28 DAT
1	DEIONIZED WATER									4.98	0 a	0 a	28 g	28 g	37 d	32 e
1	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
2	DEIONIZED WATER									5.03	0 a	0 a	30 g	32 fg	45 bc	38 de
2	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
2	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A							
3	DEIONIZED WATER									5.04	0 a	0 a	58 a	69 a	50 abc	52 a
3	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A							
4	DEIONIZED WATER									4.98	0 a	0 a	48 bcd	60 b	48 abc	48 ab
4	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
4	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A							
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A							
5	DEIONIZED WATER									3.30	0 a	0 a	42 def	42 de	43 cd	40 cd
5	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
5	CUT RATE	100	SG	0.24	% w/w	2	lb/100 gal	6-8" W	A							
6	DEIONIZED WATER									3.13	0 a	0 a	57 ab	45 cd	52 ab	39 cde
6	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
6	CUT RATE	100	SG	0.48	% w/w	4	lb/100 gal	6-8" W	A							
7	DEIONIZED WATER									2.66	0 a	0 a	40 def	42 de	48 abc	45 a-d
7	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
7	HEL-FIRE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
8	DEIONIZED WATER									2.29	0 a	0 a	37 efg	32 fg	43 cd	40 cd
8	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
8	HEL-FIRE	100	SL	1	% v/v	1	% v/v	6-8" W	A							
9	DEIONIZED WATER									2.07	0 a	0 a	35 fg	35 efg	50 abc	47 abc
9	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
9	IMPORT	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
10	DEIONIZED WATER									1.88	0 a	0 a	43 def	43 cde	52 ab	47 abc
10	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
10	IMPORT	100	SL	1	% v/v	1	% v/v	6-8" W	A							
11	DEIONIZED WATER									2.40	0 a	0 a	37 efg	37 d-g	47 bc	43 bcd
11	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
11	CT-301	100	SL	0.0313	% v/v	4	fl oz/100 gal	6-8" W	A							
12	DEIONIZED WATER									2.30	0 a	0 a	45 de	39 def	47 bc	45 a-d
12	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
12	CT-301	100	SL	0.0625	% v/v	8	fl oz/100 gal	6-8" W	A							
13	DEIONIZED WATER									2.42	0 a	0 a	48 bcd	38 def	50 abc	45 a-d
13	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
13	ET 4000	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
14	DEIONIZED WATER									2.13	0 a	0 a	55 abc	51 c	55 a	47 abc
14	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
14	ET 4000	100	SL	1	% v/v	1	% v/v	6-8" W	A							
15	DEIONIZED WATER									2.59	0 a	0 a	40 def	32 fg	47 bc	39 cde
15	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
15	N-TENSE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
16	DEIONIZED WATER									2.20	0 a	0 a	47 cd	40 def	48 abc	47 abc
16	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
16	N-TENSE	100	SL	1	% v/v	1	% v/v	6-8" W	A							
17	NONTREATED									.	0 a	0 a	0 h	0 h	0 e	0 f
LSD (P=.05)										.	0.0	0.0	9.5	8.4	7.5	8.0
Replicate F											0.000	0.000	1.128	0.010	0.670	3.862
Replicate Prob(F)											1.0000	1.0000	0.3363	0.9900	0.5189	0.0314
Treatment F											0.000	0.000	16.902	24.858	22.000	17.537
Treatment Prob(F)											1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Glyphosate with Acidic AMS Replacement Adjuvants - Deionized Water.

Trial ID: 09-11C-E90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 08-13-09 Control Percent 14 DAT	AMATA 08-27-09 Control Percent 28 DAT	SETFA 08-13-09 Control Percent 14 DAT	SETFA 08-27-09 Control Percent 28 DAT
1	DEIONIZED WATER									45 f	45 ef	90 e	85 e
1	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
2	DEIONIZED WATER									62 de	53 b-f	95 a-d	96 ab
2	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
2	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A				
3	DEIONIZED WATER									86 a	75 a	98 ab	98 a
3	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A				
4	DEIONIZED WATER									83 ab	66 ab	99 ab	98 a
4	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
4	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A				
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A				
5	DEIONIZED WATER									60 de	47 ef	92 de	95 ab
5	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
5	CUT RATE	100	SG	0.24	% w/w	2	lb/100 gal	6-8" W	A				
6	DEIONIZED WATER									65 d	48 def	91 de	90 cd
6	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
6	CUT RATE	100	SG	0.48	% w/w	4	lb/100 gal	6-8" W	A				
7	DEIONIZED WATER									65 d	54 b-f	99 a	98 a
7	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
7	HEL-FIRE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
8	DEIONIZED WATER									68 cd	63 abc	98 ab	98 a
8	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
8	HEL-FIRE	100	SL	1	% v/v	1	% v/v	6-8" W	A				
9	DEIONIZED WATER									79 abc	55 b-f	99 a	99 a
9	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
9	IMPORT	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
10	DEIONIZED WATER									70 bcd	60 bcd	99 a	99 a
10	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
10	IMPORT	100	SL	1	% v/v	1	% v/v	6-8" W	A				
11	DEIONIZED WATER									58 def	45 ef	95 a-d	93 bc
11	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
11	CT-301	100	SL	0.0313	% v/v	4	fl oz/100 gal	6-8" W	A				
12	DEIONIZED WATER									50 ef	43 f	94 b-e	96 ab
12	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
12	CT-301	100	SL	0.0625	% v/v	8	fl oz/100 gal	6-8" W	A				
13	DEIONIZED WATER									70 bcd	48 def	93 cde	88 de
13	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
13	ET 4000	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
14	DEIONIZED WATER									67 cd	57 b-e	97 abc	97 ab
14	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
14	ET 4000	100	SL	1	% v/v	1	% v/v	6-8" W	A				
15	DEIONIZED WATER									67 cd	52 c-f	99 a	99 a
15	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
15	N-TENSE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
16	DEIONIZED WATER									88 a	63 abc	99 a	99 a
16	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
16	N-TENSE	100	SL	1	% v/v	1	% v/v	6-8" W	A				
17	NONTREATED									0 g	0 g	0 f	0 f
LSD (P=.05)										13.9	13.1	4.9	4.5

Glyphosate with Acidic AMS Replacement Adjuvants - Deionized Water.

Trial ID: 09-11C-E90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	SETFA	SETFA
Crop Code													
Rating Date										08-13-09	08-27-09	08-13-09	08-27-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										14 DAT	28 DAT	14 DAT	28 DAT
Replicate F										4.082	4.101	2.282	0.043
Replicate Prob(F)										0.0264	0.0260	0.1184	0.9584
Treatment F										17.264	12.237	191.674	225.736
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: NDSU/UNL/KSU/SIU.
2. Ratings: WC at 14 & 28 DAT.
3. Measure and record spray solution pH after mixing.
4. Mixing instructions: Use DI water.
5. Spray sol. = Spray solution after mixing.
6. Not harvested.

Glyphosate with Acidic AMS Replacement Adjuvants - Hard Water.

Trial ID: 09-11C-W95 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Evaluate the efficacy of acidic AMS replacement adjuvant products with glyphosate in the presence of hard water cations.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 2 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A

% OM: 2.3 **Texture:** SILT LOAM
pH: 5.8 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1 84 LB/A, K 456 LB/A

Application Description

	A
Application Date:	07-30-09
Time of Day:	9:15
Application Method:	Spray
Application Timing:	6-8"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	73 F
% Relative Humidity:	90
Wind Velocity, Unit:	1 MPH
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	75
	07-30-09
Crop stage at application:	V4
Height Min, Max (inch):	6 8

Pest Stage At Each Application

Application Date:	07-30-09
Weed Code:	ABUTH
Stage Majority (leaves):	4
Stage Min, Max:	2 5
Height Majority:	7 IN
Height Min, Max:	1.5 9
Density, Unit:	0.2 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	6
Stage Min, Max:	4 8
Height Majority:	6.5 IN
Height Min, Max:	3.5 8
Density, Unit:	0.5 FT2
Weed Code:	AMATA
Stage Majority (leaves):	8
Stage Min, Max:	6 12
Height Majority:	7 IN
Height Min, Max:	3 9
Density, Unit:	15 FT2
Weed Code:	SETFA
Stage Majority (leaves):	3
Stage Min, Max:	2 5
Height Majority:	7.5 IN
Height Min, Max:	4 10
Density, Unit:	10 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	TT 110015
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	10 GPA

Glyphosate with Acidic AMS Replacement Adjuvants - Hard Water.

Trial ID: 09-11C-W95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	07-30-09 Spray sol. pH after mixing	GLXMA 08-13-09 Injury Percent 14 DAT	GLXMA 08-27-09 Injury Percent 28 DAT	ABUTH 08-13-09 Control Percent 14 DAT	ABUTH 08-27-09 Control Percent 28 DAT	IPOHE 08-13-09 Control Percent 14 DAT	IPOHE 08-27-09 Control Percent 28 DAT
1	HARD WATER (1000 PPM)									4.89	0 a	0 a	22 g	22 d	33 g	28 gh
1	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
2	HARD WATER (1000 PPM)									5.07	0 a	0 a	38 de	33 c	40 fg	33 fg
2	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
2	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A							
3	HARD WATER (1000 PPM)									4.93	0 a	0 a	63 ab	60 a	55 bc	51 ab
3	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A							
4	HARD WATER (1000 PPM)									4.90	0 a	0 a	53 bc	60 a	60 b	50 b
4	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
4	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A							
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A							
5	HARD WATER (1000 PPM)									3.37	0 a	0 a	32 efg	30 cd	42 ef	35 efg
5	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
5	CUT RATE	100	SG	0.24	% w/w	2	lb/100 gal	6-8" W	A							
6	HARD WATER (1000 PPM)									3.20	0 a	0 a	32 efg	30 cd	48 cde	42 cde
6	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
6	CUT RATE	100	SG	0.48	% w/w	4	lb/100 gal	6-8" W	A							
7	HARD WATER (1000 PPM)									2.80	0 a	0 a	25 fg	22 d	42 ef	37 def
7	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
7	HEL-FIRE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
8	HARD WATER (1000 PPM)									2.32	0 a	0 a	40 de	28 cd	50 cd	45 bc
8	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
8	HEL-FIRE	100	SL	1	% v/v	1	% v/v	6-8" W	A							
9	HARD WATER (1000 PPM)									2.09	0 a	0 a	52 c	45 b	52 c	43 bcd
9	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
9	IMPORT	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
10	HARD WATER (1000 PPM)									1.89	0 a	0 a	68 a	67 a	70 a	58 a
10	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
10	IMPORT	100	SL	1	% v/v	1	% v/v	6-8" W	A							
11	HARD WATER (1000 PPM)									2.54	0 a	0 a	30 efg	30 cd	33 g	23 h
11	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
11	CT-301	100	SL	0.0313	% v/v	4	fl oz/100 gal	6-8" W	A							
12	HARD WATER (1000 PPM)									2.26	0 a	0 a	35 ef	30 cd	42 ef	30 fgh
12	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
12	CT-301	100	SL	0.0625	% v/v	8	fl oz/100 gal	6-8" W	A							
13	HARD WATER (1000 PPM)									2.47	0 a	0 a	38 de	32 c	42 ef	35 efg
13	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
13	ET 4000	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
14	HARD WATER (1000 PPM)									2.15	0 a	0 a	48 cd	43 b	53 bc	43 bcd
14	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
14	ET 4000	100	SL	1	% v/v	1	% v/v	6-8" W	A							
15	HARD WATER (1000 PPM)									2.60	0 a	0 a	23 g	22 d	43 def	33 fg
15	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
15	N-TENSE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A							
16	HARD WATER (1000 PPM)									2.21	0 a	0 a	30 efg	30 cd	50 cd	42 cde
16	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A							
16	N-TENSE	100	SL	1	% v/v	1	% v/v	6-8" W	A							
17	NONTREATED									.	0 a	0 a	0 h	0 e	0 h	0 i
LSD (P=.05)										.	0.0	0.0	10.3	9.9	7.8	8.2
Replicate F											0.000	0.000	1.043	0.285	0.267	4.777
Replicate Prob(F)											1.0000	1.0000	0.3652	0.7539	0.7673	0.0153
Treatment F											0.000	0.000	21.632	23.524	29.694	21.156
Treatment Prob(F)											1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Glyphosate with Acidic AMS Replacement Adjuvants - Hard Water.

Trial ID: 09-11C-W95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 08-13-09 Control Percent 14 DAT	AMATA 08-27-09 Control Percent 28 DAT	SETFA 08-13-09 Control Percent 14 DAT	SETFA 08-27-09 Control Percent 28 DAT
1	HARD WATER (1000 PPM)									22 h	20 jk	40 g	47 g
1	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
2	HARD WATER (1000 PPM)									42 ef	33 f-i	90 c	90 c
2	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
2	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A				
3	HARD WATER (1000 PPM)									60 c	57 bc	94 b	95 abc
3	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
3	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A				
4	HARD WATER (1000 PPM)									73 b	60 b	99 a	98 a
4	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
4	R-11	100	SL	0.25	% v/v	0.25	% v/v	6-8" W	A				
4	AMS	100	SG	1.02	% w/w	8.5	lb/100 gal	6-8" W	A				
5	HARD WATER (1000 PPM)									42 ef	30 g-k	73 e	76 e
5	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
5	CUT RATE	100	SG	0.24	% w/w	2	lb/100 gal	6-8" W	A				
6	HARD WATER (1000 PPM)									48 de	37 e-h	74 e	77 e
6	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
6	CUT RATE	100	SG	0.48	% w/w	4	lb/100 gal	6-8" W	A				
7	HARD WATER (1000 PPM)									58 cd	42 d-g	97 ab	97 ab
7	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
7	HEL-FIRE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
8	HARD WATER (1000 PPM)									58 cd	45 c-f	97 ab	98 a
8	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
8	HEL-FIRE	100	SL	1	% v/v	1	% v/v	6-8" W	A				
9	HARD WATER (1000 PPM)									76 ab	53 bcd	99 a	99 a
9	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
9	IMPORT	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
10	HARD WATER (1000 PPM)									87 a	73 a	99 a	99 a
10	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
10	IMPORT	100	SL	1	% v/v	1	% v/v	6-8" W	A				
11	HARD WATER (1000 PPM)									27 gh	23 ijk	65 f	68 f
11	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
11	CT-301	100	SL	0.0313	% v/v	4	fl oz/100 gal	6-8" W	A				
12	HARD WATER (1000 PPM)									20 h	18 k	63 f	65 f
12	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
12	CT-301	100	SL	0.0625	% v/v	8	fl oz/100 gal	6-8" W	A				
13	HARD WATER (1000 PPM)									35 fg	25 h-k	83 d	83 d
13	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
13	ET 4000	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
14	HARD WATER (1000 PPM)									47 e	35 e-i	86 d	91 bc
14	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
14	ET 4000	100	SL	1	% v/v	1	% v/v	6-8" W	A				
15	HARD WATER (1000 PPM)									47 e	33 f-j	90 c	95 abc
15	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
15	N-TENSE	100	SL	0.5	% v/v	0.5	% v/v	6-8" W	A				
16	HARD WATER (1000 PPM)									52 cde	47 cde	99 a	98 a
16	TOUCHDOWN HI-TECH	5	SL	0.28	lb ae/a	7.2	fl oz/a	6-8" W	A				
16	N-TENSE	100	SL	1	% v/v	1	% v/v	6-8" W	A				
17	NONTREATED									0 i	0 l	0 h	0 h
LSD (P=.05)										11.4	13.1	3.7	6.2

Glyphosate with Acidic AMS Replacement Adjuvants - Hard Water.

Trial ID: 09-11C-W95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	SETFA	SETFA
Crop Code													
Rating Date										08-13-09	08-27-09	08-13-09	08-27-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										14 DAT	28 DAT	14 DAT	28 DAT
Replicate F										1.053	1.384	0.269	1.719
Replicate Prob(F)										0.3608	0.2652	0.7655	0.1954
Treatment F										31.088	15.602	424.005	143.884
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: NDSU/UNL/KSU/SIU.
2. Ratings: WC at 14 & 28 DAT.
3. Measure and record spray solution pH after mixing.
4. Special mixing instructions: Use hardwater.
   HARD WATER MIXING INSTRUCTIONS:
   To make 3 gallons of 1000 ppm Ca + Mg hard water use the formula:
   13.45 g of CaCl2-2H2O (Calcium Chloride Dihydrate)
   4.62 g of MgCl2-6H20 (Magnesium Chloride Hexahydrate)
   3 gallons distilled water
   Be sure to use the dihydrate form of the calcium chloride and the hexahydrate form of the magnesium chloride.
   Be sure to stir in the salts to insure that the solutions are all homogeneous before use.
5. Spray sol. = Spray solution after mixing.
6. Not harvested.

ISA POST Tank-Mix Adjuvant Study.

Trial ID: 09-DeSoto-ISA-TMadj Location: DeSoto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-23-09

Objectives: Determine the role of adjuvants used in tank-mixtures of broadleaf herbicides with glyphosate.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-23-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp
Pest 2 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A
Application Date:	06-12-09
Time of Day:	13:15
Application Method:	Spray
Application Timing:	MPOST
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	76 F
% Relative Humidity:	50
Wind Velocity, Unit:	2 MPH
Wind Direction:	SE
Dew Presence (Y/N):	N
Soil Temperature, Unit:	78 F
Soil Moisture:	ABONOR
% Cloud Cover:	100
	06-12-09
Crop stage at application:	V1-V2
Height Min, Max (inch):	5 8

Pest Stage At Each Application

Application Date:	06-12-09
Weed Code:	AMATA
Stage Majority (leaves):	6
Stage Min, Max:	COTY 20
Height Majority:	5 IN
Height Min, Max:	0.5 18
Density, Unit:	35 FT2
Weed Code:	ERICA
Stage Majority (leaves):	18
Stage Min, Max:	12 38
Height Majority:	8 IN
Height Min, Max:	4 13
Density, Unit:	0.5 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

ISA POST Tank-Mix Adjuvant Study.

Trial ID: 09-DeSoto-ISA-TMadj Location: DeSoto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA 06-19-09 Injury Percent 7 DA-A	GLXMA 06-26-09 Injury Percent 14 DA-A	GLXMA 07-10-09 Injury Percent 28 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.2 bcd	55.1 ab	39 a	0 l	0 g	0 c
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	10.9 bcd	54.3 a-d	41 a	16 fgh	7 b-f	2 abc
2	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.5 bcd	53.9 bcd	42 a	23 bc	9 a-d	2 abc
3	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.1 bcd	54.1 bcd	41 a	26 b	10 abc	4 a
4	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.2 bcd	54.0 bcd	42 a	23 bcd	7 b-f	2 abc
5	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	10.8 bcd	53.9 bcd	41 a	23 bc	7 b-f	2 abc
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.0 bcd	54.6 abc	42 a	20 cde	6 c-f	1 bc
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.8 b	55.5 a	41 a	30 a	13 a	4 ab
8	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	10.9 bcd	53.6 cd	38 a	26 b	9 a-d	3 abc
9	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.7 bc	54.5 abc	41 a	25 b	10 abc	1 bc
10	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	13.2 a	53.1 d	39 a	25 b	11 ab	3 ab
11	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	10.8 cd	53.9 bcd	43 a	9 k	3 fg	0 c
12	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.7 bcd	54.5 abc	42 a	15 ghi	4 efg	0 c
13	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	10.9 bcd	54.7 abc	44 a	13 hij	4 efg	0 c
14	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.6 bcd	54.3 a-d	44 a	11 jk	4 efg	0 c
15	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						

ISA POST Tank-Mix Adjuvant Study.

Trial ID: 09-DeSoto-ISA-TMadj Location: DeSoto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA 06-19-09 Injury Percent 7 DA-A	GLXMA 06-26-09 Injury Percent 14 DA-A	GLXMA 07-10-09 Injury Percent 28 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.0 bcd	54.9 ab	44 a	12 ijk	4 efg	0 c
16	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.1 bcd	54.5 abc	40 a	18 efg	8 b-e	1 bc
17	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.4 bcd	53.9 bcd	39 a	16 fgh	6 c-f	0 c
18	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
18	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.2 bcd	54.7 abc	39 a	19 def	5 def	0 c
19	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	10.7 d	54.4 a-d	41 a	17 efg	5 def	0 c
20	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	11.7 bc	55.1 ab	42 a	19 ef	9 a-d	1 bc
21	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
21	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
22	NONTREATED									11.7 bc	53.9 bcd	39 a	0 l	0 g	0 c
LSD (P=.05)										0.98	1.30	7.0	3.5	4.3	2.7
Replicate F										2.156	2.615	0.173	1.713	2.136	0.716
Replicate Prob(F)										0.1285	0.0851	0.8419	0.1927	0.1308	0.4944
Treatment F										2.477	1.510	0.474	41.435	4.725	1.982
Treatment Prob(F)										0.0061	0.1263	0.9659	0.0001	0.0001	0.0293

Means followed by same letter do not significantly differ (P=.05, LSD)

ISA POST Tank-Mix Adjuvant Study.

Trial ID: 09-DeSoto-ISA-TMadj Location: DeSoto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-26-09 Control Percent 14 DA-A	AMATA-HR 07-10-09 Control Percent 28 DA-A	AMATA-HR 08-07-09 Control Percent 56 DA-A	ERICA 06-26-09 Control Percent 14 DA-A	ERICA 07-10-09 Control Percent 28 DA-A	ERICA 08-07-09 Control Percent 56 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	67 ab	53 ab	15 de			
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	80 ab	67 ab	20 a-d	73 a	75 a	73 a
2	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	63 ab	58 ab	18 b-e	68 abc	65 a-d	64 abc
3	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	70 ab	65 ab	20 a-d	70 ab	65 a-d	65 abc
4	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	77 ab	70 ab	18 b-e	50 def	43 ef	43 de
5	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	63 ab	57 ab	20 a-d	43 f	38 f	35 e
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	83 a	80 a	23 ab	62 a-e	60 a-e	58 a-d
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	82 a	72 ab	24 a	55 b-f	45 def	45 cde
8	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	84 a	72 ab	21 abc	68 abc	68 abc	63 a-d
9	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	80 ab	69 ab	17 cde	65 a-d	65 a-d	64 abc
10	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	82 a	68 ab	14 e	53 c-f	57 a-f	57 a-d
11	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	65 ab	64 ab	21 abc	65 a-d	65 a-d	65 abc
12	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	73 ab	67 ab	20 a-d	63 a-e	70 ab	68 ab
13	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	75 ab	67 ab	19 b-e	50 def	58 a-f	58 a-d
14	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	67 ab	58 ab	19 b-e	48 ef	50 b-f	50 b-e
15	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						

ISA POST Tank-Mix Adjuvant Study.

Trial ID: 09-DeSoto-ISA-TMadj Location: DeSoto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-26-09 Control Percent 14 DA-A	AMATA-HR 07-10-09 Control Percent 28 DA-A	AMATA-HR 08-07-09 Control Percent 56 DA-A	ERICA 06-26-09 Control Percent 14 DA-A	ERICA 07-10-09 Control Percent 28 DA-A	ERICA 08-07-09 Control Percent 56 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	58 b	50 b	19 b-e	60 a-e	50 b-f	50 b-e
16	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	65 ab	58 ab	17 cde	65 a-d	48 c-f	48 b-e
17	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	65 ab	57 ab	18 b-e	63 a-d	60 a-e	55 a-e
18	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
18	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	75 ab	69 ab	22 abc	60 a-e	60 a-e	55 a-e
19	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	72 ab	69 ab	21 abc	55 b-f	58 a-f	55 a-e
20	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	75 ab	65 ab	18 b-e	58 a-e	50 b-f	47 cde
21	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
21	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
22	NONTREATED									0 c	0 c	0 f	0 g	0 g	0 f
LSD (P=.05)										22.7	29.3	5.7	15.0	20.5	20.1
Replicate F										0.499	0.961	2.562	2.369	5.376	6.877
Replicate Prob(F)										0.6106	0.3907	0.0891	0.1121	0.0106	0.0037
Treatment F										4.662	2.278	5.743	8.611	4.939	4.887
Treatment Prob(F)										0.0001	0.0115	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT; late-season rating of all plots at 56 DAT or at crop harvest.
3. MPOST = 3-5"W.
4. Take weed counts in nontreated at the "B" application timing (No./0.5 m2).
5. Yield if possible.
6. Blanket burndown application of Roundup PowerMax (32 floz/A) + 2,4-D (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
7. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
   AMATA-HR control on 8-7-09 includes control of new emergence after application.
   ERICA control on 8-7-09 is only burndown control of plants present at application.
8. AMATA-HR plants per 0.5 square meter in the nontreated plots on 6-12-09 at the MPOST (A) application were 210, 119, and 151 in plots 122, 212, and 317, respectively.
   ERICA plants per 0.5 square meter in the nontreated plots on 6-12-09 at the MPOST (A) application were 1, 0, and 1 in plots 122, 212, and 317, respectively.
9. Harvested 11-6-09, (2) 30 inch rows by 27 ft.

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 1.

Trial ID: 09-51E-M90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Determine the role of adjuvants used in tank-mixtures of broadleaf herbicides with glyphosate.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida L. ragweed, giant
Pest 2 Type: W **Code:** IPOSS morningglory, species
Pest 3 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.7 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 90 LB/A, K: 409 LB/A

Application Description

	A
Application Date:	07-22-09
Time of Day:	11:00
Application Method:	Spray
Application Timing:	MPOST
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	72 F
% Relative Humidity:	92
Wind Velocity, Unit:	7 MPH
Wind Direction:	N
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	100
	07-22-09
Crop stage at application:	V2
Height Min, Max (inch):	3 8

Pest Stage At Each Application

Application Date:	07-22-09
Weed Code:	AMBTR
Stage Majority (leaves):	5
Stage Min, Max:	2 8
Height Majority:	5 IN
Height Min, Max:	3 10
Density, Unit:	1 FT2
Weed Code:	IPOSS
Stage Majority (leaves):	6
Stage Min, Max:	2 8
Height Majority:	5 IN
Height Min, Max:	1 7
Density, Unit:	2.5 FT2
Weed Code:	AMATA
Stage Majority (leaves):	4
Stage Min, Max:	2 6
Height Majority:	4 IN
Height Min, Max:	1 6
Density, Unit:	0.5 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 1.

Trial ID: 09-51E-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-08-09 Moisture Percent	GLXMA 11-08-09 Yield bu/A	GLXMA 07-29-09 Injury Percent 7 DA-A	GLXMA 08-05-09 Injury Percent 14 DA-A	GLXMA 08-19-09 Injury Percent 28 DA-A	AMBTR 08-05-09 Control Percent 14 DA-A	AMBTR 08-19-09 Control Percent 28 DA-A	AMBTR 09-16-09 Control Percent 56 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.4 ab	37 abc	0 h	0 f	0 e	96 bc	96 b	82 b
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.3 ab	43 a	0 h	0 f	0 e	97 ab	97 ab	89 ab
2	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.6 a	36 a-d	3 g	0 f	0 e	98 ab	97 ab	86 ab
3	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A								
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.3 ab	42 ab	7 f	2 e	0 e	95 cd	95 b	91 ab
4	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A								
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.3 ab	40 ab	13 de	6 d	0 e	93 d	92 c	91 ab
5	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A								
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.2 ab	44 a	12 e	6 d	0 e	94 d	94 bc	93 a
6	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A								
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.2 ab	40 ab	15 d	7 d	0 e	99 a	99 a	92 ab
7	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.4 ab	38 abc	18 c	10 c	0 e	99 a	99 a	85 ab
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.3 ab	38 abc	19 c	10 c	0 e	99 a	99 a	87 ab
9	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.3 ab	36 a-d	15 d	6 d	0 e	99 a	99 a	90 ab
10	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.2 ab	39 abc	18 c	10 c	2 cd	99 a	99 a	86 ab
11	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.1 b	39 abc	20 bc	12 ab	1 de	99 a	99 a	92 ab
12	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.5 ab	34 bcd	23 a	13 a	4 a	99 a	99 a	92 ab
13	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A								
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.5 ab	30 cd	21 ab	13 a	4 ab	99 a	99 a	89 ab
14	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A								
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.4 ab	37 a-d	19 bc	11 bc	3 bc	99 a	99 a	91 ab
15	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A								
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 1.

Trial ID: 09-51E-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code														AMBTR	AMBTR	AMBTR
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
Rating Date										11-08-09	11-08-09	07-29-09	08-05-09	08-19-09	08-05-09	08-19-09	09-16-09
Rating Data Type										Moisture	Yield	Injury	Injury	Injury	Control	Control	Control
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing																	
Trt-Eval Interval												7 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	56 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12.4	ab	37	abc	19	c	11	bc	0	e	99	a	99	a	89	ab
16	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A																
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A																
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A																
17	NONTREATED									12.2	ab	27	d	0	h	0	f	0	e	0	e	0	d	0	c
LSD (P=.05)										0.45		9.5		2.2		1.4		1.6		2.1		2.7		10.1	
Replicate F										1.926		4.632		2.172		6.825		0.408		1.562		1.898		1.607	
Replicate Prob(F)										0.1623		0.0171		0.1304		0.0034		0.6687		0.2252		0.1664		0.2162	
Treatment F										0.679		1.651		110.897		101.511		6.839		1089.967		639.744		39.256	
Treatment Prob(F)										0.7929		0.1111		0.0001		0.0001		0.0001		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 1.

Trial ID: 09-51E-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										IPOSS	IPOSS	IPOSS	AMATA	AMATA	AMATA		
Crop Code																	
Rating Date										08-05-09	08-19-09	09-16-09	08-05-09	08-19-09	09-16-09		
Rating Data Type										Control	Control	Control	Control	Control	Control		
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent		
Rating Timing																	
Trt-Eval Interval										14 DA-A	28 DA-A	56 DA-A	14 DA-A	28 DA-A	56 DA-A		
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	72	d	69	d	62	e	99	a	99	a	99	a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	73	d	72	d	72	d	99	a	99	a	96	c
2	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A												
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	83	c	81	c	78	cd	98	a	98	a	98	abc
3	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A												
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	85	c	83	c	78	cd	98	a	97	a	97	abc
4	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A												
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A												
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	90	b	88	b	78	cd	97	a	97	a	96	bc
5	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A												
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	89	b	88	b	85	abc	98	a	98	a	98	abc
6	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	A												
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	96	a	96	a	85	abc	99	a	99	a	99	a
7	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A												
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a	98	a	86	abc	99	a	99	a	98	ab
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A												
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99	a	98	a	88	ab	99	a	99	a	99	a
9	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A												
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A												
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a	98	a	85	abc	98	a	97	a	97	abc
10	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A												
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a	98	a	83	abc	99	a	99	a	98	ab
11	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A												
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99	a	98	a	81	bcd	99	a	99	a	99	a
12	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A												
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a	97	a	82	abc	99	a	99	a	99	a
13	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A												
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99	a	99	a	80	bcd	99	a	99	a	98	ab
14	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A												
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A												
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99	a	99	a	90	a	99	a	99	a	97	abc
15	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A												
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A												
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A												

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 1.

Trial ID: 09-51E-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS 08-05-09 Control Percent 14 DA-A	IPOSS 08-19-09 Control Percent 28 DA-A	IPOSS 09-16-09 Control Percent 56 DA-A	AMATA 08-05-09 Control Percent 14 DA-A	AMATA 08-19-09 Control Percent 28 DA-A	AMATA 09-16-09 Control Percent 56 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99 a	98 a	77 cd	99 a	99 a	99 a
16	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
17	NONTREATED									0 e	0 e	0 f	0 b	0 b	0 d
LSD (P=.05)										2.7	3.9	9.3	2.1	2.6	2.6
Replicate F										0.570	1.133	3.456	1.294	0.452	1.516
Replicate Prob(F)										0.5713	0.3345	0.0438	0.2882	0.6403	0.2349
Treatment F										667.194	320.145	40.939	1099.744	693.399	724.434
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/UIUC/WIU/ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT; late-season rating of all plots at 56 DAT or at crop harvest.
3. MPOST = 3-5"W.
4. Take weed counts in nontreated at the MPOST application timing (No./0.5 m2).
5. Yield if possible.
6. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
7. Weed counts per 0.5 square meter in the nontreated plots on 7-21-09 were:
   Plot 117- 6 AMBTR, 7 IPOSS, 2 ABUTH, 2 AMATA
   Plot 203- 8 AMBTR, 9 IPOSS, 5 ABUTH
   Plot 306- 4 AMBTR, 3 IPOSS, 2 ABUTH, 5 AMATA
8. Ratings at 56 DA-A includes new growth after herbicide application.
9. Harvested 11-8-09, (2) 30 inch rows by 24 ft.

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 2.

Trial ID: 09-10B-W150 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Determine the role of adjuvants used in tank-mixtures of broadleaf herbicides with glyphosate.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida L. ragweed, giant
Pest 2 Type: W **Code:** IPOSS morningglory, species
Pest 3 Type: W **Code:** ABUTH Abutilon theophrasti Medicus velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A

% OM: 2 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1 88 LB/A, K 445 LB/A

Application Description

	A
Application Date:	07-20-09
Time of Day:	10:15 AM
Application Method:	Spray
Application Timing:	MPOST
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	72 F
% Relative Humidity:	90
Wind Velocity, Unit:	4 MPH
Wind Direction:	SE
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	20
	07-20-09
Crop stage at application:	V1
Height Min, Max (inch):	3 6

Pest Stage At Each Application

Application Date:	07-20-09
Weed Code:	AMBTR
Stage Majority (leaves):	3
Stage Min, Max:	2 4
Height Majority:	4 IN
Height Min, Max:	1 7
Density, Unit:	1 FT2
Weed Code:	IPOSS
Stage Majority (leaves):	2
Stage Min, Max:	2 4
Height Majority:	2 IN
Height Min, Max:	1 4
Density, Unit:	0.1 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	4
Stage Min, Max:	2 4
Height Majority:	3 IN
Height Min, Max:	1 5
Density, Unit:	4 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 2.

Trial ID: 09-10B-W150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-10-09 Moisture Percent	GLXMA 11-10-09 Yield bu/A	GLXMA 07-27-09 Injury Percent 7 DA-A	GLXMA 08-03-09 Injury Percent 14 DA-A	GLXMA 08-17-09 Injury Percent 28 DA-A	AMBTR 08-03-09 Control Percent 14 DA-A	AMBTR 08-17-09 Control Percent 28 DA-A	AMBTR 09-14-09 Control Percent 56 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.9 a-f	29 a-d	0 j	0 h	0 b	97 bc	98 a-d	80 abc
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	16.0 a-f	30 a-d	24 d	13 cde	0 b	98 abc	97 a-d	76 abc
2	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	16.3 a	37 ab	28 bc	15 a-d	1 ab	97 c	96 cd	80 abc
3	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A								
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	16.1 abc	31 a-d	26 cd	14 b-e	1 ab	98 ab	98 a-d	75 abc
4	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A								
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	16.2 ab	38 ab	24 d	14 a-d	1 ab	99 ab	98 abc	72 bc
5	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A								
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	16.0 a-e	34 abc	25 cd	14 b-e	0 b	98 abc	97 a-d	82 abc
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A								
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.6 c-f	22 de	29 ab	14 a-d	2 ab	98 ab	97 bcd	73 abc
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.7 a-f	29 a-d	26 cd	13 cde	1 ab	99 ab	98 a-d	80 abc
8	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A								
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.7 a-f	30 a-d	31 a	16 ab	0 b	99 ab	98 abc	81 abc
9	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A								
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.7 a-f	27 bcd	32 a	17 a	2 a	98 abc	96 d	63 c
10	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A								
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.9 a-f	34 abc	30 ab	15 abc	0 b	98 abc	96 cd	78 abc
11	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A								
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.7 b-f	35 abc	15 i	7 g	0 b	98 abc	96 cd	89 ab
12	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.7 a-f	26 cde	18 ghi	9 fg	0 b	99 ab	99 ab	75 abc
13	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.4 ef	39 a	15 i	7 g	0 b	99 a	99 a	86 ab
14	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.6 b-f	35 abc	17 hi	7 g	0 b	99 a	99 a	87 ab
15	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A								
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A								

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 2.

Trial ID: 09-10B-W150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code										
Pest Code															AMBTR		AMBTR		AMBTR
Crop Code										GLXMA		GLXMA	GLXMA	GLXMA					
Rating Date										11-10-09		11-10-09	07-27-09	08-03-09	08-17-09	08-03-09		08-17-09	09-14-09
Rating Data Type										Moisture		Yield	Injury	Injury	Injury	Control		Control	Control
Rating Unit										Percent		bu/A	Percent	Percent	Percent	Percent		Percent	Percent
Rating Timing																			
Trt-Eval Interval													7 DA-A	14 DA-A	28 DA-A	14 DA-A		28 DA-A	56 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.8	a-f	32	a-d	19	fgh	9	fg	0	b	99	ab	98	abc	81	abc
16	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A																
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A																
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A																
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	16.0	a-d	31	a-d	19	fgh	11	ef	0	b	99	ab	99	ab	92	a
17	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A																
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A																
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.7	a-f	36	abc	20	fg	11	ef	0	b	98	abc	97	bcd	89	ab
18	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A																
18	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A																
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A																
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.8	a-f	37	ab	20	fg	9	fg	0	b	99	a	99	a	89	ab
19	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A																
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A																
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A																
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.5	def	27	bcd	24	de	14	b-e	1	ab	98	abc	97	bcd	85	ab
20	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A																
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A																
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A																
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15.9	a-f	28	bcd	21	ef	12	de	0	b	98	ab	98	a-d	91	a
21	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A																
21	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A																
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A																
22	NONTREATED									15.4	f	16	e	0	j	0	h	0	b	0	d	0	e	0	d
LSD (P=.05)										0.58		10.7		2.7		2.9		1.8		1.5		2.3		19.0	
Replicate F										3.110		2.718		2.663		4.540		0.012		0.527		1.661		0.145	
Replicate Prob(F)										0.0564		0.0792		0.0815		0.0164		0.9880		0.5943		0.2022		0.8654	
Treatment F										1.344		2.257		81.498		20.853		0.953		1634.739		686.562		7.888	
Treatment Prob(F)										0.2109		0.0148		0.0001		0.0001		0.5330		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 2.

Trial ID: 09-10B-W150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS 08-03-09 Control Percent 14 DA-A	IPOSS 08-17-09 Control Percent 28 DA-A	IPOSS 09-14-09 Control Percent 56 DA-A	ABUTH 08-03-09 Control Percent 14 DA-A	ABUTH 08-17-09 Control Percent 28 DA-A	ABUTH 09-14-09 Control Percent 56 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	96 b-f	94 bcd	70 gh	99 a	99 a	73 e
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97 a-e	95 a-d	72 fgh	99 a	99 a	87 a-d
2	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	95 def	94 cd	70 gh	99 a	99 a	87 a-d
3	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	95 ef	95 a-d	68 h	99 a	99 a	78 b-e
4	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 abc	97 abc	73 e-h	99 a	99 a	81 a-e
5	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97 a-d	95 a-d	80 b-e	99 a	99 a	83 a-e
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97 a-d	95 a-d	75 d-h	99 a	99 a	77 cde
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 ab	97 abc	77 c-g	99 a	99 a	75 de
8	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	96 c-f	94 bcd	80 b-e	99 a	99 a	87 a-d
9	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97 a-e	96 abc	80 b-e	99 a	99 a	85 a-e
10	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	94 f	92 d	80 b-e	99 a	99 a	83 a-e
11	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 ab	98 abc	80 b-e	99 a	99 a	81 a-e
12	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99 a	98 ab	82 a-d	99 a	99 a	85 a-e
13	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 ab	97 abc	78 c-g	99 a	99 a	87 a-d
14	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99 a	98 abc	78 c-f	99 a	99 a	89 ab
15	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Site 2.

Trial ID: 09-10B-W150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS 08-03-09 Control Percent 14 DA-A	IPOSS 08-17-09 Control Percent 28 DA-A	IPOSS 09-14-09 Control Percent 56 DA-A	ABUTH 08-03-09 Control Percent 14 DA-A	ABUTH 08-17-09 Control Percent 28 DA-A	ABUTH 09-14-09 Control Percent 56 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99 a	99 a	82 a-d	99 a	99 a	86 a-d
16	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 ab	97 abc	83 abc	99 a	99 a	88 abc
17	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 ab	97 abc	88 ab	99 a	99 a	91 a
18	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
18	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99 a	98 a	88 a	99 a	99 a	89 ab
19	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 ab	97 abc	83 abc	99 a	99 a	87 a-d
20	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 ab	97 abc	84 abc	99 a	99 a	89 ab
21	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
21	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
22	NONTREATED									0 g	0 e	0 i	0 b	0 b	0 f
LSD (P=.05)										2.1	4.3	8.3	0.0	0.0	11.9
Replicate F										0.621	2.039	2.781	0.000	0.000	1.705
Replicate Prob(F)										0.5422	0.1428	0.0734	1.0000	1.0000	0.1942
Treatment F										794.130	184.511	37.181	0.000	0.000	20.079
Treatment Prob(F)										0.0001	0.0001	0.0001	1.0000	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/UIUC/WIU/ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT; late-season rating of all plots at 56 DAT or at crop harvest.
3. MPOST = 3-5"W.
4. Take weed counts in nontreated at the "B" application timing (No./0.5 m2).
5. Yield if possible.
6. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
7. Weed counts per 0.5 square meter in the nontreated plots on 7-20-09 were;
   Plot 122- 1 AMBTR, 21 ABUTH, 5 IPOSS, 3 SETFA, 3 CYPES
   Plot 216- 20 ABUTH, 1 AMBTR, 7 IPOSS, 10 SETFA, 23 CYPES
   Plot 303- 5 AMBTR, 14 ABUTH, 7 IPOSS, 7 SETFA
7. Ratings at 56 DA-A includes new growth after herbicide application.
8. Harvested 11-10-09, (2) 30 inch rows by 21 ft.

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Clinton.

Trial ID: 09-Clinton-TMadj Location: Huey, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Huey IL 62252 USA
Trial Status: FINAL **Initiation Date:** 06-12-09

Objectives: Determine the role of adjuvants used in tank-mixtures of broadleaf herbicides with glyphosate.

Crop 1: GLXMA Soybean **Variety:** RR
Planting Method: SEEDED **Planting Date:** 06-12-09
LB/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 15 IN

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: PPO-resistant waterhemp
Pest 2 Type: W **Code:** MOLVE Mollugo verticillata L. carpetweed

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Texture: SILT LOAM

Application Description

	A
Application Date:	07-03-09
Time of Day:	10:00 AM
Application Method:	Spray
Application Timing:	MPOST
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	81 F
% Relative Humidity:	43
Wind Velocity, Unit:	4 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	78 F
Soil Moisture:	NORMAL
% Cloud Cover:	20
	07-03-09
Crop stage at application:	V3
Height Min, Max (inch):	6 8

Pest Stage At Each Application

Application Date:	07-03-09
Weed Code:	AMATA
Stage Majority (leaves):	8
Stage Min, Max:	4 12
Height Majority:	4 IN
Height Min, Max:	2 10
Density, Unit:	1 FT2
Weed Code:	MOLVE
Stage Majority (leaves):	8
Stage Min, Max:	2 12
Height Majority:	0.75 IN DIA
Height Min, Max:	0.25 1.25
Density, Unit:	10 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Clinton.

Trial ID: 09-Clinton-TMadj Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 07-10-09 Injury Percent 7 DA-A	GLXMA 07-17-09 Injury Percent 14 DA-A	GLXMA 07-31-09 Injury Percent 28 DA-A	AMATA-HR 07-17-09 Control Percent 14 DA-A	AMATA-HR 07-31-09 Control Percent 28 DA-A	AMATA-HR 08-28-09 Control Percent 56 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	0 k	0 k	0 a	97 a	98 ab	99 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	22 ef	9 cde	0 a	97 a	99 ab	99 a
2	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	20 fg	7 efg	0 a	96 a	98 ab	99 a
3	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	28 c	8 def	0 a	98 a	99 ab	99 a
4	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	27 cd	7 efg	0 a	97 a	99 ab	98 a
5	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	24 de	7 efg	0 a	97 a	99 ab	99 a
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A						
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	30 bc	11 bc	0 a	98 a	99 ab	99 a
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	33 ab	10 bcd	0 a	96 a	99 ab	99 a
8	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	34 a	14 a	0 a	96 a	98 ab	99 a
9	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	33 ab	12 ab	0 a	97 a	99 a	99 a
10	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	30 bc	12 ab	0 a	96 a	99 ab	99 a
11	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A						
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	7 j	3 j	0 a	92 b	97 b	99 a
12	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	13 i	3 j	0 a	96 a	99 ab	99 a
13	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12 i	3 j	0 a	97 a	99 ab	99 a
14	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	12 i	4 ij	0 a	97 a	99 ab	98 a
15	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Clinton.

Trial ID: 09-Clinton-TMadj Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 07-10-09 Injury Percent 7 DA-A	GLXMA 07-17-09 Injury Percent 14 DA-A	GLXMA 07-31-09 Injury Percent 28 DA-A	AMATA-HR 07-17-09 Control Percent 14 DA-A	AMATA-HR 07-31-09 Control Percent 28 DA-A	AMATA-HR 08-28-09 Control Percent 56 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	13 i	4 hij	0 a	96 a	99 a	99 a
16	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A						
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	15 hi	5 g-j	0 a	95 a	98 ab	98 a
17	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	14 hi	4 ij	0 a	97 a	99 ab	99 a
18	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
18	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	17 gh	5 g-j	0 a	97 a	99 a	99 a
19	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A						
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	17 gh	6 ghi	0 a	96 a	98 ab	99 a
20	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	19 fg	6 fgh	0 a	97 a	98 ab	98 a
21	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A						
21	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A						
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A						
22	NONTREATED									0 k	0 k	0 a	0 c	0 c	0 b
LSD (P=.05)										3.7	2.2	0.0	2.9	1.4	1.2
Replicate F										1.109	5.228	0.000	3.597	0.143	0.187
Replicate Prob(F)										0.3392	0.0094	1.0000	0.0362	0.8671	0.8299
Treatment F										60.566	24.997	0.000	399.532	1784.870	2348.307
Treatment Prob(F)										0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Clinton.

Trial ID: 09-Clinton-TMadj Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										MOLVE		MOLVE		MOLVE
Crop Code														
Rating Date										07-17-09		07-31-09		08-28-09
Rating Data Type										Control		Control		Control
Rating Unit										Percent		Percent		Percent
Rating Timing														
Trt-Eval Interval										14 DA-A		28 DA-A		56 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97	cd	99	a	99 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97	bcd	99	a	99 a
2	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a-d	99	a	99 a
3	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A					
3	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	abc	99	a	99 a
4	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A					
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a-d	99	a	99 a
5	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A					
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a-d	99	a	99 a
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	A					
6	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	abc	99	a	99 a
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a-d	99	a	99 a
8	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A					
8	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	abc	99	a	99 a
9	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A					
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99	ab	99	a	99 a
10	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A					
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99	a	99	a	99 a
11	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	A					
11	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97	bcd	99	a	99 a
12	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a-d	99	a	99 a
13	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A					
13	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97	d	98	a	99 a
14	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A					
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98	a-d	99	a	99 a
15	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A					
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A					
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A					

Cooperative POST Soybean Glyphosate Tank-Mix Adjuvants - Clinton.

Trial ID: 09-Clinton-TMadj Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	MOLVE	MOLVE	MOLVE
Pest Code										MOLVE	MOLVE	MOLVE
Crop Code												
Rating Date										07-17-09	07-31-09	08-28-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing												
Trt-Eval Interval										14 DA-A	28 DA-A	56 DA-A
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99 a	99 a	99 a
16	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	A			
16	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A			
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A			
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 abc	99 a	99 a
17	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A			
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A			
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	97 bcd	98 a	99 a
18	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A			
18	PREFERENCE	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A			
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A			
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 a-d	99 a	99 a
19	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A			
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	MPOST	A			
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A			
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	98 abc	99 a	99 a
20	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A			
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A			
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A			
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	A	99 ab	99 a	99 a
21	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	A			
21	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	MPOST	A			
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	A			
22	NONTREATED									0 e	0 b	0 b
LSD (P=.05)										1.4	0.7	0.0
Replicate F										0.267	0.920	0.000
Replicate Prob(F)										0.7667	0.4065	1.0000
Treatment F										1778.775	6735.289	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/UIUC/WIU/ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT; late-season rating of all plots at 56 DAT or at crop harvest.
3. MPOST = 3-5"W.
4. Take weed counts in nontreated at the "B" application timing (No./0.5 m2).
5. Yield if possible.
6. Crop canopied prior to 28 dat rating.
7. AMATA-HR = Herbicide-resistant waterhemp (PPO).
8. 7/3/09 Weed counts in nontreated. Plot 122: 53 Molve 8 Amata, Plot 212: 74 Molve 6 Amata, Plot 308: 45 Molve 5 Amata
9. Not harvested

No-Till Corn Weed Control Studies

Southern Illinois University

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-06-09

Objectives: Compare two-pass Syngenta treatments to full season rates of Lexar and to Corvus, Integrity, and Balance Flexx for efficacy and yield.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 05-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common
Pest 4 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 5 Type: W	**Code:** CHEAL	Chenopodium album L.	lambsquarters, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** CASEYVILLE
CEC: 8 **Fert. Level:** P1 82 LB/A, K 408 LB/A

Application Description

	A	B	C
Application Date:	05-06-09	06-10-09	06-12-09
Time of Day:	17:00	10:00	8:00
Application Method:	Spray	Spray	Spray
Application Timing:	BURNDOWN	2-4"W-1	2-4"W-2
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	RFK	RFK	DKP
Air Temperature, Unit:	66 F	78 F	64 F
% Relative Humidity:	92	92	92
Wind Velocity, Unit:	0 MPH	0 MPH	1 MPH
Wind Direction:	NA	NA	N
Dew Presence (Y/N):	N	N	N
Soil Moisture:	ABONOR	ABONOR	ABONOR
% Cloud Cover:	0	0	100
	05-06-09	06-10-09	06-12-09
Crop stage at application:	NA	V2-3	V2-3
Height Min, Max (inch):		4 5	4 5

Pest Stage At Each Application

Application Date:	05-06-09	06-10-09	06-12-09
Weed Code:	SETFA	SETFA	SETFA
Stage Majority (leaves):	NA	4	4
Stage Min, Max:		3 4	3 4
Height Majority:		4 IN	4 IN
Height Min, Max:		1 4	3 5
Density, Unit:		0.5 FT2	0.4 FT2
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	5	2	6
Stage Min, Max:	5 8	1 2	2 8
Height Majority:	4 IN	0.5 IN	3 IN
Height Min, Max:	2 6	0 1	2 5
Density, Unit:	4 FT2	0.5 FT2	0.2 FT2
Weed Code:	XANST	XANST	XANST
Stage Majority (leaves):	NA	6	2
Stage Min, Max:		4 8	2 4
Height Majority:		3 IN	2 IN
Height Min, Max:		2 4	1 5
Density, Unit:		1 FT2	0.3 FT2
Weed Code:	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	4	4
Stage Min, Max:		4 8	2 6
Height Majority:		2 IN	2 IN
Height Min, Max:		1 3	1 3
Density, Unit:		0.5 FT2	0.1 FT2
Weed Code:	CHEAL	CHEAL	CHEAL
Stage Majority (leaves):	10	NA	NA
Stage Min, Max:	7 10		
Height Majority:	3 IN		
Height Min, Max:	2 4		
Density, Unit:	2 FT2		

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 11-14-09 Moisture Percent	ZEAMD 11-14-09 Yield bu/A	ZEAMD 06-10-09 Injury Percent -2 DA-C 0 DA-B	ZEAMD 07-08-09 Injury Percent 26 DA-C 28 DA-B	ZEAMD 08-05-09 Injury Percent 54 DA-C 56 DA-B
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	15.6 ab	64 b	0 a	0 a	0 a
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	BURNDOWN	A	15.5 ab	105 ab	0 a	0 a	0 a
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	BURNDOWN	A					
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	BURNDOWN	A	16.0 ab	90 ab	0 a	0 a	0 a
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	2-4"W-2	C					
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	BURNDOWN	A	15.6 ab	105 ab	0 a	0 a	0 a
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C					
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C					
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-2	C					
5	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	BURNDOWN	A	16.2 ab	116 a	0 a	0 a	0 a
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C					
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C					
6	BICEP II MAGNUM	5.5	SC	2.9	lb ai/a	2.1	qt/a	BURNDOWN	A	16.0 ab	115 a	0 a	0 a	0 a
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
6	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C					
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	2-4"W-2	C					
6	28% UAN	100	SL	1	% v/v	1	%v/v	2-4"W-2	C					
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	16.4 a	99 ab	0 a	0 a	0 a
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
7	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
7	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-1	B					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B					
7	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-1	B					
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	15.3 b	103 ab	0 a	0 a	0 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B					
8	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-1	B					
8	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-1	B					
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-1	B					
9	CORVUS	2.62	SC	0.0676	lb ai/a	3.3	fl oz/a	BURNDOWN	A	16.3 ab	96 ab	0 a	0 a	0 a
9	AATREX	4	SC	1	lb ai/a	1	qt/a	BURNDOWN	A					
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
9	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
10	BALANCE FLEXX	2	SC	0.078	lb ai/a	5	fl oz/a	BURNDOWN	A	15.6 ab	87 ab	0 a	0 a	0 a
10	AATREX	4	SC	1.5	lb ai/a	1.5	qt/a	BURNDOWN	A					
10	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
10	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					
11	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	BURNDOWN	A	15.9 ab	76 ab	0 a	0 a	0 a
11	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A					
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A					
11	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A					

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code														
Crop Code										ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Rating Date										11-14-09	11-14-09	06-10-09	07-08-09	08-05-09
Rating Data Type										Moisture	Yield	Injury	Injury	Injury
Rating Unit										Percent	bu/A	Percent	Percent	Percent
Rating Timing												-2 DA-C	26 DA-C	54 DA-C
Trt-Eval Interval												0 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										1.06	44.4	0.0	0.0	0.0
Replicate F										1.289	1.363	0.000	0.000	0.000
Replicate Prob(F)										0.2961	0.2728	1.0000	1.0000	1.0000
Treatment F										0.890	1.064	0.000	0.000	0.000
Treatment Prob(F)										0.5535	0.4181	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA 06-10-09 Control Percent -2 DA-C 0 DA-B	SETFA 07-08-09 Control Percent 26 DA-C 28 DA-B	SETFA 08-05-09 Control Percent 54 DA-C 56 DA-B	AMBTR 06-10-09 Control Percent -2 DA-C 0 DA-B	AMBTR 07-08-09 Control Percent 26 DA-C 28 DA-B	AMBTR 08-05-09 Control Percent 54 DA-C 56 DA-B
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	91 bc	28 e	18 e	94 bc	79 d	58 c
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	BURNDOWN	A	98 a	74 bc	60 bc	96 abc	92 c	78 b
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	BURNDOWN	A						
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	BURNDOWN	A	94 ab	73 bc	79 ab	97 ab	98 ab	95 ab
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	2-4"W-2	C						
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	BURNDOWN	A	97 ab	99 a	98 a	97 ab	99 a	99 a
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C						
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-2	C						
5	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	BURNDOWN	A	94 ab	96 a	94 a	98 ab	99 ab	97 a
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C						
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C						
6	BICEP II MAGNUM	5.5	SC	2.9	lb ai/a	2.1	qt/a	BURNDOWN	A	97 ab	94 a	89 a	96 ab	98 ab	98 a
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
6	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C						
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	2-4"W-2	C						
6	28% UAN	100	SL	1	% v/v	1	%v/v	2-4"W-2	C						
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	85 c	91 ab	92 a	91 c	99 ab	97 a
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
7	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
7	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-1	B						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B						
7	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-1	B						
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	86 c	98 a	97 a	94 bc	99 ab	98 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B						
8	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-1	B						
8	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-1	B						
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-1	B						
9	CORVUS	2.62	SC	0.0676	lb ai/a	3.3	fl oz/a	BURNDOWN	A	97 ab	65 cd	58 bcd	99 a	95 abc	90 ab
9	AATREX	4	SC	1	lb ai/a	1	qt/a	BURNDOWN	A						
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
9	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
10	BALANCE FLEXX	2	SC	0.078	lb ai/a	5	fl oz/a	BURNDOWN	A	96 ab	53 d	53 cd	98 ab	94 bc	89 ab
10	AATREX	4	SC	1.5	lb ai/a	1.5	qt/a	BURNDOWN	A						
10	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
10	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
11	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	BURNDOWN	A	95 ab	64 cd	35 de	96 abc	92 c	82 ab
11	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
11	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										SETFA	SETFA	SETFA	AMBTR	AMBTR	AMBTR
Crop Code															
Rating Date										06-10-09	07-08-09	08-05-09	06-10-09	07-08-09	08-05-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										-2 DA-C	26 DA-C	54 DA-C	-2 DA-C	26 DA-C	54 DA-C
Trt-Eval Interval										0 DA-B	28 DA-B	56 DA-B	0 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										6.7	19.5	24.8	4.6	5.1	18.1
Replicate F										1.315	1.225	0.320	2.154	0.908	0.417
Replicate Prob(F)										0.2878	0.3179	0.8109	0.1142	0.4487	0.7420
Treatment F										3.535	11.164	10.108	1.985	11.178	4.033
Treatment Prob(F)										0.0035	0.0001	0.0001	0.0718	0.0001	0.0014

Means followed by same letter do not significantly differ (P=.05, LSD)

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	XANST 06-10-09 Control Percent -2 DA-C 0 DA-B	XANST 07-08-09 Control Percent 26 DA-C 28 DA-B	XANST 08-05-09 Control Percent 54 DA-C 56 DA-B	IPOHE 06-10-09 Control Percent -2 DA-C 0 DA-B	IPOHE 07-08-09 Control Percent 26 DA-C 28 DA-B	IPOHE 08-05-09 Control Percent 54 DA-C 56 DA-B
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	97 ab	70 c	70 d	92 bc	38 e	35 c
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	BURNDOWN	A	99 a	84 b	79 cd	97 ab	55 de	50 bc
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	BURNDOWN	A						
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	BURNDOWN	A	99 a	98 a	95 a	98 a	95 ab	89 a
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	2-4"W-2	C						
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	BURNDOWN	A	96 b	96 a	94 a	97 ab	97 a	94 a
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C						
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-2	C						
5	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	BURNDOWN	A	98 ab	91 ab	95 a	94 ab	82 abc	85 a
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C						
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C						
6	BICEP II MAGNUM	5.5	SC	2.9	lb ai/a	2.1	qt/a	BURNDOWN	A	99 a	97 a	97 a	95 ab	99 a	87 a
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
6	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C						
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	2-4"W-2	C						
6	28% UAN	100	SL	1	% v/v	1	%v/v	2-4"W-2	C						
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	90 c	95 a	97 a	88 c	72 cd	69 ab
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
7	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
7	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-1	B						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B						
7	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-1	B						
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	90 c	97 a	96 a	92 bc	89 abc	92 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B						
8	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-1	B						
8	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-1	B						
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-1	B						
9	CORVUS	2.62	SC	0.0676	lb ai/a	3.3	fl oz/a	BURNDOWN	A	99 a	94 ab	92 ab	98 a	74 bcd	53 bc
9	AATREX	4	SC	1	lb ai/a	1	qt/a	BURNDOWN	A						
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
9	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
10	BALANCE FLEXX	2	SC	0.078	lb ai/a	5	fl oz/a	BURNDOWN	A	99 a	97 a	90 ab	99 a	83 abc	70 ab
10	AATREX	4	SC	1.5	lb ai/a	1.5	qt/a	BURNDOWN	A						
10	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
10	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						
11	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	BURNDOWN	A	98 ab	91 ab	83 bc	99 a	80 abc	71 ab
11	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A						
11	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A						

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										XANST	XANST	XANST	IPOHE	IPOHE	IPOHE
Crop Code															
Rating Date										06-10-09	07-08-09	08-05-09	06-10-09	07-08-09	08-05-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										-2 DA-C	26 DA-C	54 DA-C	-2 DA-C	26 DA-C	54 DA-C
Trt-Eval Interval										0 DA-B	28 DA-B	56 DA-B	0 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										3.0	10.6	10.0	4.8	23.1	28.1
Replicate F										0.629	2.219	5.063	3.834	1.158	0.590
Replicate Prob(F)										0.6019	0.1064	0.0059	0.0195	0.3421	0.6261
Treatment F										11.049	5.101	6.315	4.432	5.432	4.038
Treatment Prob(F)										0.0001	0.0002	0.0001	0.0007	0.0001	0.0014

Means followed by same letter do not significantly differ (P=.05, LSD)

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	CHEAL 06-10-09 Control Percent -2 DA-C 0 DA-B	CHEAL 07-08-09 Control Percent 26 DA-C 28 DA-B	CHEAL 08-05-09 Control Percent 54 DA-C 56 DA-B
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	99 a	99 a	96 b
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	BURNDOWN	A	99 a	97 ab	99 a
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	BURNDOWN	A			
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	BURNDOWN	A	99 a	99 a	99 a
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	2-4"W-2	C			
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	BURNDOWN	A	99 a	99 a	99 a
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C			
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C			
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-2	C			
5	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	BURNDOWN	A	99 a	95 b	98 ab
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-2	C			
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C			
6	BICEP II MAGNUM	5.5	SC	2.9	lb ai/a	2.1	qt/a	BURNDOWN	A	99 a	99 a	99 a
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
6	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C			
6	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	2-4"W-2	C			
6	28% UAN	100	SL	1	% v/v	1	%v/v	2-4"W-2	C			
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	97 b	99 a	99 a
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
7	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
7	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-1	B			
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B			
7	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-1	B			
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A	99 a	99 a	99 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	2-4"W-1	B			
8	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-1	B			
8	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-1	B			
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	2-4"W-1	B			
9	CORVUS	2.62	SC	0.0676	lb ai/a	3.3	fl oz/a	BURNDOWN	A	99 a	97 ab	99 a
9	AATREX	4	SC	1	lb ai/a	1	qt/a	BURNDOWN	A			
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
9	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
10	BALANCE FLEXX	2	SC	0.078	lb ai/a	5	fl oz/a	BURNDOWN	A	99 a	99 a	99 a
10	AATREX	4	SC	1.5	lb ai/a	1.5	qt/a	BURNDOWN	A			
10	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
10	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			
11	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	BURNDOWN	A	99 a	98 ab	99 a
11	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	BURNDOWN	A			
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	BURNDOWN	A			
11	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	BURNDOWN	A			

Lexar in No-Till Corn.

Trial ID: 09-6C-E95 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										CHEAL	CHEAL	CHEAL
Crop Code												
Rating Date										06-10-09	07-08-09	08-05-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing										-2 DA-C	26 DA-C	54 DA-C
Trt-Eval Interval										0 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										2.0	3.8	3.2
Replicate F										1.000	0.452	0.810
Replicate Prob(F)										0.4064	0.7179	0.4985
Treatment F										1.000	1.303	0.931
Treatment Prob(F)										0.4654	0.2733	0.5197

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (HRDL01X4), BASF.
2. Ratings: CI/WC at 0, 28 + 56 da B.
3. Burndown application should target 4-6" weeds.
4. Yield.
5. Harvested 11-14-09, (2) 30 inch rows by 21 ft.

Corvus and Balance Flexx Burndown and Residual.

Trial ID: 09-6C-W90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-06-09

Objectives: Evaluate Corvus and Balance Flexx for burndown and residual weed control in no-till corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 05-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 4 Type: W	**Code:** CHEAL	Chenopodium album L.	lambsquarters, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** CASEYVILLE
CEC: 8 **Fert. Level:** P1 82 LB/A, K 408 LB/A

Application Description

	A
Application Date:	05-06-09
Time of Day:	17:00
Application Method:	Spray
Application Timing:	PREPLANT
Application Placement:	BROFOL
Applied By:	RFK
Air Temperature, Unit:	66 F
% Relative Humidity:	92
Wind Velocity, Unit:	0 MPH
Soil Moisture:	ABONOR
% Cloud Cover:	0
	05-06-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	05-06-09
Weed Code:	SETFA
Stage Majority (leaves):	NA
Weed Code:	AMBTR
Stage Majority (leaves):	5
Stage Min, Max:	5 8
Height Majority:	4 IN
Height Min, Max:	2 6
Density, Unit:	4 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	NA
Weed Code:	CHEAL
Stage Majority (leaves):	10
Stage Min, Max:	7 10
Height Majority:	3 IN
Height Min, Max:	2 4
Density, Unit:	2 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Corvus and Balance Flexx Burndown and Residual.

Trial ID: 09-6C-W90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code													SETFA	SETFA	SETFA
Crop Code										ZEAMD	ZEAMD	ZEAMD			
Rating Date										06-12-09	07-02-09	08-01-09	06-12-09	07-02-09	08-01-09
Rating Data Type										Injury	Injury	Injury	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										10 DAE	30 DAE	60 DAE	10 DAE	30 DAE	60 DAE
Trt-Eval Interval															
1	NONTREATED									0 a	0 a	0 a	0 c	0 c	0 c
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A	0 a	0 a	0 a	0 c	17 c	13 c
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
3	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	0 a	0 a	0 a	99 a	92 a	88 a
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	0 a	0 a	0 a	99 a	93 a	92 a
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
4	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PREPLANT	A	0 a	0 a	0 a	99 a	82 ab	78 ab
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
5	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	0 a	0 a	0 a	99 a	80 ab	68 ab
6	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	PREPLANT	A						
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
7	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PREPLANT	A	0 a	0 a	0 a	99 a	67 b	68 ab
7	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
8	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PREPLANT	A	0 a	0 a	0 a	98 a	72 ab	73 ab
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
8	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
9	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PREPLANT	A	0 a	0 a	0 a	96 a	75 ab	63 ab
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
9	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
10	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	PREPLANT	A	0 a	0 a	0 a	27 b	10 c	3 c
11	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PREPLANT	A	0 a	0 a	0 a	93 a	76 ab	53 b
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
12	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PREPLANT	A	0 a	0 a	0 a	89 a	63 b	48 b
12	ATRAZINE 4L	4	SC	1	lb ai/a	1	qt/a	PREPLANT	A						
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
LSD (P=.05)										0.0	0.0	0.0	23.5	22.7	32.2
Replicate F										0.000	0.000	0.000	0.823	0.318	0.179
Replicate Prob(F)										1.0000	1.0000	1.0000	0.4520	0.7310	0.8376
Treatment F										0.000	0.000	0.000	25.453	17.587	8.471
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Corvus and Balance Flexx Burndown and Residual.

Trial ID: 09-6C-W90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
	Pest Code									AMBTR	AMBTR	AMBTR	IPOHE	IPOHE	IPOHE
	Crop Code														
	Rating Date									06-12-09	07-02-09	08-01-09	06-12-09	07-02-09	08-01-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing									10 DAE	30 DAE	60 DAE	10 DAE	30 DAE	60 DAE
	Trt-Eval Interval														
1	NONTREATED									0 d	0 c	0 c	0 c	0 d	0 c
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A	72 b	50 b	47 b	99 a	63 bc	63 ab
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
3	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	99 a	97 a	97 a	99 a	94 a	89 a
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	99 a	97 a	96 a	99 a	95 a	86 ab
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
4	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PREPLANT	A	98 a	89 a	88 a	99 a	71 abc	76 ab
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
5	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	99 a	89 a	87 a	99 a	88 ab	83 ab
6	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	PREPLANT	A						
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
7	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PREPLANT	A	97 a	87 a	86 a	95 a	80 abc	80 ab
7	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
8	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PREPLANT	A	97 a	91 a	87 a	96 a	77 abc	75 ab
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
8	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
9	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PREPLANT	A	93 ab	87 a	80 a	96 a	85 ab	78 ab
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A						
9	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
10	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	PREPLANT	A	27 c	50 b	40 b	30 b	7 d	17 c
11	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PREPLANT	A	97 a	90 a	84 a	96 a	79 abc	79 ab
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
12	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PREPLANT	A	97 a	88 a	85 a	99 a	53 c	57 b
12	ATRAZINE 4L	4	SC	1	lb ai/a	1	qt/a	PREPLANT	A						
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A						
	LSD (P=.05)									24.3	14.3	17.6	25.6	28.4	29.9
	Replicate F									1.545	0.008	0.165	1.199	3.331	5.476
	Replicate Prob(F)									0.2356	0.9919	0.8492	0.3205	0.0545	0.0117
	Treatment F									15.894	34.811	23.619	14.189	10.704	7.746
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Corvus and Balance Flexx Burndown and Residual.

Trial ID: 09-6C-W90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										CHEAL	CHEAL	CHEAL
Crop Code												
Rating Date										06-12-09	07-02-09	08-01-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing										10 DAE	30 DAE	60 DAE
Trt-Eval Interval												
1	NONTREATED									0	c	0 c	0 c
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A	99	a	93 a	99 a
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
3	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	99	a	99 a	99 a
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A				
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	99	a	99 a	99 a
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A				
4	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
5	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PREPLANT	A	99	a	96 a	96 a
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A				
5	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PREPLANT	A	99	a	96 a	99 a
6	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	PREPLANT	A				
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A				
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
7	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PREPLANT	A	99	a	99 a	99 a
7	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A				
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
8	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PREPLANT	A	99	a	95 a	99 a
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A				
8	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
9	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PREPLANT	A	99	a	94 a	93 a
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	PREPLANT	A				
9	DESTINY HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
10	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	PREPLANT	A	60	b	37 b	56 b
11	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PREPLANT	A	99	a	99 a	99 a
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
12	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PREPLANT	A	99	a	99 a	99 a
12	ATRAZINE 4L	4	SC	1	lb ai/a	1	qt/a	PREPLANT	A				
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	PREPLANT	A				
LSD (P=.05)										25.4		16.5	25.3
Replicate F										1.000		1.608	1.256
Replicate Prob(F)										0.3840		0.2230	0.3044
Treatment F										11.800		31.550	11.929
Treatment Prob(F)										0.0001		0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (JJA-1), BASF.
2. Ratings: CI/WC at 10, 30 and 60 DAE.
3. Stand reduction due to standing water was observed and recorded by plot.
4. Not harvested.

Winter Annual Grass Burndown with Corvus - 1.

Trial ID: 09-ARC-9-M110 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 04-04-09

Objectives: Determine the efficacy of Corvus and Corvus tank-mixtures for foliar burndown activity on winter annual grass species compared with commercial standards.

Crop 1: YACKR Arable land **Variety:** NON-CROP

Pest 1 Type: W	**Code:** POAAN	Poa annua L.	bluegrass, annual
Pest 2 Type: W	**Code:** STEME	Stellaria media (L.) Vill.	chickweed, common
Pest 3 Type: W	**Code:** LAMPU	Lamium purpureum L.	deadnettle, purple
Pest 4 Type: W	**Code:** TRZAX	Triticum aestivum L.	wheat, volunteer

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 22 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** STOY
CEC: 7.4 **Fert. Level:** P1: 66 LB/A, K: 274 LB/A

Application Description

	A
Application Date:	04-04-09
Time of Day:	11:00
Application Method:	Spray
Application Timing:	3-4"BD
Application Placement:	BROFOL
Applied By:	DKT
Air Temperature, Unit:	65 F
% Relative Humidity:	26
Wind Velocity, Unit:	3 MPH
Wind Direction:	E
Dew Presence (Y/N):	N
Soil Temperature, Unit:	53 F
Soil Moisture:	ABONOR
	04-04-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	04-04-09
Weed Code:	POANN
Stage Majority (leaves):	25
Stage Min, Max:	15 40
Height Majority:	2 IN
Height Min, Max:	1 4
Density, Unit:	5 FT2
Weed Code:	STEME
Stage Majority (leaves):	50
Stage Min, Max:	30 60
Height Majority:	6 IN
Height Min, Max:	4 10
Density, Unit:	3 FT2
Weed Code:	LAMPU
Stage Majority (leaves):	8
Stage Min, Max:	6 10
Height Majority:	6 IN
Height Min, Max:	4 8
Density, Unit:	1 FT2
Weed Code:	TRZAX
Stage Majority (leaves):	4
Stage Min, Max:	3 10
Height Majority:	7 IN
Height Min, Max:	5 8
Density, Unit:	16 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Winter Annual Grass Burndown with Corvus - 1.

Trial ID: 09-ARC-9-M110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	POAAN	POAAN	POAAN	STEME	STEME	STEME
	Pest Code									POAAN	POAAN	POAAN	STEME	STEME	STEME
	Crop Code														
	Rating Date									04-18-09	05-02-09	05-02-09	04-18-09	05-02-09	05-02-09
	Rating Data Type									Control	Control	Plants	Control	Control	Plants
	Rating Unit									Percent	Percent	0.5 m2	Percent	Percent	0.5 m2
	Rating Timing														
	Trt-Eval Interval									14 DA-A	28 DA-A	28 DA-A	14 DA-A	28 DA-A	28 DA-A
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	28 c	33 f	3.1 bc	10 d	94 b	0.1 ab
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
1	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	30 c	33 f	3.0 bc	10 d	96 ab	0.0 b
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
2	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	30 c	38 ef	3.8 b	28 c	97 ab	0.1 ab
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
3	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	30 c	43 e	2.6 bc	33 c	99 a	0.0 b
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
4	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	33 c	38 ef	3.4 bc	35 c	99 a	0.0 b
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
5	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	30 c	55 d	3.8 b	30 c	99 a	0.0 b
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
6	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	55 b	74 c	2.5 bc	50 b	99 a	0.0 b
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
7	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	60 b	76 bc	2.8 bc	60 b	99 a	0.0 b
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
8	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	86 a	89 a	2.9 bc	84 a	99 a	0.0 b
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
9	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	85 a	86 a	2.8 bc	88 a	99 a	0.0 b
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
10	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A	38 c	45 e	2.1 c	30 c	99 a	0.0 b
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A	84 a	85 ab	2.0 c	88 a	99 a	0.0 b
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
12	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"BD	A	90 a	90 a	2.8 bc	91 a	99 a	0.0 b
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
13	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
14	NONTREATED									0 d	0 g	14.6 a	0 d	0 c	0.3 a
	LSD (P=.05)									10.4	8.8	1.39	13.0	4.1	0.16
	Replicate F									1.852	3.365	0.516	0.742	2.864	2.690
	Replicate Prob(F)									0.1537	0.0281	0.6739	0.5332	0.0490	0.0595
	Treatment F									60.560	81.153	42.797	47.932	340.072	1.759
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001	0.0866

Means followed by same letter do not significantly differ (P=.05, LSD)

Winter Annual Grass Burndown with Corvus - 1.

Trial ID: 09-ARC-9-M110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	LAMPU	LAMPU	LAMPU	TRZAX	TRZAX	TRZAX
	Pest Code									LAMPU	LAMPU	LAMPU	TRZAX	TRZAX	TRZAX
	Crop Code														
	Rating Date									04-18-09	05-02-09	05-02-09	04-18-09	05-02-09	05-02-09
	Rating Data Type									Control	Control	Plants	Control	Control	Plants
	Rating Unit									Percent	Percent	0.5 m2	Percent	Percent	0.5 m2
	Rating Timing														
	Trt-Eval Interval									14 DA-A	28 DA-A	28 DA-A	14 DA-A	28 DA-A	28 DA-A
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	10 e	99 a	0.0 b	30 d	25 d	17.5 ab
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
1	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	10 e	99 a	0.0 b	30 d	28 cd	16.0 b
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
2	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	43 cd	99 a	0.0 b	30 d	30 bc	17.5 ab
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
3	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	53 bc	99 a	0.0 b	38 cd	33 b	18.8 a
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
4	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	53 bc	99 a	0.0 b	20 e	10 e	19.0 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
5	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	48 cd	99 a	0.0 b	20 e	10 e	17.4 ab
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
6	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	45 cd	99 a	0.0 b	63 b	99 a	0.0 d
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
7	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	63 b	99 a	0.0 b	68 b	99 a	0.0 d
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
8	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	88 a	99 a	0.0 b	30 d	28 cd	18.5 ab
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
9	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	85 a	99 a	0.0 b	30 d	30 bc	17.4 ab
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
10	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A	38 d	99 a	0.0 b	81 a	99 a	0.0 d
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A	86 a	99 a	0.0 b	45 c	30 bc	17.9 ab
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
12	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"BD	A	90 a	99 a	0.0 b	90 a	96 a	4.1 c
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
13	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
14	NONTREATED									0 e	0 b	0.1 a	0 f	0 f	17.6 ab
	LSD (P=.05)									12.4	0.0	0.10	9.7	3.7	2.62
	Replicate F									0.669	0.000	1.000	1.070	3.382	1.516
	Replicate Prob(F)									0.5764	1.0000	0.4031	0.3731	0.0276	0.2256
	Treatment F									47.522	0.000	1.000	56.004	811.459	74.975
	Treatment Prob(F)									0.0001	1.0000	0.4697	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Winter Annual Grass Burndown with Corvus - 1.

Trial ID: 09-ARC-9-M110 Location: Agronomy Res. Center

Trial Comments

1. Protocol: SIU(DT)/Bayer.
2. Ratings: WC at 14 and 28 DAT; Grass density (live plants) at 28 DAT.
3. Target annual bluegrass and wheat.
4. Plants 0.5 m2 = Plants per 0.5 square meter.
   By 5-2-09, LAMPU in the nontreated plots was senescing naturally.
5. Not harvested (non-crop).

Winter Annual Grass Burndown with Corvus - 2.

Trial ID: 09-HRC-WU12-Corvus Location: Hort. Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 04-04-09

Objectives: Determine the efficacy of Corvus and Corvus tank-mixtures for foliar burndown activity on winter annual grass species compared with commercial standards.

Crop 1: YACKR Arable land **Variety:** NON-CROP

Pest 1 Type: W **Code:** HORPU Hordeum pusillum Nutt. barley, little
Pest 2 Type: W **Code:** STEME Stellaria media (L.) Vill. chickweed, common
Pest 3 Type: W **Code:** LAMPU Lamium purpureum L. deadnettle, purple

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6.7
CEC: 10 **Fert. Level:** P1: 92 LB/A, K: 334 LB/A

Application Description

	A
Application Date:	04-04-09
Time of Day:	12:00
Application Method:	Spray
Application Timing:	3-4"BD
Application Placement:	BROFOL
Applied By:	DKT
Air Temperature, Unit:	65 F
% Relative Humidity:	26
Wind Velocity, Unit:	4 MPH
Dew Presence (Y/N):	N
Soil Temperature, Unit:	53 F
Soil Moisture:	ABONOR
	04-04-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	04-04-09
Weed Code:	HORPU
Stage Majority (leaves):	30
Stage Min, Max:	6 40
Height Majority:	5 IN
Height Min, Max:	2 10
Density, Unit:	8 FT2
Weed Code:	STEME
Stage Majority (leaves):	50
Stage Min, Max:	30 60
Height Majority:	6 IN
Height Min, Max:	4 10
Density, Unit:	3 FT2
Weed Code:	LAMPU
Stage Majority (leaves):	15
Stage Min, Max:	8 20
Height Majority:	6 IN
Height Min, Max:	4 8
Density, Unit:	4 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Winter Annual Grass Burndown with Corvus - 2.

Trial ID: 09-HRC-WU12-Corvus Location: Hort. Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	HORPU 04-18-09 Control Percent	HORPU 05-02-09 Control Percent	HORPU 05-02-09 Plants 0.5 m2	STEME 04-18-09 Control Percent	STEME 05-02-09 Control Percent	STEME 05-02-09 Plants 0.5 m2
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	10 f	48 f	30.8 b	10 fg	99 a	0.0 b
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
1	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	20 e	58 d	22.5 cd	15 ef	99 a	0.0 b
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
2	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	33 d	55 de	11.5 e	20 ef	99 a	0.0 b
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
3	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	28 de	55 de	31.3 b	35 cd	99 a	0.0 b
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
4	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	28 de	33 g	19.0 d	20 ef	99 a	0.0 b
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
5	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	30 d	50 ef	20.3 d	18 ef	99 a	0.0 b
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
6	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	79 bc	99 a	0.0 f	38 c	99 a	0.0 b
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
7	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	75 c	97 a	0.0 f	25 de	99 a	0.0 b
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
8	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	79 bc	81 c	27.8 bc	78 b	99 a	0.0 b
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
9	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	85 ab	89 b	12.8 e	89 a	99 a	0.0 b
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
10	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A	90 a	93 ab	2.5 f	23 e	99 a	0.0 b
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A	90 a	88 bc	21.5 d	94 a	99 a	0.0 b
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
12	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"BD	A	88 a	90 b	11.3 e	86 ab	99 a	0.0 b
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
13	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
14	NONTREATED									0 g	0 h	69.3 a	0 g	0 b	2.0 a
LSD (P=.05)										7.9	6.5	5.40	10.9	0.0	0.31
Replicate F										0.568	2.062	2.860	3.337	0.000	1.000
Replicate Prob(F)										0.6396	0.1211	0.0492	0.0290	1.0000	0.4031
Treatment F										149.304	163.213	87.180	72.840	0.000	24.000
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Winter Annual Grass Burndown with Corvus - 2.

Trial ID: 09-HRC-WU12-Corvus Location: Hort. Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										LAMPU		LAMPU		LAMPU	
Crop Code															
Rating Date										04-18-09		05-02-09		05-02-09	
Rating Data Type										Control		Control		Plants	
Rating Unit										Percent		Percent		0.5 m2	
Rating Timing															
Trt-Eval Interval										14 DA-A		28 DA-A		28 DA-A	
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	13	f	99	a	0.0	a
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
1	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	18	ef	99	a	0.0	a
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
2	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	28	d	99	a	0.0	a
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
3	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	48	c	99	a	0.0	a
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
4	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	28	d	99	a	0.0	a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
5	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	25	de	99	a	0.0	a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
6	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	55	c	99	a	0.0	a
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
7	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	18	ef	99	a	0.0	a
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
8	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	79	b	99	a	0.0	a
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
9	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	91	a	99	a	0.0	a
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
10	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A	20	def	99	a	0.0	a
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A	94	a	99	a	0.0	a
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
12	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"BD	A	88	ab	99	a	0.0	a
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
13	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
14	NONTREATED									0	g	0	b	0.0	a
LSD (P=.05)										9.8		0.0		0.00	
Replicate F										2.436		0.000		0.000	
Replicate Prob(F)										0.0792		1.0000		1.0000	
Treatment F										89.748		0.000		0.000	
Treatment Prob(F)										0.0001		1.0000		1.0000	

Means followed by same letter do not significantly differ (P=.05, LSD)

Winter Annual Grass Burndown with Corvus - 2.

Trial ID: 09-HRC-WU12-Corvus Location: Hort. Res. Center

Trial Comments

1. Protocol: SIU(DT)/Bayer.
2. Ratings: WC at 14 and 28 DAT; Grass density (live plants) at 28 DAT.
3. Target little barley.
4. Plants 0.5 m2 = Plants per 0.5 square meter.
   By 5-2-09, LAMPU in the nontreated plots was senescing naturally.
5. Not harvested (non-crop).

Winter Annual Grass Burndown with Corvus - 3.

Trial ID: 09-YRC-Corvus Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 04-29-09

Objectives: Determine the efficacy of Corvus and Corvus tank-mixtures for foliar burndown activity on winter annual grass species compared with commercial standards.

Crop 1: YACKR Arable land

Pest 1 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed
Pest Description: glyphosate-resistant marestail
Pest 2 Type: W **Code:** HORPU Hordeum pusillum Nutt. barley, little
Pest 3 Type: W **Code:** VERAR Veronica arvensis L. speedwell, corn

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.1 **Texture:** VERY FINE SANDY LOAM
pH: 5 **Soil Name:** ALVIN
CEC: 9 **Fert. Level:** P1 133 LB/A, K 209 LB/A

Application Description

	A
Application Date:	04-29-09
Time of Day:	15:20
Application Method:	Spray
Application Timing:	3-4"BD
Application Placement:	BROFOL
Applied By:	DKT
Air Temperature, Unit:	78 F
% Relative Humidity:	50
Wind Velocity, Unit:	3 MPH
Wind Direction:	N
Dew Presence (Y/N):	N
Soil Temperature, Unit:	70 F
Soil Moisture:	ABONOR
	04-29-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	04-29-09
Weed Code:	ERICA
Stage Majority (leaves):	10
Stage Min, Max:	6 14
Height Majority:	4 IN
Height Min, Max:	2 6
Density, Unit:	2 FT2
Weed Code:	HORPU
Stage Majority (leaves):	5
Stage Min, Max:	3 5
Height Majority:	7 IN
Height Min, Max:	6 10
Density, Unit:	2 FT2
Weed Code:	VERAR
Stage Majority (leaves):	16
Stage Min, Max:	8 20
Height Majority:	6 IN
Height Min, Max:	5 10
Density, Unit:	8 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Winter Annual Grass Burndown with Corvus - 3.

Trial ID: 09-YRC-Corvus Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA-HR 05-13-09 Control Percent 14 DA-A	ERICA-HR 05-27-09 Control Percent 28 DA-A	ERICA-HR 05-27-09 Plants 0.5 m2 28 DA-A	HORPU 05-13-09 Control Percent 14 DA-A	HORPU 05-27-09 Control Percent 28 DA-A	HORPU 05-27-09 Plants 0.5 m2 28 DA-A
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	94 a	99 a	0.0 c	10 f	40 f	0.9 bc
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	86 b	99 a	0.0 c	10 f	45 f	0.5 bc
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	94 a	99 a	0.0 c	20 e	86 cd	0.5 bc
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	95 a	99 a	0.0 c	20 e	79 de	0.4 bc
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	86 b	99 a	0.0 c	13 f	70 e	0.6 bc
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	94 a	99 a	0.0 c	10 f	48 f	1.4 b
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	95 a	99 a	0.0 c	78 bc	99 a	0.0 c
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	94 a	99 a	0.0 c	63 d	99 a	0.0 c
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A	94 a	99 a	0.0 c	90 a	89 bc	0.9 bc
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A	95 a	99 a	0.0 c	73 c	89 bc	0.9 bc
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A	63 c	75 b	4.1 b	83 b	92 abc	0.0 c
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A	94 a	99 a	0.0 c	93 a	97 ab	0.1 bc
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"BD	A	94 a	99 a	0.0 c	91 a	99 a	0.0 c
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
14	NONTREATED									0 d	0 c	13.3 a	0 g	0 g	2.8 a
LSD (P=.05)										5.9	2.2	1.93	7.0	10.0	1.31
Replicate F										0.441	1.000	1.729	2.374	3.150	1.247
Replicate Prob(F)										0.7249	0.4031	0.1769	0.0849	0.0356	0.3059
Treatment F										153.032	1201.375	28.906	227.311	72.742	2.615
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0102

Means followed by same letter do not significantly differ (P=.05, LSD)

Winter Annual Grass Burndown with Corvus - 3.

Trial ID: 09-YRC-Corvus Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code											VERAR		VERAR		VERAR
Crop Code															
Rating Date											05-13-09		05-27-09		05-27-09
Rating Data Type											Control		Control		Plants
Rating Unit											Percent		Percent		0.5 m2
Rating Timing															
Trt-Eval Interval											14 DA-A		28 DA-A		28 DA-A
1	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A		88	bc	88	cd	1.3 b
1	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A		88	bc	95	b	0.6 b
2	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
3	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A		95	a	99	a	0.0 b
3	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A		94	a	99	a	0.0 b
4	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	3-4"BD	A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
5	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A		85	c	90	c	0.9 b
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A		91	ab	99	a	0.0 b
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	3-4"BD	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
7	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A		94	a	99	a	0.0 b
7	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
8	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A		95	a	99	a	0.0 b
8	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A						
8	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
9	CORVUS	2.62	SC	0.0614	lb ai/a	3.0	fl oz/a	3-4"BD	A		94	a	99	a	0.0 b
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
10	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	3-4"BD	A		94	a	99	a	0.0 b
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
11	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	3-4"BD	A		91	ab	96	ab	0.0 b
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
11	AMS	100	SG	5	% v/v	5	% v/v	3-4"BD	A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	3-4"BD	A		94	a	99	a	0.0 b
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	3-4"BD	A		83	c	85	d	2.3 b
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	3-4"BD	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	3-4"BD	A						
14	NONTREATED										0	d	0	e	10.1 a
LSD (P=.05)											5.2		3.7		2.89
Replicate F											4.684		0.522		1.223
Replicate Prob(F)											0.0069		0.6694		0.3141
Treatment F											182.634		400.092		7.067
Treatment Prob(F)											0.0001		0.0001		0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Winter Annual Grass Burndown with Corvus - 3.

Trial ID: 09-YRC-Corvus Location: Young Res. Center

Trial Comments

1. Protocol: SIU(DT)/Bayer.
2. Ratings: WC at 14 and 28 DAT; Grass density (live plants) at 28 DAT.
3. Target species marestail and little barley.
4. Plants 0.5 m2 = Plants per 0.5 square meter.
   ERICA-HR = Herbicide-resistant marestail (glyphosate).
5. Not harvested (non-crop).

No-Till Soybean Weed Control Studies

Southern Illinois University

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-21-09

Objectives: Evalauate Ignite applied alone and in combination with other herbicides for burndown control of tough to control weeds.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** HORPU	Hordeum pusillum Nutt.	barley, little
Pest 2 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 3 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 4 Type: W	**Code:** ERICA	Conyza canadensis (L.) Crong.	horseweed
Pest 5 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 6 Type: W	**Code:** SENGL	Senecio glabellus Poir.	groundsel, cressleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** WINFIELD
CEC: 8 **Fert. Level:** P1: 83 LB/A, K: 396 LB/A

Application Description

	A	B	C
Application Date:	05-21-09	06-18-09	07-16-09
Time of Day:	12:30	7:45	9:00
Application Method:	Spray	Spray	Spray
Application Timing:	7DBP6"W	4"W-1	4"W-2
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKP	DKP	DKP
Air Temperature, Unit:	80 F	80 F	76 F
% Relative Humidity:	62	92	92
Wind Velocity, Unit:	5 MPH	1 MPH	1 MPH
Wind Direction:	S	NW	NE
Dew Presence (Y/N):	N	Y	Y
Soil Moisture:	NORMAL	ABONOR	ABONOR
% Cloud Cover:	50	50	60
	05-21-09	06-18-09	07-16-09
Crop stage at application:	NA	NA	V2
Height Min, Max (inch):			5 9

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	05-21-09			06-18-09			07-16-09	
Weed Code:	HORPU			HORPU			HORPU	
Stage Majority (leaves):	20			NA			NA	
Stage Min, Max:	15	30						
Height Majority:	15	IN						
Height Min, Max:	6	20						
Density, Unit:	4	FT2						
Weed Code:	SETFA			SETFA			SETFA	
Stage Majority (leaves):	NA			2			NA	
Stage Min, Max:				2	4			
Height Majority:				5	IN			
Height Min, Max:				2	10			
Density, Unit:				3	FT2			
Weed Code:	AMBTR			AMBTR			AMBTR	
Stage Majority (leaves):	6			6			5	
Stage Min, Max:	3	10		2	25		4	30
Height Majority:	6	IN		5	IN		4	IN
Height Min, Max:	2	9		2	18		4	36
Density, Unit:	0.2	FT2		0.4	FT2		0.01	FT2
Weed Code:	ERICA			ERICA			ERICA	
Stage Majority (leaves):	7			10			20	
Stage Min, Max:	7	10		7	10		10	20
Height Majority:	2	IN		4	IN		4	IN
Height Min, Max:	2	4		2	4		2	8
Density, Unit:	0.01	FT2		0.01	FT2		0.01	FT2
Weed Code:	AMBEL			AMBEL			AMBEL	
Stage Majority (leaves):	2			4			4	
Stage Min, Max:	2	4		2	4		2	6
Height Majority:	2	IN		4	IN		4	IN
Height Min, Max:	2	4		2	4		2	4
Density, Unit:	0.01	FT2		0.01	FT2		0.01	FT2
Weed Code:	SENGL			SENGL			SENGL	
Stage Majority (leaves):	30			NA			NA	
Stage Min, Max:	20	50						
Height Majority:	30	IN						
Height Min, Max:	12	48						
Density, Unit:	1	FT2						

Application Equipment

Appl. Equipment:	CO2 sprayer			CO2 sprayer			CO2 sprayer	
Operating Pressure:	30	PSI		30	PSI		30	PSI
Nozzle Type:	Flat fan			Flat fan			Flat fan	
Nozzle Size:	XR 8002			XR 8002			XR 8002	
Boom Length, Unit:	7.5	FT		7.5	FT		7.5	FT
Spray Volume, Unit:	15	GPA		15	GPA		15	GPA

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code									
Pest Code												HORPU		SETFA		SETFA		SETFA
Crop Code										GLXMA		GLXMA						
Rating Date										11-05-09		11-05-09		06-04-09		06-18-09		06-25-09		08-20-09
Rating Data Type										Moisture		Yield		Control		Control		Control		Control
Rating Unit										Percent		bu/A		Percent		Percent		Percent		Percent
Rating Timing																				
Trt-Eval Interval														14 DA-A		0 DA-B		35 DA-A		35 DA-C
1	NONTREATED											0	c	0	f	0	b	0	e	0	c
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	11.9	b	43	ab	78	de	0	b	77	d	97	ab
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	12.0	b	44	ab	80	cd	58	ab	92	abc	96	ab
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.8	b	45	ab	80	cd	17	b	83	cd	89	b
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A												
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.9	b	43	ab	75	e	66	ab	98	a	94	ab
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A												
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A												
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A												
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	12.4	a	42	ab	75	e	58	ab	93	abc	95	ab
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A												
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	11.9	b	42	ab	83	c	30	ab	87	bcd	95	ab
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A												
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	12.0	b	42	b	96	a	60	ab	96	ab	97	ab
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	11.9	b	45	a	0	f	55	ab	87	bcd	99	a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A												
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A												
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B												
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B												
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C												
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C												

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code												HORPU	SETFA	SETFA	SETFA
Crop Code										GLXMA	GLXMA				
Rating Date										11-05-09	11-05-09	06-04-09	06-18-09	06-25-09	08-20-09
Rating Data Type										Moisture	Yield	Control	Control	Control	Control
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval												14 DA-A	0 DA-B	35 DA-A	35 DA-C
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	11.8	b	45 ab	99 a	99 a	99 a	97 ab
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A							
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A							
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	12.0	b	43 ab	88 b	63 ab	97 ab	96 ab
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A							
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.8	b	43 ab	75 e	30 ab	94 abc	96 ab
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A							
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
LSD (P=.05)										0.37		3.5	3.9	75.4	10.9	8.8
Replicate F										0.371		10.441	3.376	0.417	1.384	0.756
Replicate Prob(F)										0.6949		0.0006	0.0526	0.6640	0.2715	0.4815
Treatment F										1.967		113.300	619.536	1.331	53.548	85.673
Treatment Prob(F)										0.0950		0.0001	0.0001	0.2727	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
	Pest Code									AMBTR		AMBTR		AMBTR		AMBTR
	Crop Code															
	Rating Date									06-04-09		06-18-09		06-25-09		08-20-09
	Rating Data Type									Control		Control		Control		Control
	Rating Unit									Percent		Percent		Percent		Percent
	Rating Timing															
	Trt-Eval Interval									14 DA-A		0 DA-B		35 DA-A		35 DA-C
1	NONTREATED									0	b	0	d	0	c	0 c
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	99	a	95	abc	95	ab	98 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	98	a	99	a	98	a	99 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99	a	96	abc	98	a	93 ab
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99	a	96	abc	98	a	98 a
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A							
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A							
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	98	a	95	abc	95	ab	99 a
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	90	a	88	bc	86	b	96 ab
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	90	a	88	bc	88	b	90 b
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	93	a	97	ab	98	a	99 a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR
Crop Code													
Rating Date										06-04-09	06-18-09	06-25-09	08-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										14 DA-A	0 DA-B	35 DA-A	35 DA-C
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	98 a	95 abc	94 ab	98 a
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A				
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A				
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	98 a	87 c	94 ab	94 ab
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	96 a	93 abc	95 ab	99 a
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
LSD (P=.05)										10.7	9.8	9.4	7.3
Replicate F										1.357	3.952	3.675	1.727
Replicate Prob(F)										0.2781	0.0342	0.0420	0.2011
Treatment F										59.131	66.965	73.103	126.443
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										ERICA		ERICA		ERICA		ERICA
Crop Code																
Rating Date										06-04-09		06-18-09		06-25-09		08-20-09
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing																
Trt-Eval Interval										14 DA-A		0 DA-B		35 DA-A		35 DA-C
1	NONTREATED									0	c	0	c	0	c	0 c
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	98	ab	99	a	99	a	98 ab
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	97	ab	99	a	98	ab	99 ab
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99	a	96	ab	98	ab	99 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99	ab	99	a	99	a	99 a
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A							
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A							
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99	a	99	a	99	a	99 a
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	99	ab	99	a	99	a	98 ab
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	99	ab	99	a	98	ab	96 b
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	99	a	99	a	99	a	99 a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C							

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	ERICA
	Pest Code									ERICA	ERICA	ERICA	ERICA
	Crop Code												
	Rating Date									06-04-09	06-18-09	06-25-09	08-20-09
	Rating Data Type									Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing												
	Trt-Eval Interval									14 DA-A	0 DA-B	35 DA-A	35 DA-C
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	96 b	99 a	98 ab	99 ab
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A				
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A				
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	96 ab	95 b	97 b	99 ab
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
	LSD (P=.05)									2.9	3.5	1.5	2.8
	Replicate F									1.895	0.135	0.407	1.435
	Replicate Prob(F)									0.1741	0.8742	0.6703	0.2596
	Treatment F									818.900	561.506	2963.565	870.046
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBEL	AMBEL	AMBEL	AMBEL	SENGL
Crop Code														
Rating Date										06-04-09	06-18-09	06-25-09	08-20-09	06-04-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										14 DA-A	0 DA-B	35 DA-A	35 DA-C	14 DA-A
1	NONTREATED									0 c	0 b	0 c	0 b	0 b
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	99 a	99 a	98 b	99 a	99 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 ab	99 a	99 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A					
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A					
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	98 b	99 a	99 a	99 a	99 a
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					

Ignite Burndown for Roundup Ready Soybean - 1.

Trial ID: 09-1-ME40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBEL	AMBEL	AMBEL	AMBEL	SENGL
	Pest Code									AMBEL	AMBEL	AMBEL	AMBEL	SENGL
	Crop Code													
	Rating Date									06-04-09	06-18-09	06-25-09	08-20-09	06-04-09
	Rating Data Type									Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent
	Rating Timing													
	Trt-Eval Interval									14 DA-A	0 DA-B	35 DA-A	35 DA-C	14 DA-A
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A					
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A					
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a	99 a
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A					
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
	LSD (P=.05)									1.1	0.0	1.1	0.0	0.0
	Replicate F									1.000	0.000	1.536	0.000	0.000
	Replicate Prob(F)									0.3840	1.0000	0.2374	1.0000	1.0000
	Treatment F									5500.563	0.000	5405.073	0.000	0.000
	Treatment Prob(F)									0.0001	1.0000	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (MRA) / BASF.
2. Ratings: CI at 0 DA-B; WC at 14+35 DA-A; prior to B, and 35 DA-C.
3. Yield if possible.
4. Estimate percent ground cover of each weed species at each application and evaluation timing. .
5. Planting was delayed due to wet field conditions.
   Not possible to rate crop injury at 0 DA-B because crop could not yet be planted.
6. Percent ground cover on 5-21-09 at application A for HORPU, SETFA, AMBTR, ERICA, AMBEL, and SENGL was, 50, 0, 0.5, 0, 0, and 1, respectively.
   Percent ground cover on 6-18-09 at application B for HORPU, SETFA, AMBTR, ERICA, AMBEL, and SENGL was, 0, 30, 20, 10, 20, and 0, respectively.
   Percent ground cover on 6-25-09 at 35 DA-A for HORPU, SETFA, AMBTR, ERICA, AMBEL, and SENGL was, 0, 30, 20, 10, 20, and 0, respectively.
   Percent ground cover on 7-16-09 at application C for HORPU, SETFA, AMBTR, ERICA, AMBEL, and SENGL was, 0, 30, 20, 10, 20, and 0, respectively.
   Percent ground cover on 8-20-09 at 35 DA-C for HORPU, SETFA, AMBTR, ERICA, AMBEL, and SENGL was, 0, 30, 20, 10, 20, and 0, respectively.
7. Harvested 11-5-09, (2) 30 inch rows by 24 ft.

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 05-18-09

Objectives: Evalauate Ignite applied alone and in combination with other herbicides for burndown control of glyphosate-resistant marestail.

Crop 1: GLXMA Soybean **Variety:** AG 3905 **Description:** RR
Planting Method: SEEDED **Planting Date:** 05-25-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed
Pest Description: glyphosate-resistant marestail
Pest 2 Type: W **Code:** AMASS Amaranthus species amaranthus species
Pest 3 Type: W **Code:** MEDSS Medicago species medicago species

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.1 **Texture:** VERY FINE SANDY LOAM
pH: 5 **Soil Name:** ALVIN
CEC: 9 **Fert. Level:** P1 133 LB/A, K 209 LB/A

Application Description

	A	B	C
Application Date:	05-18-09	06-20-09	07-06-09
Time of Day:	10:30	8:15	10:00
Application Method:	Spray	Spray	Spray
Application Timing:	7DBP6"W	4"W-1	4"W-2
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKT	DKT	DKP
Air Temperature, Unit:	65 F	83 F	85 F
% Relative Humidity:	31	75	50
Wind Velocity, Unit:	6 MPH	2 MPH	2 MPH
Wind Direction:	NE	W	N
Dew Presence (Y/N):	N	Y	Y
Soil Temperature, Unit:	61 F	80 F	75 F
Soil Moisture:	ABONOR	ABONOR	ABONOR
% Cloud Cover:	5	0	5
	05-18-09	06-20-09	07-06-09
Crop stage at application:	NA	V3	V6
Height Min, Max (inch):		8 10	22 26

Pest Stage At Each Application

Application Date:	05-18-09	06-20-09	07-06-09
Weed Code:	ERICA	ERICA	ERICA
Stage Majority (leaves):	10	18	14
Stage Min, Max:	3 26	8 52	6 40
Height Majority:	3 IN	8 IN	3 IN
Height Min, Max:	1 8	4 20	1 10
Density, Unit:	1 FT2	0.5 FT2	0.5 FT2
Weed Code:	AMASS	AMASS	AMASS
Stage Majority (leaves):	2	8	8
Stage Min, Max:	2 4	4 30	5 24
Height Majority:	0.5 IN	5 IN	4 IN
Height Min, Max:	0.25 1	2 22	2 18
Density, Unit:	0.01 FT2	1 FT2	0.2 FT2
Weed Code:	MEDSS	MEDSS	MEDSS
Stage Majority (leaves):	30	50	NA
Stage Min, Max:	20 60	20 80	
Height Majority:	2.5 IN	4 IN	
Height Min, Max:	1 6	3 8	
Density, Unit:	2 FT2	0.01 FT2	

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Yield bu/A	GLXMA 06-20-09 Injury Percent	GLXMA 06-22-09 Injury Percent	GLXMA 08-10-09 Injury Percent
	Pest Code													
	Crop Code													
	Rating Date									11-06-09	11-06-09	06-20-09	06-22-09	08-10-09
	Rating Data Type									Moisture	Yield	Injury	Injury	Injury
	Rating Unit									Percent	bu/A	Percent	Percent	Percent
	Rating Timing													
	Trt-Eval Interval											0 DA-B	35 DA-A	35 DA-C
1	NONTREATED									12.6 a	22 c	0 a	0 a	0 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	11.4 b	43 b	0 a	0 a	0 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.4 b	45 ab	0 a	0 a	0 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.2 b	52 a	0 a	0 a	0 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.4 b	44 b	0 a	0 a	0 a
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A					
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A					
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.3 b	46 ab	0 a	0 a	0 a
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	11.2 b	44 ab	0 a	0 a	0 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	11.5 b	46 ab	0 a	0 a	0 a
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	11.4 b	44 ab	0 a	0 a	0 a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Yield bu/A	GLXMA 06-20-09 Injury Percent	GLXMA 06-22-09 Injury Percent	GLXMA 08-10-09 Injury Percent
	Pest Code													
	Crop Code									GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	Rating Date									11-06-09	11-06-09	06-20-09	06-22-09	08-10-09
	Rating Data Type									Moisture	Yield	Injury	Injury	Injury
	Rating Unit									Percent	bu/A	Percent	Percent	Percent
	Rating Timing													
	Trt-Eval Interval											0 DA-B	35 DA-A	35 DA-C
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	11.7 b	48 ab	0 a	0 a	0 a
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A					
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A					
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	11.4 b	46 ab	0 a	0 a	0 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	11.4 b	48 ab	0 a	0 a	0 a
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A					
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
	LSD (P=.05)									0.83	8.5	0.0	0.0	0.0
	Replicate F									0.009	3.124	0.000	0.000	0.000
	Replicate Prob(F)									0.9912	0.0640	1.0000	1.0000	1.0000
	Treatment F									1.724	6.621	0.000	0.000	0.000
	Treatment Prob(F)									0.1334	0.0001	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA-HR 06-01-09 Control Percent 14 DA-A	ERICA-HR 06-20-09 Control Percent 0 DA-B	ERICA-HR 06-22-09 Control Percent 35 DA-A	ERICA-HR 08-10-09 Control Percent 35 DA-C
1	NONTREATED									0 c	0 f	0 f	0 b
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	95 a	95 bcd	95 bcd	99 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	98 a	93 d	94 d	99 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 ab	99 ab	99 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 ab	99 ab	99 a
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A				
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A				
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	97 abc	98 abc	99 a
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	98 a	93 d	93 d	99 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	40 b	60 e	60 e	99 a
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
	Pest Code									ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
	Crop Code												
	Rating Date									06-01-09	06-20-09	06-22-09	08-10-09
	Rating Data Type									Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing												
	Trt-Eval Interval									14 DA-A	0 DA-B	35 DA-A	35 DA-C
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	97 a	99 a	99 a	99 a
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A				
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A				
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	98 a	95 cd	95 cd	99 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
	LSD (P=.05)									5.6	3.8	3.9	0.0
	Replicate F									0.132	1.528	0.862	0.000
	Replicate Prob(F)									0.8767	0.2401	0.4366	1.0000
	Treatment F									274.292	498.672	482.931	0.000
	Treatment Prob(F)									0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										AMASS		AMASS		AMASS		AMASS	
Crop Code																	
Rating Date										06-01-09		06-20-09		06-22-09		08-10-09	
Rating Data Type										Control		Control		Control		Control	
Rating Unit										Percent		Percent		Percent		Percent	
Rating Timing																	
Trt-Eval Interval										14 DA-A		0 DA-B		35 DA-A		35 DA-C	
1	NONTREATED									0	c	0	f	0	e	0	b
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	87	b	23	de	38	cd	99	a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	97	a	25	cde	35	d	99	a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	98	a	33	cd	45	bcd	99	a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99	a	99	a	99	a	99	a
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A								
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A								
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A								
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99	a	40	bc	52	bc	99	a
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	85	b	17	e	30	d	99	a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A								
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	97	a	22	de	33	d	99	a
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	99	a	50	b	60	b	99	a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A								
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B								
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C								

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMASS	AMASS	AMASS	AMASS
Crop Code													
Rating Date										06-01-09	06-20-09	06-22-09	08-10-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										14 DA-A	0 DA-B	35 DA-A	35 DA-C
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A				
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A				
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	97 a	17 e	30 d	99 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	53 b	60 b	99 a
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
LSD (P=.05)										4.1	15.1	15.6	0.0
Replicate F										0.827	1.017	1.102	0.000
Replicate Prob(F)										0.4505	0.3781	0.3500	1.0000
Treatment F										409.797	37.001	28.550	0.000
Treatment Prob(F)										0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
	Pest Code									MEDSS	MEDSS	MEDSS	MEDSS
	Crop Code												
	Rating Date									06-01-09	06-20-09	06-22-09	08-10-09
	Rating Data Type									Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing												
	Trt-Eval Interval									14 DA-A	0 DA-B	35 DA-A	35 DA-C
1	NONTREATED									0 c	0 d	0 d	0 c
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	98 a	90 ab	90 ab	99 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
3	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	96 a	96 a	99 ab
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
4	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	93 ab	94 ab	99 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP6"W	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
5	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	98 a	98 a	98 a	99 a
5	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A				
5	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A				
5	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
6	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	96 a	97 a	98 b
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A	47 b	33 c	35 c	99 a
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				

Ignite Burndown for Roundup Ready Soybean - 2.

Trial ID: 09-YRC-IgniteBD Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										MEDSS	MEDSS	MEDSS	MEDSS
Crop Code													
Rating Date										06-01-09	06-20-09	06-22-09	08-10-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										14 DA-A	0 DA-B	35 DA-A	35 DA-C
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
10	VALOR XLT	40.3	WG			3	oz/a	7DBP6"W	A				
10	VALOR SX	51	WG	0.056	lb ai/a			7DBP6"W	A				
10	CLASSIC	25	WG	0.0194	lb ai/a			7DBP6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7DBP6"W	A	99 a	86 b	86 b	99 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7DBP6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7DBP6"W	A	99 a	99 a	99 a	99 a
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7DBP6"W	A				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7DBP6"W	A				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP6"W	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-1	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W-2	C				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
LSD (P=.05)										3.1	9.4	9.4	0.6
Replicate F										0.928	0.781	1.304	1.941
Replicate Prob(F)										0.4104	0.4703	0.2917	0.1673
Treatment F										860.645	97.605	96.687	18991.531
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (MRA) / BASF.
2. Ratings: CI at 0 DA-B; WC at 14+35 DA-A; prior to B, and 35 DA-C.
3. Yield if possible.
4. Estimate percent ground cover of each weed species at each application and evaluation timing.
   Ground cover percent on 5-18-09 at 7DBP6"W application were 10, 1, and 20 for ERICA, AMASS, and MEDSS, respectively.
   Ground cover percent on 6-1-09 at 14 DA-A rating were 10, 5, and 30 for ERICA, AMASS, and MEDSS, respectively.
   Ground cover percent on 6-20-09 at 4-6"W-1 application were 20, 25, and 30 for ERICA, AMASS, and MEDSS, respectively.
   Ground cover percent on 6-20-09 at 0 DA-B rating were 20, 25, and 30 for ERICA, AMASS, and MEDSS, respectively.
   Ground cover percent on 6-22-09 at 35 DA-A rating were 20, 25, and 30 for ERICA, AMASS, and MEDSS, respectively.
   Ground cover percent on 7-6-09 at 4-6"W-2 application were 5, 2, and 0 for ERICA, AMASS, and MEDSS, respectively.
5. ERICA-HR = Herbicide-resistant marestail (glyphosate).
   AMASS = Amaranth species including AMATA (common waterhemp) and AMARE (redroot pigweed).
6. Harvested 11-6-09, (2) 30 inch rows by 26.7 ft.

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-YRC-BDtankmix Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 05-04-09

Objectives: Evaluate the effectiveness of various tank-mix partners with Roundup PowerMax, Ignite, and Gramoxone Inteon in no-till soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed
Pest Description: glyphosate-resistant marestail
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 3.1 **Texture:** VERY FINE SANDY LOAM
pH: 5.7 **Soil Name:** ALVIN
CEC: 10 **Fert. Level:** P1 183 LB/A, K 288 LB/A

Application Description

	A	B
Application Date:	05-04-09	06-20-09
Time of Day:	19:00	8:00
Application Method:	Spray	Spray
Application Timing:	7-14EPP	28DAP
Application Placement:	BROFOL	BROFOL
Applied By:	NRJ	DKT
Air Temperature, Unit:	68 F	83 F
% Relative Humidity:	41	75
Wind Velocity, Unit:	1 MPH	2 MPH
Wind Direction:	SE	W
Dew Presence (Y/N):	N	Y
Soil Temperature, Unit:	65 F	80 F
Soil Moisture:	ABONOR	ABONOR
% Cloud Cover:	50	0
	05-04-09	06-20-09
Crop stage at application:	NA	V3
Height Min, Max (inch):		8 10

Pest Stage At Each Application

Application Date:	05-04-09	06-20-09
Weed Code:	ERICA	ERICA
Stage Majority (leaves):	10	18
Stage Min, Max:	COTY 36	8 52
Height Majority:	4 IN	8 IN
Height Min, Max:	0.25 19	4 20
Density, Unit:	8 FT2	8 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	2	8
Stage Min, Max:	COTY 4	4 30
Height Majority:	0.75 IN	4 IN
Height Min, Max:	0.25 1.5	3 8
Density, Unit:	2 FT2	2 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-YRC-BDtankmix Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Yield bu/A	ERICA-HR 05-18-09 BD-Control Percent	ERICA-HR 06-17-09 Control Percent	ERICA-HR 07-18-09 Control Percent
	Pest Code											ERICA-HR	ERICA-HR	ERICA-HR
	Crop Code									GLXMA	GLXMA			
	Rating Date									11-06-09	11-06-09	05-18-09	06-17-09	07-18-09
	Rating Data Type									Moisture	Yield	BD-Control	Control	Control
	Rating Unit									Percent	bu/A	Percent	Percent	Percent
	Rating Timing													
	Trt-Eval Interval											14 DA-A	-3 DA-B	28 DA-B
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.2 b	31 g	55 g	69 f-i	78 c-f
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.7 b	34 d-g	70 def	81 c-f	86 abc
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.1 b	34 d-g	55 g	60 hi	57 g
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.2 b	29 g	98 a	94 ab	92 abc
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A					
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.7 b	49 ab	69 ef	87 a-d	92 abc
5	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A					
5	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A					
5	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.1 b	48 abc	77 cde	96 a	96 a
6	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.7 b	37 b-g	67 f	58 i	55 g
7	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
8	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.2 b	38 a-g	96 a	73 efg	76 c-f
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.2 b	33 efg	97 a	81 c-f	80 b-e
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.2 b	31 fg	91 ab	61 hi	66 d-g
10	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
11	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.2 b	32 fg	98 a	92 abc	94 ab
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A					
11	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-YRC-BDtankmix Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent		GLXMA 11-06-09 Yield bu/A		ERICA-HR 05-18-09 BD-Control Percent		ERICA-HR 06-17-09 Control Percent		ERICA-HR 07-18-09 Control Percent	
	Pest Code													ERICA-HR		ERICA-HR		ERICA-HR	
	Crop Code									GLXMA		GLXMA							
	Rating Date									11-06-09		11-06-09		05-18-09		06-17-09		07-18-09	
	Rating Data Type									Moisture		Yield		BD-Control		Control		Control	
	Rating Unit									Percent		bu/A		Percent		Percent		Percent	
	Rating Timing																		
	Trt-Eval Interval													14 DA-A		-3 DA-B		28 DA-B	
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	10.7	b	46	a-d	98	a	96	a	95	ab
12	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A										
12	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A										
12	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A										
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
13	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.1	b	45	a-e	97	a	97	a	97	a
13	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A										
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
14	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	10.7	b	47	abc	94	a	80	def	76	c-f
14	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A										
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
15	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.1	b	32	fg	83	bc	70	fgh	62	fg
15	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A										
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
16	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	10.8	b	43	a-f	95	a	83	b-e	82	a-d
16	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A										
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A										
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
17	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	10.4	b	36	c-g	79	cd	62	ghi	65	efg
17	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A										
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A										
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
18	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.5	b	37	b-g	97	a	86	a-d	83	abc
18	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A										
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A										
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
19	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.1	b	46	abc	80	c	87	a-d	88	abc
19	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A										
19	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A										
19	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A										
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A										
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
20	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	10.6	b	50	a	84	bc	93	abc	96	ab
20	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A										
20	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A										
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
21	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.2	b	37	b-g	82	c	59	hi	62	fg
21	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A										
21	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A										
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A										
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B										
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B										
22	NONTREATED									13.1	a	8	h	0	h	0	j	0	h

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-YRC-BDtankmix Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code												ERICA-HR	ERICA-HR	ERICA-HR
Crop Code										GLXMA	GLXMA			
Rating Date										11-06-09	11-06-09	05-18-09	06-17-09	07-18-09
Rating Data Type										Moisture	Yield	BD-Control	Control	Control
Rating Unit										Percent	bu/A	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval												14 DA-A	-3 DA-B	28 DA-B
LSD (P=.05)										1.43	12.3	9.1	11.9	16.2
Replicate F										0.099	14.974	1.286	3.810	3.006
Replicate Prob(F)										0.9063	0.0001	0.2871	0.0302	0.0603
Treatment F										1.115	4.746	49.918	26.883	14.867
Treatment Prob(F)										0.3711	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-YRC-BDtankmix Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMASS	AMASS	AMASS
Pest Code										AMASS	AMASS	AMASS
Crop Code												
Rating Date										05-18-09	06-17-09	07-18-09
Rating Data Type										BD-Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing												
Trt-Eval Interval										14 DA-A	-3 DA-B	28 DA-B
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	98 abc	7 ghi	53 de
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	97 abc	3 hi	48 de
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	43 a-d	82 abc
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	97 abc	8 ghi	45 e
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A			
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	56 ab	68 a-d
5	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A			
5	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A			
5	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	50 abc	85 ab
6	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	18 fgh	87 ab
7	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A			
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
8	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	94 cd	10 ghi	57 de
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	98 abc	13 f-i	52 de
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A			
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	98 abc	15 f-i	57 de
10	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A			
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			
11	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	90 e	15 f-i	55 de
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A			
11	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B			

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-YRC-BDtankmix Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMASS		AMASS		AMASS
Crop Code														
Rating Date										05-18-09		06-17-09		07-18-09
Rating Data Type										BD-Control		Control		Control
Rating Unit										Percent		Percent		Percent
Rating Timing														
Trt-Eval Interval										14 DA-A		-3 DA-B		28 DA-B
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	93	de	40	bcd	60 cde
12	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A					
12	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A					
12	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
13	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	99	a	37	cde	87 ab
13	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
14	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	99	ab	60	a	90 a
14	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
15	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	97	abc	7	ghi	60 cde
15	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
16	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	97	abc	20	e-h	65 b-e
16	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A					
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
17	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	99	a	28	def	82 abc
17	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A					
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
18	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	95	bcd	22	efg	58 de
18	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A					
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
19	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	99	a	42	bcd	55 de
19	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A					
19	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A					
19	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A					
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
20	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	99	a	40	bcd	82 abc
20	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A					
20	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
21	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	99	ab	42	bcd	90 a
21	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A					
21	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A					
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A					
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
22	NONTREATED									0	f	0	i	0 f

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-YRC-BDtankmix Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										AMASS	AMASS	AMASS
Crop Code												
Rating Date										05-18-09	06-17-09	07-18-09
Rating Data Type										BD-Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing												
Trt-Eval Interval										14 DA-A	-3 DA-B	28 DA-B
LSD (P=.05)										3.6	16.7	22.7
Replicate F										0.052	4.534	4.260
Replicate Prob(F)										0.9498	0.0165	0.0207
Treatment F										278.017	9.728	6.823
Treatment Prob(F)										0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: ISA.
2. Ratings: WC at 14 da A and CI/WC at 0 + 28 da B.
3. Yield if possible.
4. ERICA-HR = Herbicide-resistant marestail (glyphosate).
   AMASS = Amaranth species including AMATA (common waterhemp) and AMARE (redroot pigweed).
   BD-Control = Burndown control. Control 6-17-09 and 7-18-09 was a combination of burndown and residual.
5. Harvested 11-6-09, (2) 30 inch rows by 27.5 ft.

FBS 1039 and FBS 1032 Soybean Burndown Study.

Trial ID: 09-22-MS40 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-29-09

Objectives: Evaluate FBS 1039 and FBS 1032 treatments for efficacy, yield and quality on Roundup Ready soybean for burndown applications.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-24-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 26 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.1 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** CASEYVILLE
CEC: 10 **Fert. Level:** P1: 99 LB/A, K: 493 LB/A

Application Description

	A	B	C
Application Date:	05-29-09	07-21-09	08-05-09
Time of Day:	12:00	11:00	10:15
Application Method:	Spray	Spray	Spray
Application Timing:	7DBP	V3	2-3WAB
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	NVH	NVH	DKP
Air Temperature, Unit:	74 F	74 F	80 F
% Relative Humidity:	76	90	92
Wind Velocity, Unit:	4 MPH	6 MPH	3 MPH
Wind Direction:	NW	SE	E
Dew Presence (Y/N):	N	N	N
Soil Moisture:	ABONOR	NORMAL	NORMAL
% Cloud Cover:	5	80	70
	05-29-09	07-21-09	08-05-09
Crop stage at application:	NA	V4	R2
Height Min, Max (inch):		6 8	24 30

Pest Stage At Each Application

Application Date:	05-29-09	07-21-09	08-05-09
Weed Code:	NA	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	10 FT	10 FT	10 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

FBS 1039 and FBS 1032 Soybean Burndown Study.

Trial ID: 09-22-MS40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-03-09 Moisture Percent	GLXMA 11-03-09 Test wt. lb/bu	GLXMA 12-16-09 Protein Percent	GLXMA 12-16-09 Oil Percent	GLXMA 11-03-09 Yield bu/A
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	12.5 a	56.3 a	39.2 c	19.5 a	48 ab
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B					
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B					
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C					
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C					
2	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	12.5 a	56.1 a	39.9 ab	19.5 a	48 ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C					
3	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	12.5 a	56.3 a	40.3 a	19.2 a	48 ab
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B					
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	12.4 ab	56.3 a	39.7 bc	19.3 a	50 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B					
4	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C					
5	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	12.2 c	56.1 a	40.1 ab	19.5 a	48 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B					
5	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C					
6	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	12.3 bc	56.2 a	39.8 abc	19.3 a	46 b
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B					
6	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C					
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C					
LSD (P=.05)										0.14	0.34	0.58	0.45	2.6
Replicate F										16.124	0.172	0.290	5.992	6.602
Replicate Prob(F)										0.0001	0.9133	0.8316	0.0068	0.0046
Treatment F										6.247	0.449	3.691	0.790	1.900
Treatment Prob(F)										0.0025	0.8075	0.0223	0.5728	0.1541

Means followed by same letter do not significantly differ (P=.05, LSD)

FBS 1039 and FBS 1032 Soybean Burndown Study.

Trial ID: 09-22-MS40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code													
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										08-11-09	08-19-09	08-26-09	09-01-09
Rating Data Type										GrowthStage	GrowthStage	GrowthStage	GrowthStage
Rating Unit										R	R	R	R
Rating Timing													
Trt-Eval Interval										21 DA-B	14 DA-C	21 DA-C	42 DA-B
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	2.0 a	3.0 a	4.0 a	5.0 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A				
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B				
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B				
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C				
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C				
2	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	2.0 a	3.0 a	4.0 a	5.0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C				
3	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	2.0 a	3.0 a	4.0 a	5.0 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	2.0 a	3.0 a	4.0 a	5.0 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B				
4	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C				
5	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	2.0 a	3.0 a	4.0 a	5.0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B				
5	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C				
6	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	2.0 a	3.0 a	4.0 a	5.0 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B				
6	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C				
LSD (P=.05)										0.00	0.00	0.00	0.00
Replicate F										0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

FBS 1039 and FBS 1032 Soybean Burndown Study.

Trial ID: 09-22-MS40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code												
Crop Code										GLXMA	GLXMA	GLXMA
Rating Date										08-11-09	08-19-09	08-26-09
Rating Data Type										Vigor	Vigor	Vigor
Rating Unit										0-9	0-9	0-9
Rating Timing												
Trt-Eval Interval										21 DA-B	14 DA-C	21 DA-C
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	7.5 a	7.8 a	8.0 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A			
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B			
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B			
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C			
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C			
2	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	7.0 a	7.5 a	8.0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A			
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B			
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C			
3	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	7.0 a	7.5 a	8.0 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A			
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B			
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C			
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	7.5 a	7.5 a	8.3 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A			
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B			
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B			
4	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C			
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C			
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C			
5	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	7.0 a	7.8 a	8.3 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A			
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B			
5	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C			
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C			
6	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	7.3 a	7.8 a	8.0 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A			
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B			
6	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C			
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C			
LSD (P=.05)										1.27	0.85	0.87
Replicate F										1.000	2.565	0.500
Replicate Prob(F)										0.4199	0.0934	0.6879
Treatment F										0.341	0.235	0.200
Treatment Prob(F)										0.8800	0.9411	0.9575

Means followed by same letter do not significantly differ (P=.05, LSD)

FBS 1039 and FBS 1032 Soybean Burndown Study.

Trial ID: 09-22-MS40 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code																
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										08-11-09	08-11-09	08-19-09	08-19-09	08-26-09	08-26-09	11-03-09	11-03-09
Rating Data Type										Height	Height	Height	Height	Height	Height	Height	Height
Rating Unit										cm	cm	cm	cm	cm	cm	cm	cm
Rating Timing										5 Plants	Overall	5 Plants	Overall	5 Plants	Overall	5 Plants	Overall
Trt-Eval Interval										21 DA-B	21 DA-B	14 DA-C	14 DA-C	21 DA-C	21 DA-C	EOS	EOS
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	57 a	57 a	82 a	83 a	94 a	93 a	94 a	93 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A								
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B								
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C								
2	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	56 a	56 a	80 a	80 a	92 a	91 a	93 abc	92 ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A								
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B								
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C								
3	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	56 a	55 a	81 a	82 a	92 a	89 a	92 abc	93 ab
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A								
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B								
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C								
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	56 a	56 a	81 a	82 a	92 a	90 a	93 ab	93 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A								
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B								
4	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C								
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C								
5	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	7DBP	A	55 a	56 a	83 a	83 a	91 a	90 a	91 bc	92 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A								
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B								
5	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C								
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C								
6	FBS 1039	100	SL	12	fl oz/a	12	fl oz/a	7DBP	A	56 a	56 a	83 a	83 a	91 a	91 a	90 c	90 b
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A								
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3	B								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3	B								
6	FBS 1032	100	SL	32	fl oz/a	32	fl oz/a	2-3WAB	C								
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAB	C								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAB	C								
LSD (P=.05)										3.7	3.7	4.8	4.9	3.4	4.7	3.0	2.5
Replicate F										5.976	7.345	1.498	1.038	24.452	4.288	8.968	12.805
Replicate Prob(F)										0.0069	0.0030	0.2554	0.4043	0.0001	0.0283	0.0012	0.0002
Treatment F										0.358	0.339	0.605	0.587	0.768	0.661	2.285	1.561
Treatment Prob(F)										0.8694	0.8811	0.6975	0.7103	0.5872	0.6597	0.0987	0.2306

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Floratine BioSciences.
2. Ratings: Soybean growth stage at B + C applications and every 21 da each B + C timing.
   Vigor and plant height at 21 da B + C and at harvest.
3. Yield, seed oil and protein content, and test weight.
4. Application C is 2-3 weeks after V3 application B, or R1 growth stage.
5. GrowthStage R = Soybean reproductive growth stage.
   Soybean height; 5 Plants is average height of 5 random plants per plot, Overall is looking across the top of the plants.
   Soybean vigor scale is 0-9, 0 = dead, 9 = very vigorous.
   EOS = End of season.
6. Harvested 11-3-09, (2) 30 inch rows by 23 ft.

No-Till Soybean Burndown Evaluation for Vida and Experimental Herbicides.

Trial ID: 09-ARC-17-100-N75 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 04-29-09

Objectives: Determine the burndown efficacy of Vida, GWN-9794, and GWN-9795 for no-till soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** STEME	Stellaria media (L.) Vill.	chickweed, common
Pest 2 Type: W	**Code:** LAMAM	Lamium amplexicaule L.	henbit
Pest 3 Type: W	**Code:** POAAN	Poa annua L.	bluegrass, annual
Pest 4 Type: W	**Code:** SENGL	Senecio glabellus Poir.	groundsel, cressleaf
Pest 5 Type: W	**Code:** ERICA	Conyza canadensis (L.) Crong.	horseweed
Pest 6 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 7 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** STOY
CEC: 8.3 **Fert. Level:** P1: 67 LB/A, K: 247 LB/A

Application Description	A
Application Date:	04-29-09
Time of Day:	14:30
Application Method:	Spray
Application Timing:	14EPP
Application Placement:	BROFOL
Applied By:	NRJ
Air Temperature, Unit:	84 F
% Relative Humidity:	58
Wind Velocity, Unit:	1 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Temperature, Unit:	70 F
Soil Moisture:	ABONOR
% Cloud Cover:	75
	04-29-09
Crop stage at application:	NA LVS

No-Till Soybean Burndown Evaluation for Vida and Experimental Herbicides.

Trial ID: 09-ARC-17-100-N75 Location: Agronomy Res. Center

Pest Stage At Each Application

Application Date:	04-29-09
Weed Code:	STEME
Stage Majority (leaves):	70
Stage Min, Max:	60 80
Height Majority:	5 IN
Height Min, Max:	4 6
Density, Unit:	2 FT2
Weed Code:	LAMAM
Stage Majority (leaves):	50
Stage Min, Max:	30 60
Height Majority:	7 IN
Height Min, Max:	6 8
Density, Unit:	1 FT2
Weed Code:	POAAN
Stage Majority (leaves):	7 TILLERS
Stage Min, Max:	4 10
Height Majority:	3 IN
Height Min, Max:	2 4
Density, Unit:	1 FT2
Weed Code:	SENGL
Stage Majority (leaves):	20
Stage Min, Max:	10 30
Height Majority:	22 IN
Height Min, Max:	12 30
Density, Unit:	0.1 FT2
Weed Code:	ERICA
Stage Majority (leaves):	30
Stage Min, Max:	10 40
Height Majority:	8 IN
Height Min, Max:	3 10
Density, Unit:	0.1 FT2
Weed Code:	PANDI
Stage Majority (leaves):	NA
Weed Code:	AMBTR
Stage Majority (leaves):	6
Stage Min, Max:	2 8
Height Majority:	4 IN
Height Min, Max:	2 6
Density, Unit:	0.1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

No-Till Soybean Burndown Evaluation for Vida and Experimental Herbicides.

Trial ID: 09-ARC-17-100-N75 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code													STEME	STEME	LAMAM	LAMAM
Crop Code										GLXMA	GLXMA	GLXMA				
Rating Date										11-05-09	11-05-09	06-19-09	05-06-09	05-13-09	05-06-09	05-13-09
Rating Data Type										Moisture	Yield	Injury	Control	Control	Control	Control
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent	Percent
Rating Timing												21 DAE				
Trt-Eval Interval												28 DA-A	7 DA-A	14 DA-A	7 DA-A	14 DA-A
1	NONTREATED									12.5	ab	25 ab	0 a	0 b	0 b	0 b	0 b
2	VIDA	0.208	SL	0.00163	lb ai/a	1	fl oz/a	14EPP	A	12.3	ab	30 a	0 a	97 a	99 a	99 a	99 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A								
3	VIDA	0.208	SL	0.00163	lb ai/a	1	fl oz/a	14EPP	A	13.2	a	31 a	0 a	95 a	98 a	99 a	99 a
3	2,4-D LV 4	3.8	EC	0.238	lb ae/a	8	fl oz/a	14EPP	A								
3	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A								
4	GWN-9794	74.3	WG	0.0232	lb ai/a	0.5	oz/a	14EPP	A	12.9	ab	23 b	0 a	97 a	99 a	99 a	99 a
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A								
5	GWN-9794	74.3	WG	0.0232	lb ai/a	0.5	oz/a	14EPP	A	12.2	b	30 a	0 a	96 a	99 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A								
6	GWN-9795	73.7	WG	0.161	lb ai/a	3.5	oz/a	14EPP	A	12.5	ab	29 a	0 a	94 a	99 a	99 a	99 a
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A								
7	GWN-9795	73.7	WG	0.161	lb ai/a	3.5	oz/a	14EPP	A	12.4	ab	27 ab	0 a	96 a	99 a	99 a	99 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A	12.4	ab	26 ab	0 a	97 a	99 a	99 a	99 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A								
LSD (P=.05)										0.94		5.8	0.0	5.1	1.0	0.0	0.0
Replicate F										2.844		6.062	0.000	1.229	1.000	0.000	0.000
Replicate Prob(F)										0.0623		0.0039	1.0000	0.3241	0.4123	1.0000	1.0000
Treatment F										1.118		1.953	0.000	386.371	9773.715	0.000	0.000
Treatment Prob(F)										0.3887		0.1112	1.0000	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

No-Till Soybean Burndown Evaluation for Vida and Experimental Herbicides.

Trial ID: 09-ARC-17-100-N75 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										POAAN	POAAN	POAAN	SENGL	SENGL
Crop Code														
Rating Date										05-06-09	05-13-09	05-27-09	05-06-09	05-13-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A	7 DA-A	14 DA-A
1	NONTREATED									0 c	0 c	0 c	0 d	0 c
2	VIDA	0.208	SL	0.00163	lb ai/a	1	fl oz/a	14EPP	A	85 a	99 a	99 a	85 a	99 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
3	VIDA	0.208	SL	0.00163	lb ai/a	1	fl oz/a	14EPP	A	83 a	38 b	60 b	50 c	56 b
3	2,4-D LV 4	3.8	EC	0.238	lb ae/a	8	fl oz/a	14EPP	A					
3	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
4	GWN-9794	74.3	WG	0.0232	lb ai/a	0.5	oz/a	14EPP	A	56 b	8 c	0 c	78 ab	98 a
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
5	GWN-9794	74.3	WG	0.0232	lb ai/a	0.5	oz/a	14EPP	A	74 ab	99 a	98 a	70 ab	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
6	GWN-9795	73.7	WG	0.161	lb ai/a	3.5	oz/a	14EPP	A	64 ab	0 c	35 b	66 bc	99 a
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
7	GWN-9795	73.7	WG	0.161	lb ai/a	3.5	oz/a	14EPP	A	75 ab	99 a	99 a	69 ab	98 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A	84 a	99 a	99 a	76 ab	99 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
LSD (P=.05)										25.9	16.2	27.7	17.1	14.9
Replicate F										2.199	1.138	0.384	2.192	1.106
Replicate Prob(F)										0.1182	0.3566	0.7654	0.1190	0.3690
Treatment F										10.213	77.350	22.335	21.485	50.398
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

No-Till Soybean Burndown Evaluation for Vida and Experimental Herbicides.

Trial ID: 09-ARC-17-100-N75 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	PANDI	AMBTR
	Pest Code									ERICA	ERICA	ERICA	PANDI	AMBTR
	Crop Code													
	Rating Date									05-06-09	05-13-09	05-27-09	05-27-09	05-27-09
	Rating Data Type									Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent
	Rating Timing													
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	28 DA-A	28 DA-A
1	NONTREATED									0 c	0 c	0 e	0 a	0 c
2	VIDA	0.208	SL	0.00163	lb ai/a	1	fl oz/a	14EPP	A	58 ab	93 a	84 b	0 a	96 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
3	VIDA	0.208	SL	0.00163	lb ai/a	1	fl oz/a	14EPP	A	55 b	61 b	58 c	0 a	99 a
3	2,4-D LV 4	3.8	EC	0.238	lb ae/a	8	fl oz/a	14EPP	A					
3	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
4	GWN-9794	74.3	WG	0.0232	lb ai/a	0.5	oz/a	14EPP	A	55 b	56 b	38 d	0 a	52 b
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
5	GWN-9794	74.3	WG	0.0232	lb ai/a	0.5	oz/a	14EPP	A	60 ab	90 a	78 b	0 a	87 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
6	GWN-9795	73.7	WG	0.161	lb ai/a	3.5	oz/a	14EPP	A	64 a	92 a	99 a	0 a	96 a
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	14EPP	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
7	GWN-9795	73.7	WG	0.161	lb ai/a	3.5	oz/a	14EPP	A	61 ab	94 a	99 a	0 a	94 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	14EPP	A	59 ab	86 a	84 b	0 a	82 ab
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14EPP	A					
	LSD (P=.05)									7.5	9.0	9.3	0.0	32.3
	Replicate F									1.068	1.248	1.881	0.000	0.917
	Replicate Prob(F)									0.3837	0.3174	0.1638	1.0000	0.4497
	Treatment F									67.545	113.291	117.039	0.000	9.652
	Treatment Prob(F)									0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Gowan (UNI-09-02-T01).
2. Ratings: CI 14-21 DAE, WC at 7, 14, and 28-35 DAT.
3. Targets: STEME, ERICA, LAMAM, AMBTR.
4. DAE = Days after emergence.
5. Harvested 11-5-09, (2) 30 inch rows by 25 ft.

Tackle Burndown and POST in Soybean.

Trial ID: 09-ARC-17-100-M50 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 04-29-09

Objectives: Determine the efficacy and selectivity of Tackle herbicide applied as a burndown and postemergence in no-till soybean.

Crop 1: GLXMA Soybean **Variety:** FS 45T70 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** STEME	Stellaria media (L.) Vill.	chickweed, common
Pest 2 Type: W	**Code:** LAMAM	Lamium amplexicaule L.	henbit
Pest 3 Type: W	**Code:** POAAN	Poa annua L.	bluegrass, annual
Pest 4 Type: W	**Code:** SENGL	Senecio glabellus Poir.	groundsel, cressleaf
Pest 5 Type: W	**Code:** ERICA	Conyza canadensis (L.) Crong.	horseweed
Pest 6 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 7 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 8 Type: W	**Code:** IPOSS		morningglory, species

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** STOY
CEC: 8.3 **Fert. Level:** P1: 67 LB/A, K: 247 LB/A

Application Description	A	B	C
Application Date:	04-29-09		06-17-09
Time of Day:	14:30	See	8:00
Application Method:	Spray	Comment 5	Spray
Application Timing:	14-21EPP	PRE	14-21DAP
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	NRJ		DKP
Air Temperature, Unit:	84 F		84 F
% Relative Humidity:	58		75
Wind Velocity, Unit:	2 MPH		4 MPH
Wind Direction:	W		W
Dew Presence (Y/N):	N		Y
Soil Temperature, Unit:	70 F		76 F
Soil Moisture:	ABONOR		ABONOR
% Cloud Cover:	75		50
	04-29-09		06-17-09
Crop stage at application:	NA	NA	V2-V3
Height Min, Max (inch):		NA NA	5 7

Tackle Burndown and POST in Soybean.

Trial ID: 09-ARC-17-100-M50 Location: Agronomy Res. Center

Pest Stage At Each Application

Application Date:	04-29-09		06-17-09			
Weed Code:	STEME	STEME	STEME			
Stage Majority (leaves):	70		NA	NA		
Stage Min, Max:	60	80				
Height Majority:	5	IN				
Height Min, Max:	4	6				
Density, Unit:	2	FT2				
Weed Code:	LAMAM	LAMAM	LAMAM			
Stage Majority (leaves):	50		NA	NA		
Stage Min, Max:	30	60				
Height Majority:	7	IN				
Height Min, Max:	6	8				
Density, Unit:	1	FT2				
Weed Code:	POAAN	POAAN	POAAN			
Stage Majority (leaves):	35		NA	35		
Stage Min, Max:	30	40		30	40	
Height Majority:	3	IN		3	IN	
Height Min, Max:	2	4		2	4	
Density, Unit:	1	FT2		0.5	FT2	
Weed Code:	SENGL	SENGL	SENGL			
Stage Majority (leaves):	20		NA	NA		
Stage Min, Max:	10	30				
Height Majority:	22	IN				
Height Min, Max:	12	30				
Density, Unit:	0.1	FT2				
Weed Code:	ERICA	ERICA	ERICA			
Stage Majority (leaves):	30		NA	55		
Stage Min, Max:	10	40		14	70	
Height Majority:	8	IN		14	IN	
Height Min, Max:	3	10		5	48	
Density, Unit:	0.1	FT2		0.4	FT2	
Weed Code:	AMBTR	AMBTR	AMBTR			
Stage Majority (leaves):	6		NA	NA		
Stage Min, Max:	2	8				
Height Majority:	4	IN				
Height Min, Max:	2	6				
Density, Unit:	0.2	FT2				
Weed Code:	PANDI	PANDI	PANDI			
Stage Majority (leaves):	NA		NA	5		
Stage Min, Max:				3	9	
Height Majority:				8	IN	
Height Min, Max:				2	14	
Density, Unit:				2	FT2	
Weed Code:	IPOSS	IPOSS	IPOSS			
Stage Majority (leaves):	NA		NA	6		
Stage Min, Max:				2	8	
Height Majority:				3	IN	
Height Min, Max:				1	4	
Density, Unit:				0.2	FT2	

Application Equipment

Appl. Equipment:	CO2 sprayer		CO2 sprayer		CO2 sprayer	
Operating Pressure:	30	PSI	30	PSI	30	PSI
Nozzle Type:	Flat fan		Flat fan		Flat fan	
Nozzle Size:	XR 8002		XR 8002		XR 8002	
Boom Length, Unit:	7.5	FT	7.5	FT	7.5	FT
Spray Volume, Unit:	15	GPA	15	GPA	15	GPA

Tackle Burndown and POST in Soybean.

Trial ID: 09-ARC-17-100-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 05-27-09 Injury Percent	GLXMA 06-24-09 Injury Percent	GLXMA 07-01-09 Injury Percent	GLXMA 07-15-09 Injury Percent	GLXMA 08-12-09 Injury Percent	STEME 05-13-09 Control Percent
	Pest Code																STEME
	Crop Code									GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	
	Rating Date									11-05-09	11-05-09	05-27-09	06-24-09	07-01-09	07-15-09	08-12-09	05-13-09
	Rating Data Type									Moisture	Yield	Injury	Injury	Injury	Injury	Injury	Control
	Rating Unit									Percent	bu/A	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing																
	Trt-Eval Interval											28 DA-A	7 DA-C	14 DA-C	28 DA-C	56 DA-C	14 DA-A
1	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	11.9 b	56 a	0 a	0 b	0 a	0 a	0 a	99 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A								
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A								
1	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21DAP	C								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C								
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	12.0 b	59 a	0 a	1 b	0 a	0 a	0 a	99 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A								
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A								
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C								
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C								
3	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	13.1 a	37 b	0 a	0 b	0 a	0 a	0 a	99 a
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A								
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A								
3	SEE COMMENT 5																
3	CHA-019	4.5	ME	1.13	lb ai/a	32	fl oz/a	PRE	B								
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	12.0 b	58 a	0 a	0 b	0 a	0 a	0 a	99 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A								
4	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C								
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C								
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	11.8 b	58 a	0 a	2 a	0 a	0 a	0 a	99 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A								
5	EXTREME	2.17	ME	0.81	lb ai/a	3	pt/a	14-21DAP	C								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C								
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C								
6	NONTREATED									12.2 b	36 b	0 a	0 b	0 a	0 a	0 a	0 b
LSD (P=.05)										0.66	6.4	0.0	1.4	0.0	0.0	0.0	0.0
Replicate F										0.320	0.828	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)										0.8111	0.4987	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F										4.833	26.597	0.000	3.667	0.000	0.000	0.000	0.000
Treatment Prob(F)										0.0078	0.0001	1.0000	0.0229	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Tackle Burndown and POST in Soybean.

Trial ID: 09-ARC-17-100-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	LAMAM	POAAN	POAAN	SENGL
	Pest Code									LAMAM	POAAN	POAAN	SENGL
	Crop Code												
	Rating Date									05-13-09	05-13-09	05-27-09	05-13-09
	Rating Data Type									Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing												
	Trt-Eval Interval									14 DA-A	14 DA-A	28 DA-A	14 DA-A
1	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	99 a	99 a	99 a	98 b
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A				
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A				
1	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21DAP	C				
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C				
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	99 a	99 a	99 a	99 ab
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A				
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C				
3	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	99 a	99 a	98 a	99 a
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A				
3	SEE COMMENT 5												
3	CHA-019	4.5	ME	1.13	lb ai/a	32	fl oz/a	PRE	B				
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	99 a	99 a	96 ab	99 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A				
4	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C				
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C				
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	99 a	99 a	91 b	99 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A				
5	EXTREME	2.17	ME	0.81	lb ai/a	3	pt/a	14-21DAP	C				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C				
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C				
6	NONTREATED									0 b	0 b	0 c	0 c
	LSD (P=.05)									0.0	0.0	6.9	1.0
	Replicate F									0.000	0.000	0.515	0.385
	Replicate Prob(F)									1.0000	1.0000	0.6781	0.7656
	Treatment F									0.000	0.000	294.047	14988.694
	Treatment Prob(F)									1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Tackle Burndown and POST in Soybean.

Trial ID: 09-ARC-17-100-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	ERICA	ERICA
	Pest Code									ERICA	ERICA	ERICA	ERICA	ERICA
	Crop Code													
	Rating Date									05-13-09	05-27-09	07-01-09	07-15-09	08-12-09
	Rating Data Type									Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent
	Rating Timing													
	Trt-Eval Interval									14 DA-A	28 DA-A	14 DA-C	28 DA-C	56 DA-C
1	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	90 a	86 a	78 a	83 a	83 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A					
1	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21DAP	C					
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	88 a	73 b	75 a	75 a	75 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A					
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C					
3	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	88 a	81 ab	59 b	46 b	45 b
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A					
3	SEE COMMENT 5													
3	CHA-019	4.5	ME	1.13	lb ai/a	32	fl oz/a	PRE	B					
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	86 a	74 ab	74 a	75 a	75 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
4	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C					
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	90 a	85 ab	85 a	84 a	84 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
5	EXTREME	2.17	ME	0.81	lb ai/a	3	pt/a	14-21DAP	C					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C					
6	NONTREATED									0 b	0 c	0 c	0 c	0 c
	LSD (P=.05)									4.0	12.9	12.2	22.0	21.2
	Replicate F									0.534	0.354	0.509	0.661	0.722
	Replicate Prob(F)									0.6660	0.7869	0.6819	0.5890	0.5544
	Treatment F									727.136	59.402	60.036	20.062	21.628
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Tackle Burndown and POST in Soybean.

Trial ID: 09-ARC-17-100-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code														
Rating Date										05-13-09	05-27-09	07-01-09	07-15-09	08-12-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										14 DA-A	28 DA-A	14 DA-C	28 DA-C	56 DA-C
1	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	99 a	99 a	99 a	99 a	99 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A					
1	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21DAP	C					
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	99 a	99 a	99 a	99 a	99 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A					
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C					
3	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	99 a	99 a	99 a	87 a	87 a
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A					
3	SEE COMMENT 5													
3	CHA-019	4.5	ME	1.13	lb ai/a	32	fl oz/a	PRE	B					
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	99 a	99 a	99 a	99 a	99 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
4	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C					
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	99 a	94 a	99 a	99 a	99 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A					
5	EXTREME	2.17	ME	0.81	lb ai/a	3	pt/a	14-21DAP	C					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C					
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C					
6	NONTREATED									0 b	0 b	0 b	0 b	0 b
LSD (P=.05)										0.0	5.8	0.0	15.1	15.1
Replicate F										0.000	1.000	0.000	1.000	1.000
Replicate Prob(F)										1.0000	0.4199	1.0000	0.4199	0.4199
Treatment F										0.000	427.057	0.000	63.080	63.080
Treatment Prob(F)										1.0000	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Tackle Burndown and POST in Soybean.

Trial ID: 09-ARC-17-100-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	PANDI	PANDI	PANDI	PANDI	IPOSS	IPOSS	IPOSS
	Pest Code									PANDI	PANDI	PANDI	PANDI	IPOSS	IPOSS	IPOSS
	Crop Code															
	Rating Date									05-27-09	07-01-09	07-15-09	08-12-09	07-01-09	07-15-09	08-12-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing															
	Trt-Eval Interval									28 DA-A	14 DA-C	28 DA-C	56 DA-C	14 DA-C	28 DA-C	56 DA-C
1	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	95 a	99 a	97 a	93 a	69 a	63 a	60 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A							
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A							
1	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21DAP	C							
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C							
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	93 ab	99 a	98 a	92 a	85 a	74 a	68 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A							
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A							
2	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C							
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C							
3	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21EPP	A	90 b	0 b	0 b	0 b	16 b	10 b	8 b
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21EPP	A							
3	SEE COMMENT 5															
3	CHA-019	4.5	ME	1.13	lb ai/a	32	fl oz/a	PRE	B							
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	0 c	99 a	97 a	93 a	88 a	76 a	73 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A							
4	TACKLE	4.128	ME	1.0313	lb ai/a	32	fl oz/a	14-21DAP	C							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C							
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C							
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	14-21EPP	A	0 c	99 a	98 a	92 a	77 a	71 a	65 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21EPP	A							
5	EXTREME	2.17	ME	0.81	lb ai/a	3	pt/a	14-21DAP	C							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	14-21DAP	C							
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	%v/v	14-21DAP	C							
6	NONTREATED									0 c	0 b	0 b	0 b	0 b	0 b	0 b
LSD (P=.05)										4.8	0.6	1.2	7.4	25.8	18.2	19.7
	Replicate F									0.676	1.000	0.419	0.112	1.538	1.336	1.215
	Replicate Prob(F)									0.5803	0.4199	0.7423	0.9515	0.2457	0.3000	0.3383
	Treatment F									999.973	62569.006	16060.984	377.050	19.521	32.556	24.984
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Cheminova (HGLXMATAC0901).
2. Ratings: CI at 7, 14, and 28 days after B+C; WC at 14 + 28 days after A and at 14, 28, + 56 days after C.
3. Target STEME, ERICA, AMBTR, DIGSA, AMASS.
4. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
5. The planned PRE application was not applied due to an oversight.
6. Harvested 11-5-09, (2) 30 inch rows by 25 ft.

Burndown and Residual Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MW90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-21-09

Objectives: Identify complimentary herbicide products for burndown and residual weed control in no-till soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** HORPU	Hordeum pusillum Nutt.	barley, little
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** ERICA	Conyza canadensis (L.) Crong.	horseweed
Pest 4 Type: W	**Code:** SENGL	Senecio glabellus Poir.	groundsel, cressleaf
Pest 5 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 6 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 31 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** WINFIELD
CEC: 8 **Fert. Level:** P1: 83 LB/A, K: 396 LB/A

Application Description

	A
Application Date:	05-21-09
Time of Day:	11:30
Application Method:	Spray
Application Timing:	7-14DBP
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	80 F
% Relative Humidity:	62
Wind Velocity, Unit:	4 MPH
Wind Direction:	S
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	20
	05-21-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	05-21-09
Weed Code:	HORPU
Stage Majority (leaves):	7
Stage Min, Max:	3 8
Height Majority:	22 IN
Height Min, Max:	18 24
Density, Unit:	4 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	8
Stage Min, Max:	5 10
Height Majority:	9 IN
Height Min, Max:	4 14
Density, Unit:	1.5 FT2
Weed Code:	ERICA
Stage Majority (leaves):	NA
Weed Code:	SENGL
Stage Majority (leaves):	30
Stage Min, Max:	2 40
Height Majority:	24 IN
Height Min, Max:	1 32
Density, Unit:	0.75 FT2
Weed Code:	PANDI
Stage Majority (leaves):	NA
Weed Code:	AMATA
Stage Majority (leaves):	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Burndown and Residual Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MW90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 07-15-09 Injury Percent 14 DAE	BBBBB 06-04-09 BD-Control Percent 0 DAPP	GGGGG 06-04-09 BD-Control Percent 0 DAPP	AMBTR 07-11-09 Control Percent 14 DAP	AMBTR 07-25-09 Control Percent 28 DAP
1	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A	0 a	99 a	99 a	75 d	70 c
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
2	LOROX DF	50	WG	0.5	lb ai/a	16	oz/a	7-14DBP	A	0 a	99 a	99 a	86 bcd	77 bc
2	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
3	FIRSTRATE	84	WG	0.016	lb ai/a	0.305	oz/a	7-14DBP	A	0 a	99 a	99 a	96 ab	96 a
3	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
4	PROWL H2O	3.8	CS	0.95	lb ai/a	1	qt/a	7-14DBP	A	0 a	99 a	99 a	93 abc	91 ab
4	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
5	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14DBP	A	0 a	99 a	99 a	98 a	98 a
5	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
6	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	7-14DBP	A	0 a	99 a	99 a	93 abc	91 ab
6	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
7	VALOR XLT	40.3	WG			3	oz/a	7-14DBP	A	0 a	99 a	99 a	94 abc	92 ab
7	VALOR SX	51	WG	0.056	lb ai/a			7-14DBP	A					
7	CLASSIC	25	WG	0.0194	lb ai/a			7-14DBP	A					
7	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
8	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	7-14DBP	A	0 a	99 a	99 a	92 abc	91 ab
8	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
9	AUTHORITY ASSIST	4	SL	0.125	lb ai/a	4	fl oz/a	7-14DBP	A	0 a	99 a	99 a	92 abc	91 ab
9	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
10	AUTHORITY MTZ	45	WG	0.225	lb ai/a	8	oz/a	7-14DBP	A	0 a	99 a	99 a	89 abc	89 ab
10	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
11	GANGSTER (CO-PACK)					1.8	oz/a	7-14DBP	A	0 a	99 a	99 a	89 abc	87 ab
11	GANGSTER FR	84	WG	0.0158	lb ai/a			7-14DBP	A					
11	GANGSTER V	51	WG	0.048	lb ai/a			7-14DBP	A					
11	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
12	CANOPY EX	29.5	WG			1.1	oz/a	7-14DBP	A	0 a	99 a	99 a	96 ab	96 a
12	CLASSIC	25	WG	0.0156	lb ai/a			7-14DBP	A					
12	EXPRESS	50	SG	0.00468	lb ai/a			7-14DBP	A					
12	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
13	CANOPY	75	WG	0.105	lb ai/a	2.25	oz/a	7-14DBP	A	0 a	99 a	99 a	93 abc	91 ab
13	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					

Burndown and Residual Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MW90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code											BBBBB	GGGGG	AMBTR	AMBTR
Crop Code										GLXMA				
Rating Date										07-15-09	06-04-09	06-04-09	07-11-09	07-25-09
Rating Data Type										Injury	BD-Control	BD-Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										14 DAE	0 DAPP	0 DAPP	14 DAP	28 DAP
14	ENVIVE	41.3	WG			3	oz/a	7-14DBP	A	0 a	99 a	99 a	99 a	99 a
14	CLASSIC	25	WG	0.01714	lb ai/a			7-14DBP	A					
14	HARMONY SG	50	SG	0.00551	lb ai/a			7-14DBP	A					
14	VALOR SX	51	WG	0.05443	lb ai/a			7-14DBP	A					
14	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
14	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
15	PREFIX	5.29	EC	1.32	lb ai/a	1	qt/a	7-14DBP	A	0 a	99 a	99 a	90 abc	89 ab
15	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A					
15	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
16	EXTREME	2.17	SL	0.81	lb ai/a	1.5	qt/a	7-14DBP	A	0 a	99 a	99 a	82 cd	84 abc
16	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A					
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A					
17	NONTREATED									0 a	0 b	0 b	0 e	0 d
LSD (P=.05)										0.0	0.0	0.0	11.5	15.1
Replicate F										0.000	0.000	0.000	0.780	0.528
Replicate Prob(F)										1.0000	1.0000	1.0000	0.5110	0.6649
Treatment F										0.000	0.000	0.000	31.922	18.794
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Burndown and Residual Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MW90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA 07-11-09 Control Percent 14 DAP	ERICA 07-25-09 Control Percent 28 DAP	PANDI 07-11-09 Control Percent 14 DAP	PANDI 07-25-09 Control Percent 28 DAP	AMATA 07-11-09 Control Percent 14 DAP	AMATA 07-25-09 Control Percent 28 DAP
1	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A	99 a	97 a	25 e	15 d	0 f	5 f
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
2	LOROX DF	50	WG	0.5	lb ai/a	16	oz/a	7-14DBP	A	97 a	97 a	56 cd	53 bc	8 f	5 f
2	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
3	FIRSTRATE	84	WG	0.016	lb ai/a	0.305	oz/a	7-14DBP	A	99 a	99 a	49 d	40 c	5 f	0 f
3	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
4	PROWL H2O	3.8	CS	0.95	lb ai/a	1	qt/a	7-14DBP	A	99 a	99 a	75 b	65 b	35 e	15 ef
4	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
5	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14DBP	A	97 a	97 a	75 b	70 ab	78 ab	80 a
5	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
6	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	7-14DBP	A	96 a	96 a	73 bc	65 b	79 ab	73 ab
6	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
7	VALOR XLT	40.3	WG			3	oz/a	7-14DBP	A	99 a	99 a	96 a	91 a	65 abc	54 bcd
7	VALOR SX	51	WG	0.056	lb ai/a			7-14DBP	A						
7	CLASSIC	25	WG	0.0194	lb ai/a			7-14DBP	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
8	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	7-14DBP	A	99 a	99 a	66 bc	56 bc	64 abc	45 cd
8	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
9	AUTHORITY ASSIST	4	SL	0.125	lb ai/a	4	fl oz/a	7-14DBP	A	97 a	96 a	59 bcd	56 bc	53 cde	38 de
9	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
10	AUTHORITY MTZ	45	WG	0.225	lb ai/a	8	oz/a	7-14DBP	A	97 a	96 a	60 bcd	50 bc	58 bcd	46 cd
10	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
11	GANGSTER (CO-PACK)					1.8	oz/a	7-14DBP	A	98 a	98 a	69 bc	55 bc	65 abc	53 bcd
11	GANGSTER FR	84	WG	0.0158	lb ai/a			7-14DBP	A						
11	GANGSTER V	51	WG	0.048	lb ai/a			7-14DBP	A						
11	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
12	CANOPY EX	29.5	WG			1.1	oz/a	7-14DBP	A	99 a	98 a	94 a	90 a	0 f	0 f
12	CLASSIC	25	WG	0.0156	lb ai/a			7-14DBP	A						
12	EXPRESS	50	SG	0.00468	lb ai/a			7-14DBP	A						
12	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
13	CANOPY	75	WG	0.105	lb ai/a	2.25	oz/a	7-14DBP	A	98 a	98 a	95 a	92 a	34 e	20 ef
13	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						

Burndown and Residual Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MW90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA 07-11-09 Control Percent 14 DAP	ERICA 07-25-09 Control Percent 28 DAP	PANDI 07-11-09 Control Percent 14 DAP	PANDI 07-25-09 Control Percent 28 DAP	AMATA 07-11-09 Control Percent 14 DAP	AMATA 07-25-09 Control Percent 28 DAP
14	ENVIVE	41.3	WG			3	oz/a	7-14DBP	A	99 a	99 a	96 a	92 a	83 a	63 abc
14	CLASSIC	25	WG	0.01714	lb ai/a			7-14DBP	A						
14	HARMONY SG	50	SG	0.00551	lb ai/a			7-14DBP	A						
14	VALOR SX	51	WG	0.05443	lb ai/a			7-14DBP	A						
14	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
14	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
15	PREFIX	5.29	EC	1.32	lb ai/a	1	qt/a	7-14DBP	A	97 a	97 a	70 bc	64 b	38 de	33 de
15	ROUNDUP WEATHERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	7-14DBP	A						
15	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
16	EXTREME	2.17	SL	0.81	lb ai/a	1.5	qt/a	7-14DBP	A	99 a	99 a	61 bcd	59 bc	0 f	0 f
16	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14DBP	A						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14DBP	A						
17	NONTREATED									0 b	0 b	0 f	0 d	0 f	0 f
LSD (P=.05)										4.4	4.9	17.2	22.8	22.0	22.9
Replicate F										0.969	1.587	0.772	0.874	2.498	1.720
Replicate Prob(F)										0.4152	0.2047	0.5155	0.4614	0.0708	0.1754
Treatment F										242.667	189.026	17.405	10.126	16.516	11.746
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Monsanto (2009-01-04-10).
2. Ratings: CI at 10-14 DAE; Overall grass and broadleaf burndown (2 data columns) at planting; WC at 28 DAP.
3. No yield.
4. BBBBB = Broad-leaved plants. GGGGG = Grasses. BD-Control = Burndown control.
5. DAPP = Days after planned planting. Planting was delayed due to wet field conditions.

Evaluation of Kixor in Tank-mixtures for Early Preplant Burndown in Soybean.

Trial ID: 09-YRC-800TM Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 05-04-09

Objectives: Evaluate tank-mixtures with Sharpen herbicide
for burndown in no-till soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed
Pest Description: glyphosate-resistant marestail
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 3 Type: W **Code:** STEME Stellaria media (L.) Vill. chickweed, common
Pest 4 Type: W **Code:** MEDSS Medicago species medicago species

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.2 **Texture:** VERY FINE SANDY LOAM
pH: 6.2 **Soil Name:** ALVIN
CEC: 9 **Fert. Level:** P1 82 LB/A, K 91 LB/A

Application Description

	A
Application Date:	05-04-09
Time of Day:	11:00
Application Method:	Spray
Application Timing:	7EPP
Application Placement:	BROFOL
Applied By:	NRJ
Air Temperature, Unit:	67 F
% Relative Humidity:	41
Wind Velocity, Unit:	1 MPH
Wind Direction:	SE
Dew Presence (Y/N):	N
Soil Temperature, Unit:	65 F
Soil Moisture:	ABONOR
% Cloud Cover:	50
	05-04-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	05-04-09
Weed Code:	ERICA
Stage Majority (leaves):	9
Stage Min, Max:	COTY 40
Height Majority:	3 IN
Height Min, Max:	0.5 17
Density, Unit:	3 FT2
Weed Code:	AMATA
Stage Majority (leaves):	3
Stage Min, Max:	COTY 6
Height Majority:	1 IN
Height Min, Max:	0.25 2.5
Density, Unit:	2 FT2
Weed Code:	STEME
Stage Majority (leaves):	NA
Weed Code:	MEDSS
Stage Majority (leaves):	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	6.67 FT
Spray Volume, Unit:	15 GPA

Evaluation of Kixor in Tank-mixtures for Early Preplant Burndown in Soybean.

Trial ID: 09-YRC-800TM Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 06-11-09 Moisture Percent 38 DA-A	GLXMA 06-11-09 Yield bu/A 38 DA-A	GLXMA 06-01-09 Injury Percent 28 DA-A	GLXMA 06-05-09 Plants 1m row 32 DA-A	GLXMA 06-22-09 Plants 1m row 49 DA-A	GLXMA 06-22-09 Height cm 49 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	11.98 abc	32 de	0 a	31 a	27 a	27 abc
1	CLARITY	4	SL	0.25	lb ae/a	8	fl oz/a	7 DBP	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	12.08 abc	35 b-e	0 a	30 abc	25 abc	24 c
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	12.15 abc	37 a-e	0 a	31 abc	26 a	24 c
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7 DBP	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	11.85 abc	33 cde	0 a	32 a	24 abc	28 abc
4	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A						
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	11.83 abc	36 b-e	0 a	31 abc	25 abc	24 c
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A						
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	12.00 abc	35 b-e	0 a	31 abc	26 a	26 bc
6	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A						
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	12.20 ab	38 a-e	0 a	30 abc	24 abc	28 abc
7	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A						
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
8	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	11.88 abc	30 e	0 a	28 bcd	25 ab	25 bc
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	11.93 abc	32 de	0 a	28 bcd	25 abc	26 bc
9	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A						
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	11.93 abc	41 a-e	0 a	31 abc	26 a	27 abc
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A						
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
11	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	11.88 abc	43 a-d	0 a	31 a	27 a	24 c
11	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A						
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	12.03 abc	44 abc	0 a	30 abc	23 bc	25 bc
12	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A						
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	11.53 c	33 cde	0 a	32 a	25 abc	25 bc
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
14	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	11.83 abc	47 a	0 a	31 ab	27 a	26 bc
14	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A						
14	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
15	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	12.00 abc	46 ab	0 a	28 bcd	23 bc	25 bc
15	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A						
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
16	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	12.05 abc	41 a-e	0 a	30 abc	26 ab	28 abc
16	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A						
16	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
17	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	11.90 abc	43 a-d	0 a	30 abc	26 ab	30 ab
17	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A						
17	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
18	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A	11.70 bc	34 b-e	0 a	28 cd	25 ab	28 abc
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A						
19	NONTREATED									12.40 a	4 f	0 a	26 d	22 c	31 a
LSD (P=.05)										0.655	11.4	0.0	2.9	3.3	5.1

Evaluation of Kixor in Tank-mixtures for Early Preplant Burndown in Soybean.

Trial ID: 09-YRC-800TM Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code															
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										06-11-09	06-11-09	06-01-09	06-05-09	06-22-09	06-22-09
Rating Data Type										Moisture	Yield	Injury	Plants	Plants	Height
Rating Unit										Percent	bu/A	Percent	1m row	1m row	cm
Rating Timing															
Trt-Eval Interval										38 DA-A	38 DA-A	28 DA-A	32 DA-A	49 DA-A	49 DA-A
Replicate F										1.199	14.789	0.000	17.579	12.766	4.566
Replicate Prob(F)										0.3191	0.0001	1.0000	0.0001	0.0001	0.0064
Treatment F										0.664	5.230	0.000	2.422	1.500	1.305
Treatment Prob(F)										0.8301	0.0001	1.0000	0.0064	0.1267	0.2221

Means followed by same letter do not significantly differ (P=.05, LSD)

Evaluation of Kixor in Tank-mixtures for Early Preplant Burndown in Soybean.

Trial ID: 09-YRC-800TM Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA-HR 05-11-09 Control Percent 7 DA-A	ERICA-HR 05-18-09 Control Percent 14 DA-A	ERICA-HR 05-25-09 Control Percent 21 DA-A	ERICA-HR 06-01-09 Control Percent 28 DA-A	AMATA 05-18-09 Control Percent 14 DA-A	AMATA 05-25-09 Control Percent 21 DA-A	AMATA 06-01-09 Control Percent 28 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	63 d	81 c	89 b	97 a	99 a	73 b-e	40 c-g
1	CLARITY	4	SL	0.25	lb ae/a	8	fl oz/a	7 DBP	A							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	45 e	50 e	51 c	60 c	96 c	54 fg	25 fgh
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	69 c	59 d	55 c	53 d	99 a	98 a	89 a
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7 DBP	A							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	99 a	99 a	99 a	99 a	98 ab	79 bcd	53 bcd
4	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A							
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	98 ab	98 a	98 a	98 a	98 ab	82 bc	65 b
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A							
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	98 ab	98 a	94 ab	94 ab	96 bc	55 fg	28 e-h
6	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A							
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	97 ab	97 a	96 a	95 a	99 a	60 ef	28 e-h
7	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A							
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
8	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	97 ab	97 ab	94 ab	93 ab	71 d	43 g	8 hi
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 a	99 a	99 a	99 a	99 a	73 b-e	45 b-f
9	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A							
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 a	99 a	97 a	98 a	99 a	68 c-f	20 ghi
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A							
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
11	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 a	99 a	97 a	97 a	98 abc	78 bcd	33 d-g
11	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A							
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 a	99 a	97 a	97 a	97 abc	60 ef	30 efg
12	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A							
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	96 b	94 b	89 b	87 b	99 a	53 fg	23 gh
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
14	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	99 a	99 a	97 a	98 a	99 a	83 ab	56 bc
14	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A							
14	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
15	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	98 ab	98 a	96 a	97 a	99 a	73 b-e	48 b-e
15	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A							
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
16	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	98 ab	98 a	97 a	97 a	99 a	64 def	35 d-g
16	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A							
16	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
17	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	97 ab	96 ab	95 ab	93 ab	98 ab	68 c-f	30 efg
17	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A							
17	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
18	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A	99 a	99 a	97 a	98 a	99 a	80 bc	60 bc
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A							
19	NONTREATED									0 f	0 f	0 d	0 e	0 e	0 h	0 i
LSD (P=.05)										2.7	3.7	6.0	7.5	2.5	15.3	20.9

Evaluation of Kixor in Tank-mixtures for Early Preplant Burndown in Soybean.

Trial ID: 09-YRC-800TM Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	AMATA	AMATA	AMATA
Crop Code																
Rating Date										05-11-09	05-18-09	05-25-09	06-01-09	05-18-09	05-25-09	06-01-09
Rating Data Type										Control	Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing																
Trt-Eval Interval										7 DA-A	14 DA-A	21 DA-A	28 DA-A	14 DA-A	21 DA-A	28 DA-A
Replicate F										1.133	2.577	3.573	1.688	1.423	7.100	5.868
Replicate Prob(F)										0.3440	0.0632	0.0197	0.1805	0.2461	0.0004	0.0015
Treatment F										714.546	380.244	136.727	86.999	703.536	14.598	8.118
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Evaluation of Kixor in Tank-mixtures for Early Preplant Burndown in Soybean.

Trial ID: 09-YRC-800TM Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	STEME	MEDSS
	Pest Code									STEME	MEDSS
	Crop Code										
	Rating Date									05-11-09	05-11-09
	Rating Data Type									Control	Control
	Rating Unit									Percent	Percent
	Rating Timing										
	Trt-Eval Interval									7 DA-A	7 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	91 g	81 g
1	CLARITY	4	SL	0.25	lb ae/a	8	fl oz/a	7 DBP	A		
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	93 fg	80 g
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	94 ef	95 de
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7 DBP	A		
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	97 bc	97 a-d
4	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A		
4	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	96 cd	96 bcd
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A		
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	95 de	93 e
6	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A		
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7 DBP	A	91 g	95 cde
7	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A		
7	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
8	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 a	98 ab
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 ab	99 a
9	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A		
9	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 a	99 a
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A		
10	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
11	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 a	99 a
11	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A		
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7 DBP	A	99 ab	99 a
12	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A		
12	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
13	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	99 a	98 ab
13	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
14	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	99 a	99 a
14	SHARPEN	2.85	SC	0.0445	lb ai/a	2	fl oz/a	7 DBP	A		
14	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
15	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	99 a	98 ab
15	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A		
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
16	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	99 a	98 abc
16	SHARPEN	2.85	SC	0.0111	lb ai/a	0.5	fl oz/a	7 DBP	A		
16	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
17	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7 DBP	A	99 ab	97 a-d
17	SHARPEN	2.85	SC	0.00557	lb ai/a	0.25	fl oz/a	7 DBP	A		
17	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
18	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7 DBP	A	20 h	84 f
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	7 DBP	A		
19	NONTREATED									0 i	0 h
	LSD (P=.05)									2.0	2.4

Evaluation of Kixor in Tank-mixtures for Early Preplant Burndown in Soybean.

Trial ID: 09-YRC-800TM Location: Young Res. Center

Pest Code											STEME	MEDSS
Crop Code												
Rating Date											05-11-09	05-11-09
Rating Data Type											Control	Control
Rating Unit											Percent	Percent
Rating Timing												
Trt-Eval Interval											7 DA-A	7 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Replicate F											3.252	1.052
Replicate Prob(F)											0.0286	0.3771
Treatment F											1572.249	716.179
Treatment Prob(F)											0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Univ of TN/SIU/BASF.
2. Ratings: CI/WC at 7, 14, 21, and 28 DAT. Soybean stand counts at 21 and 35 DAT.
3. Yield.
4. Target 8-12" horseweed.
5. 1m row = One meter of row. ERICA-HR = Herbicide-resistant marestail (glyphosate).
6. AMATA control at 28 DA-A was a combination of weeds present at application and new emergence.
7. Harvested 11-6-09, (2) 30 inch rows by 22.5 ft.

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-21-09

Objectives: Evalaute preplant soybean burndown efficacy and tolerance of Kixor based brands, Sharpen, and Optill, in soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** HORPU	Hordeum pusillum Nutt.	barley, little
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** SENGL	Senecio glabellus Poir.	groundsel, cressleaf
Pest 4 Type: W	**Code:** CHEAL	Chenopodium album L.	lambsquarters, common
Pest 5 Type: W	**Code:** ERICA	Conyza canadensis (L.) Crong.	horseweed
Pest 6 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 7 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** WINFIELD
CEC: 8 **Fert. Level:** P1: 83 LB/A, K: 396 LB/A

Application Description	**A**	**B**
Application Date:	05-21-09	07-16-09
Time of Day:	17:30	10:15
Application Method:	Spray	Spray
Application Timing:	7-14EPP	8WA-A
Application Placement:	BROFOL	BROFOL
Applied By:	NVH	DKP
Air Temperature, Unit:	82 F	80 F
% Relative Humidity:	60	80
Wind Velocity, Unit:	5 MPH	3 MPH
Wind Direction:	SE	N
Dew Presence (Y/N):	N	N
Soil Moisture:	ABONOR	NORMAL
% Cloud Cover:	25	40
	05-21-09	07-16-09
Crop stage at application:	NA	V2
Height Min, Max (inch):		5 9

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	05-21-09		07-16-09	
Weed Code:	HORPU		HORPU	
Stage Majority (leaves):	20		NA	
Stage Min, Max:	15	35		
Height Majority:	19	IN		
Height Min, Max:	8	24		
Density, Unit:	4	FT2		
Weed Code:	AMBTR		AMBTR	
Stage Majority (leaves):	5		16	
Stage Min, Max:	2	8	8	40
Height Majority:	4	IN	10	IN
Height Min, Max:	2	8	6	54
Density, Unit:	0.1	FT2	0.1	FT2
Weed Code:	SENGL		SENGL	
Stage Majority (leaves):	15		NA	
Stage Min, Max:	COTY	25		
Height Majority:	22	IN		
Height Min, Max:	0.5	48		
Density, Unit:	2	FT2		
Weed Code:	CHEAL		CHEAL	
Stage Majority (leaves):	4		NA	
Stage Min, Max:	2	6		
Height Majority:	3	IN		
Height Min, Max:	1	6		
Density, Unit:	0.2	FT2		
Weed Code:	ERICA		ERICA	
Stage Majority (leaves):	7		20	
Stage Min, Max:	7	10	10	20
Height Majority:	2	IN	4	IN
Height Min, Max:	2	4	2	8
Density, Unit:	0.01	FT2	0.01	FT2
Weed Code:	SETFA		SETFA	
Stage Majority (leaves):	NA		8	
Stage Min, Max:			2	12
Height Majority:			8	IN
Height Min, Max:			3	42
Density, Unit:			1	FT2
Weed Code:	AMATA		AMATA	
Stage Majority (leaves):	NA		12	
Stage Min, Max:			4	40
Height Majority:			8	IN
Height Min, Max:			4	36
Density, Unit:			0.1	FT2

Application Equipment

Appl. Equipment:	CO2 sprayer		CO2 sprayer	
Operating Pressure:	30	PSI	30	PSI
Nozzle Type:	Flat fan		Flat fan	
Nozzle Size:	XR 8002		XR 8002	
Boom Length, Unit:	7.5	FT	7.5	FT
Spray Volume, Unit:	15	GPA	15	GPA

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 07-16-09 Injury Percent 56 DA-A	GLXMA 07-16-09 Necrosis Percent 56 DA-A	GLXMA 10-15-09 Injury Percent EOS	GLXMA 10-15-09 Necrosis Percent EOS
1	NONTREATED									12.4 a	6 c	0 a	0 a	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.9 bc	40 ab	0 a	0 a	0 a	0 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.7 bcd	39 ab	0 a	0 a	0 a	0 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.7 bcd	41 ab	0 a	0 a	0 a	0 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	11.9 bc	41 ab	0 a	0 a	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.7 bcd	41 ab	0 a	0 a	0 a	0 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A						
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.8 bcd	39 b	0 a	0 a	0 a	0 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.7 bcd	43 ab	0 a	0 a	0 a	0 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.8 bcd	41 ab	0 a	0 a	0 a	0 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 07-16-09 Injury Percent 56 DA-A	GLXMA 07-16-09 Necrosis Percent 56 DA-A	GLXMA 10-15-09 Injury Percent EOS	GLXMA 10-15-09 Necrosis Percent EOS
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.8 bcd	43 a	0 a	0 a	0 a	0 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A						
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A						
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.7 bcd	40 ab	0 a	0 a	0 a	0 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.6 d	41 ab	0 a	0 a	0 a	0 a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
13	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.8 bcd	40 ab	0 a	0 a	0 a	0 a
13	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	7-14EPP	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
13	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.6 cd	41 ab	0 a	0 a	0 a	0 a
14	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	7-14EPP	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
14	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
15	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	7-14EPP	A	11.9 b	42 ab	0 a	0 a	0 a	0 a
15	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
15	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
15	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
16	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	11.7 cd	40 ab	0 a	0 a	0 a	0 a
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
17	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	11.6 cd	41 ab	0 a	0 a	0 a	0 a
17	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A						
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
17	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 07-16-09 Injury Percent 56 DA-A	GLXMA 07-16-09 Necrosis Percent 56 DA-A	GLXMA 10-15-09 Injury Percent EOS	GLXMA 10-15-09 Necrosis Percent EOS
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	11.7 cd	41 ab	0 a	0 a	0 a	0 a
18	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7-14EPP	A						
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
18	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
LSD (P=.05)										0.26	4.1	0.0	0.0	0.0	0.0
Replicate F										2.596	1.326	0.000	0.000	0.000	0.000
Replicate Prob(F)										0.0893	0.2790	1.0000	1.0000	1.0000	1.0000
Treatment F										3.686	35.555	0.000	0.000	0.000	0.000
Treatment Prob(F)										0.0006	0.0001	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	HORPU	HORPU	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
	Pest Code									HORPU	HORPU	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
	Crop Code															
	Rating Date									05-28-09	06-04-09	05-28-09	06-04-09	06-18-09	07-16-09	10-15-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing															
	Trt-Eval Interval									7 DA-A	14 DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A	EOS
1	NONTREATED									0 b	0 b	0 d	0 c	0 c	0 d	0 c
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	99 a	90 c	99 b	99 a	82 b	98 ab
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	99 a	96 b	99 a	99 a	93 ab	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	98 a	87 ab	97 b
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	95 ab	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	97 a	99 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A							
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	90 ab	99 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	89 ab	99 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	HORPU	HORPU	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
	Pest Code									HORPU	HORPU	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
	Crop Code															
	Rating Date									05-28-09	06-04-09	05-28-09	06-04-09	06-18-09	07-16-09	10-15-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing															
	Trt-Eval Interval									7 DA-A	14 DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A	EOS
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A							
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A							
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	98 ab	99 a	99 a	91 ab	99 a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
13	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	96 a	99 a
13	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	7-14EPP	A							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
13	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	94 ab	99 a
14	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	7-14EPP	A							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
14	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
15	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	98 a	99 a
15	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A							
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
15	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
15	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
16	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	90 b	67 c	99 a
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
17	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	96 a	87 ab	98 ab
17	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A							
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
17	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										HORPU	HORPU	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code																
Rating Date										05-28-09	06-04-09	05-28-09	06-04-09	06-18-09	07-16-09	10-15-09
Rating Data Type										Control	Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing																
Trt-Eval Interval										7 DA-A	14 DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A	EOS
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	96 a	99 a
18	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7-14EPP	A							
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
18	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
LSD (P=.05)										0.0	0.0	2.3	0.2	4.3	13.5	1.9
Replicate F										0.000	0.000	0.615	1.000	0.428	0.191	0.754
Replicate Prob(F)										1.0000	1.0000	0.5463	0.3784	0.6551	0.8269	0.4781
Treatment F										0.000	0.000	883.716	88175.071	238.921	24.305	1273.264
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SENGL	SENGL	CHEAL	CHEAL	CHEAL	CHEAL
	Pest Code									SENGL	SENGL	CHEAL	CHEAL	CHEAL	CHEAL
	Crop Code														
	Rating Date									05-28-09	06-04-09	05-28-09	06-04-09	06-18-09	07-16-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing														
	Trt-Eval Interval									7 DA-A	14 DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A
1	NONTREATED									0 b	0 b	0 b	0 b	0 c	0 c
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A						
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	96 ab
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	96 ab
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SENGL 05-28-09 Control Percent 7 DA-A	SENGL 06-04-09 Control Percent 14 DA-A	CHEAL 05-28-09 Control Percent 7 DA-A	CHEAL 06-04-09 Control Percent 14 DA-A	CHEAL 06-18-09 Control Percent 28 DA-A	CHEAL 07-16-09 Control Percent 56 DA-A
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	96 ab
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A						
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A						
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	96 ab
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
13	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
13	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	7-14EPP	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
13	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
14	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	7-14EPP	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
14	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
15	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
15	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
15	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
15	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
16	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	93 b	96 ab
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
17	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	89 b
17	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A						
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
17	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										SENGL	SENGL	CHEAL	CHEAL	CHEAL	CHEAL
Crop Code															
Rating Date										05-28-09	06-04-09	05-28-09	06-04-09	06-18-09	07-16-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										7 DA-A	14 DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
18	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7-14EPP	A						
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
18	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
LSD (P=.05)										0.0	0.0	0.0	0.0	4.3	7.8
Replicate F										0.000	0.000	0.000	0.000	1.000	1.857
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	0.3784	0.1716
Treatment F										0.000	0.000	0.000	0.000	243.507	72.830
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	ERICA	SETFA	GGGAN	GGGAN
	Pest Code									ERICA	ERICA	ERICA	ERICA	SETFA	GGGAN	GGGAN
	Crop Code															
	Rating Date									05-28-09	06-04-09	06-18-09	07-16-09	06-18-09	07-16-09	10-15-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing															
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	56 DA-A	28 DA-A	56 DA-A	EOS
1	NONTREATED									0 c	0 c	0 c	0 b	0 c	0 e	0 b
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	96 b	99 b	99 b	98 a	94 a	13 de	99 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	96 b	99 a	99 a	99 a	93 a	13 de	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	91 a	22 cde	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	83 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	78 a	99 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A							
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	96 a	96 a	23 cde	99 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	40 bcd	99 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	98 a	93 a	43 bc	99 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	ERICA	SETFA	GGGAN	GGGAN
	Pest Code									ERICA	ERICA	ERICA	ERICA	SETFA	GGGAN	GGGAN
	Crop Code															
	Rating Date									05-28-09	06-04-09	06-18-09	07-16-09	06-18-09	07-16-09	10-15-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing															
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	56 DA-A	28 DA-A	56 DA-A	EOS
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	98 a	99 a	84 a	99 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A							
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A							
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	96 a	43 bc	99 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	93 a	47 bc	99 a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
13	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	98 a	98 a	43 bc	99 a
13	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	7-14EPP	A							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
13	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	96 a	98 a	47 bc	99 a
14	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	7-14EPP	A							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
14	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
15	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	63 ab	99 a
15	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A							
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A							
15	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
15	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
16	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	98 a	57 b	13 de	99 a
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
17	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	96 a	99 a	63 ab	99 a
17	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A							
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
17	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	ERICA	SETFA	GGGAN	GGGAN
	Pest Code									ERICA	ERICA	ERICA	ERICA	SETFA	GGGAN	GGGAN
	Crop Code															
	Rating Date									05-28-09	06-04-09	06-18-09	07-16-09	06-18-09	07-16-09	10-15-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing															
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	56 DA-A	28 DA-A	56 DA-A	EOS
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	99 a	99 a	99 a	99 a	95 a	37 bcd	99 a
18	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7-14EPP	A							
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B							
18	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B							
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B							
LSD (P=.05)										2.8	0.2	0.2	4.0	20.6	26.9	0.0
Replicate F										2.125	1.000	1.000	1.242	1.045	2.819	0.000
Replicate Prob(F)										0.1350	0.3784	0.3784	0.3017	0.3629	0.0737	1.0000
Treatment F										575.406	88175.071	88175.071	282.997	11.459	7.306	0.000
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 07-16-09 Control Percent 56 DA-A	AMATA 10-15-09 Control Percent EOS
1	NONTREATED									0 f	0 b
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	0 f	95 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A		
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	3 f	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A		
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A		
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	23 e	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A		
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	0 f	96 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A		
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	7 ef	99 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A		
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	67 bc	99 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A		
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A		
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	10 ef	97 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A		
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A		
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	87 a	99 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A		
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A		
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 07-16-09 Control Percent 56 DA-A		AMATA 10-15-09 Control Percent EOS	
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	57	cd	99	a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A				
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A				
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	73	abc	99	a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	87	a	99	a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
13	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	83	ab	99	a
13	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	7-14EPP	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
13	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	80	ab	99	a
14	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	7-14EPP	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
14	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
15	RAGE D-TECH	4.06	EC	0.51	lb ai/a	1	pt/a	7-14EPP	A	43	d	99	a
15	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
15	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
15	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
16	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	0	f	99	a
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
17	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	70	abc	97	a
17	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A				
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
17	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				

Kixor Preplant Herbicide Combinations in No-Till Soybean.

Trial ID: 09-1-MME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
	Pest Code									AMATA	AMATA
	Crop Code										
	Rating Date									07-16-09	10-15-09
	Rating Data Type									Control	Control
	Rating Unit									Percent	Percent
	Rating Timing										
	Trt-Eval Interval									56 DA-A	EOS
18	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7-14EPP	A	8 ef	96 a
18	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7-14EPP	A		
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B		
18	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B		
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B		
	LSD (P=.05)									18.5	4.2
	Replicate F									0.793	1.882
	Replicate Prob(F)									0.4606	0.1678
	Treatment F									31.503	257.241
	Treatment Prob(F)									0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: BASF (D91), FMC, Syngenta.
2. Ratings: WC at 7 DA-A; CI/necrosis/WC at 14, 28, 56 + 84 DA-A and at harvest.
3. Yield.
4. Planting was delayed due to wet field conditions.
   Not possible to rate crop injury at 7, 14, or 28 DA-A due to late planting.
   The planned 84 DA-A rating was not made due to an oversight.
5. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
6. Harvested 11-5-09, (2) 30 inch rows by 24 ft.

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 05-18-09

Objectives: Evalaute preplant soybean burndown efficacy and tolerance of Kixor based brands, Sharpen, and Optill, in soybean.

Crop 1: GLXMA Soybean **Variety:** AG 3905 **Description:** RR
Planting Method: SEEDED **Planting Date:** 05-25-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed
Pest Description: glyphosate-resistant marestail
Pest 2 Type: W **Code:** AMASS Amaranthus species amaranthus species
Pest 3 Type: W **Code:** MEDSS Medicago species medicago species

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.1 **Texture:** VERY FINE SANDY LOAM
pH: 5 **Soil Name:** ALVIN
CEC: 9 **Fert. Level:** P1 133 LB/A, K 209 LB/A

Application Description

	A	B
Application Date:	05-18-09	07-14-09
Time of Day:	10:30	10:00
Application Method:	Spray	Spray
Application Timing:	7-14EPP	8WA-A
Application Placement:	BROFOL	BROFOL
Applied By:	NRJ	DKT
Air Temperature, Unit:	65 F	78 F
% Relative Humidity:	31	51
Wind Velocity, Unit:	6 MPH	2 MPH
Wind Direction:	NE	E
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	61 F	78 F
Soil Moisture:	ABONOR	NORMAL
% Cloud Cover:	5	75
	05-18-09	07-14-09
Crop stage at application:	NA	R1
Height Min, Max (inch):		36 40

Pest Stage At Each Application

Application Date:	05-18-09	07-14-09
Weed Code:	ERICA	ERICA
Stage Majority (leaves):	11	60
Stage Min, Max:	3 30	20 80
Height Majority:	4 IN	36 IN
Height Min, Max:	0.5 8	8 48
Density, Unit:	2 FT2	2 FT2
Weed Code:	AMASS	AMASS
Stage Majority (leaves):	4	25
Stage Min, Max:	2 11	12 40
Height Majority:	1.5 IN	40 IN
Height Min, Max:	0.5 3	8 60
Density, Unit:	0.2 FT2	5 FT2
Weed Code:	MEDSS	MEDSS
Stage Majority (leaves):	30	NA
Stage Min, Max:	20 60	
Height Majority:	2.5 IN	
Height Min, Max:	1 6	
Density, Unit:	2 FT2	

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Yield bu/A	GLXMA 06-01-09 Injury Percent 14 DA-A	GLXMA 06-01-09 Necrosis Percent 14 DA-A	GLXMA 06-15-09 Injury Percent 28 DA-A	GLXMA 06-15-09 Necrosis Percent 28 DA-A
1	NONTREATED									11.9 a	19 d	0 a	0 a	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.3 ab	36 bc	0 a	0 a	0 a	0 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.2 b	35 c	0 a	0 a	0 a	0 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.4 ab	43 a	0 a	0 a	0 a	0 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	11.4 ab	45 a	0 a	0 a	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.4 ab	45 a	0 a	0 a	0 a	0 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A						
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.3 ab	40 abc	0 a	0 a	0 a	0 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.2 b	44 a	0 a	0 a	0 a	0 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.1 b	42 ab	0 a	0 a	0 a	0 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Yield bu/A	GLXMA 06-01-09 Injury Percent 14 DA-A	GLXMA 06-01-09 Necrosis Percent 14 DA-A	GLXMA 06-15-09 Injury Percent 28 DA-A	GLXMA 06-15-09 Necrosis Percent 28 DA-A
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.1 b	42 abc	0 a	0 a	0 a	0 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A						
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A						
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.4 ab	44 a	0 a	0 a	0 a	0 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	11.4 ab	43 a	0 a	0 a	0 a	0 a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
LSD (P=.05)										0.64	6.9	0.0	0.0	0.0	0.0
Replicate F										0.107	8.743	0.000	0.000	0.000	0.000
Replicate Prob(F)										0.8991	0.0016	1.0000	1.0000	1.0000	1.0000
Treatment F										0.865	9.535	0.000	0.000	0.000	0.000
Treatment Prob(F)										0.5844	0.0001	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 08-10-09 Injury Percent 27 DA-B 84 DA-A	GLXMA 08-10-09 Necrosis Percent 27 DA-B 84 DA-A	GLXMA 10-21-09 Injury Percent EOS	GLXMA 10-21-09 Necrosis Percent EOS
1	NONTREATED									0 a	0 a	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A				
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code													
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										08-10-09	08-10-09	10-21-09	10-21-09
Rating Data Type										Injury	Necrosis	Injury	Necrosis
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										27 DA-B	27 DA-B		
Trt-Eval Interval										84 DA-A	84 DA-A	EOS	EOS
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A				
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A				
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	0 a	0 a	0 a	0 a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A				
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B				
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B				
LSD (P=.05)										0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA-HR 05-25-09 BD-Control Percent 7 DA-A	ERICA-HR 06-01-09 BD-Control Percent 14 DA-A	ERICA-HR 06-15-09 Control Percent 28 DA-A	ERICA-HR 07-13-09 Control Percent -1 DA-B 56 DA-A	ERICA-HR 08-10-09 Control Percent 27 DA-B 84 DA-A	ERICA-HR 10-21-09 Control Percent EOS
1	NONTREATED									0 d	0 d	0 c	0 c	0 b	0 c
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	28 c	43 c	60 b	50 b	99 a	98 b
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	62 b	94 b	97 a	96 a	99 a	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	97 a	97 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	99 a	99 a	98 a	98 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	98 a	99 a	99 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A						
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	97 a	99 a	98 ab
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	98 a	99 a	99 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	98 a	99 a	99 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
	Pest Code									ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
	Crop Code														
	Rating Date									05-25-09	06-01-09	06-15-09	07-13-09	08-10-09	10-21-09
	Rating Data Type									BD-Control	BD-Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing												-1 DA-B	27 DA-B	
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	56 DA-A	84 DA-A	EOS
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A						
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A						
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	99 a	99 a	99 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	98 a	99 a	99 a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
LSD (P=.05)										3.9	3.0	5.0	5.5	0.0	0.7
Replicate F										1.571	1.894	0.693	1.131	0.000	2.014
Replicate Prob(F)										0.2302	0.1742	0.5107	0.3406	1.0000	0.1573
Treatment F										648.916	965.592	298.278	259.429	0.000	13626.199
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMASS 05-25-09 BD-Control Percent 7 DA-A	AMASS 06-01-09 BD-Control Percent 14 DA-A	AMASS 06-15-09 Control Percent 28 DA-A	AMASS 07-13-09 Control Percent -1 DA-B 56 DA-A	AMASS 08-10-09 Control Percent 27 DA-B 84 DA-A	AMASS 10-21-09 Control Percent EOS
1	NONTREATED									0 c	0 d	0 d	0 d	0 e	0 e
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	67 b	90 c	33 c	7 d	78 d	96 d
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	99 a	98 b	60 b	17 d	95 abc	97 abc
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	53 b	15 d	92 c	97 cd
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	99 a	99 a	91 a	53 bc	91 c	98 abc
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	90 a	45 c	94 bc	98 abc
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A						
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	86 a	47 bc	99 a	97 bcd
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	88 a	57 bc	99 ab	98 abc
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	92 a	65 b	99 a	98 abc
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMASS	AMASS	AMASS	AMASS	AMASS	AMASS
	Pest Code									AMASS	AMASS	AMASS	AMASS	AMASS	AMASS
	Crop Code														
	Rating Date									05-25-09	06-01-09	06-15-09	07-13-09	08-10-09	10-21-09
	Rating Data Type									BD-Control	BD-Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing												-1 DA-B	27 DA-B	
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	56 DA-A	84 DA-A	EOS
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	98 a	96 a	99 a	99 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A						
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A						
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a	97 a	99 a	98 abc
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	98 a	95 a	99 a	98 ab
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A						
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B						
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B						
LSD (P=.05)										2.8	1.1	18.5	19.2	4.4	1.6
Replicate F										1.000	1.000	0.321	1.787	0.313	0.478
Replicate Prob(F)										0.3840	0.3840	0.7291	0.1909	0.7346	0.6262
Treatment F										923.800	5453.773	24.458	28.476	354.503	2560.229
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	MEDSS	MEDSS	MEDSS
	Pest Code									MEDSS	MEDSS	MEDSS
	Crop Code											
	Rating Date									05-25-09	06-01-09	06-15-09
	Rating Data Type									BD-Control	BD-Control	Control
	Rating Unit									Percent	Percent	Percent
	Rating Timing											
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A
1	NONTREATED									0 c	0 c	0 b
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	82 b	99 a	99 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	80 b	99 a	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	7-14EPP	A			
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	7-14EPP	A			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	97 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
4	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
5	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	7-14EPP	A	96 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
5	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	98 a	99 a	99 a
6	EXTREME	2.17	SL	0.81	lb ai/a	48	fl oz/a	7-14EPP	A			
6	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
7	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	98 a	99 a	99 a
7	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	7-14EPP	A			
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
7	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	98 a	99 a	99 a
8	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	7-14EPP	A			
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
8	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	98 a	99 a	99 a
9	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A			
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
9	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			

Kixor Preplant Efficacy in No-Till Soybean.

Trial ID: 09-YRC-SharpenSoy Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										MEDSS	MEDSS	MEDSS
Crop Code												
Rating Date										05-25-09	06-01-09	06-15-09
Rating Data Type										BD-Control	BD-Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing												
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A
10	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	98 a	99 b	99 a
10	VALOR XLT	40.3	WG			3.5	oz/a	7-14EPP	A			
10	VALOR SX	51	WG	0.0653	lb ai/a			7-14EPP	A			
10	CLASSIC	25	WG	0.0227	lb ai/a			7-14EPP	A			
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
10	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	99 a	99 a	99 a
11	SPARTAN	4	SC	0.125	lb ai/a	4	fl oz/a	7-14EPP	A			
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
12	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	7-14EPP	A	98 a	99 a	99 a
12	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A			
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A			
12	DESTINY MSO	100	SL	1	% v/v	1	% v/v	7-14EPP	A			
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A			
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8WA-A	B			
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	8WA-A	B			
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8WA-A	B			
LSD (P=.05)										3.5	0.3	0.0
Replicate F										0.871	1.000	0.000
Replicate Prob(F)										0.4323	0.3840	1.0000
Treatment F										560.426	88156.009	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

EOS1. Protocol: BASF (D91).
2. Ratings: WC at 7 DA-A; CI/necrosis/WC at 14, 28, 56 + 84 DA-A and at harvest.
3. Yield.
4. DA-A = Days after 7-14EPP application.
5. On 6-1-09 soybeans were just emerged, no leaves unfolded, just cotyledons.
6. BD-Control = Burndown control.
   Control on 6-15-09 and 7-13-09 was a combination of burndown and residual.
   ERICA-HR = Herbicide-resistant marestail (glyphosate).
   AMASS = Amaranth species including AMATA (common waterhemp) and AMARE (redroot pigweed).
   EOS = End of season.
7. Harvested 11-6-09, (2) 30 inch rows by 26.7 ft.

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-21-09

Objectives: Evaluate preplant and postemergence herbicide strategies for weed control and soybean injury in no-till soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** HORPU	Hordeum pusillum Nutt.	barley, little
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** ERICA	Conyza canadensis (L.) Crong.	horseweed
Pest 4 Type: W	**Code:** SENGL	Senecio glabellus Poir.	groundsel, cressleaf
Pest 5 Type: W	**Code:** GGGAN		grasses, annual
Pest 6 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 7 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 31 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** WINFIELD
CEC: 8 **Fert. Level:** P1: 83 LB/A, K: 396 LB/A

	Application Description A	B	C	D	E
Application Date:	05-21-09	06-26-09	06-29-09	07-07-09	07-23-09
Time of Day:	12:30	11:00	7:30	7:45	11:45
Application Method:	Spray	Spray	Spray	Spray	Spray
Application Timing:	7DBP	V1-2	6-8"W-1	21DA-B	6-8"W-2
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NVH	NVH	DKP	DKP	DKP
Air Temperature, Unit:	80 F	91 F	72 F	74 F	80 F
% Relative Humidity:	62	72	72	92	60
Wind Velocity, Unit:	4 MPH	3 MPH	6 MPH	8 MPH	2 MPH
Wind Direction:	S	NW	W	NW	W
Dew Presence (Y/N):	N	N	Y	N	N
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
% Cloud Cover:	20	40	0	5	30
	05-21-09	06-26-09	06-29-09	07-07-09	07-23-09
Crop stage at application:	NA	NA	NA	V1	V3
Height Min, Max (inch):				2 4	4 6

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	05-21-09			06-26-09			06-29-09			07-07-09			07-23-09						
Weed Code:	HORPU			HORPU			HORPU			HORPU			HORPU						
Stage Majority (leaves):	7			NA			NA			NA			NA						
Stage Min, Max:	3	8																	
Height Majority:	22	IN																	
Height Min, Max:	18	24																	
Density, Unit:	4	FT2																	
Weed Code:	AMBTR			AMBTR			AMBTR			AMBTR			AMBTR						
Stage Majority (leaves):	8			NA			4			4			NA						
Stage Min, Max:	5	10					1	6		2	4								
Height Majority:	9	IN					6	IN		4	IN								
Height Min, Max:	4	14					1	10		3	6								
Density, Unit:	1.5	FT2					3	FT2		0.1	FT2								
Weed Code:	ERICA			ERICA			ERICA			ERICA			ERICA						
Stage Majority (leaves):	7			10			10			NA			NA						
Stage Min, Max:	7	10		7	10		7	10											
Height Majority:	2	IN		4	IN		4	IN											
Height Min, Max:	2	4		2	4		2	4											
Density, Unit:	0.01	FT2		0.01	FT2		0.01	FT2											
Weed Code:	SENGL			SENGL			SENGL			SENGL			SENGL						
Stage Majority (leaves):	30			NA			NA			NA			NA						
Stage Min, Max:	2	40																	
Height Majority:	24	IN																	
Height Min, Max:	1	32																	
Density, Unit:	0.5	FT2																	
Weed Code:	GGGGG			GGGGG			GGGGG			GGGGG			GGGGG						
Stage Majority (leaves):	NA			3			3			NA			5						
Stage Min, Max:				1	4		1	9					1	10					
Height Majority:				4	IN		6	IN					5	IN					
Height Min, Max:				1.5	6		1	10					1	7					
Density, Unit:				0.5	FT2		0.5	FT2					.001	FT2					
Weed Code:	AMATA			AMATA			AMATA			AMATA			AMATA						
Stage Majority (leaves):	NA			5			5			4			6						
Stage Min, Max:				3	8		2	8		2	6		4	8					
Height Majority:				2.5	IN		4	IN		4	IN		4.5	IN					
Height Min, Max:				1	3		1	6		1	6		2	7					
Density, Unit:				0.3	FT2		0.1	FT2		0.1	FT2		0.1	FT2					
Weed Code:	ABUTH			ABUTH			ABUTH			ABUTH			ABUTH						
Stage Majority (leaves):	COTY			1			3			2			1						
Stage Min, Max:	COTY	1		COTY	2		COTY	5		COTY	4		3	1					
Height Majority:	0.5	IN		0.75	IN		6	IN		2	IN		1	IN					
Height Min, Max:	0.5	1		0.5	1		0.5	8		0.5	4		1	2.5					
Density, Unit:	2	FT2		0.5	FT2		1	FT2		0.7	FT2		.001	FT2					

Application Equipment

Appl. Equipment:	CO2 sprayer			CO2 sprayer			CO2 sprayer			CO2 sprayer									
Operating Pressure:	30	PSI		30	PSI		30	PSI		30	PSI								
Nozzle Type:	Flat fan			Flat fan			Flat fan			Flat fan									
Nozzle Size:	XR 8002			XR 8002			XR 8002			XR 8002									
Boom Length, Unit:	7.5	FT		7.5	FT		7.5	FT		7.5	FT								
Spray Volume, Unit:	15	GPA		15	GPA		15	GPA		15	GPA								

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 07-10-09 Injury Percent	GLXMA 07-24-09 Injury Percent	HORPU 06-04-09 Control Percent
	Trt-Eval Interval											14 DA-B	28 DA-B	14 DA-A
1	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7DBP	A	12.1 a	32 cd	0 a	0 a	90 b
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A					
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C					
2	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	12.0 ab	34 bcd	0 a	0 a	90 b
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A					
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
2	N-PAK AMS	100	SL	3.13	lb ae/a	2.5	% v/v	6-8"W-1	C					
2	TOUCHDOWN TOTAL	4.17	SL			24	fl oz/a	6-8"W-1	C					
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	11.9 ab	41 a	0 a	0 a	90 b
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B					
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D					
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D					
4	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	12.0 ab	32 d	0 a	0 a	90 b
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A					
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"W-1	C					
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6-8"W-1	C					
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	11.9 ab	37 a-d	0 a	0 a	90 b
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B					
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B					
5	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	V1-2	B					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D					
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	11.8 ab	38 a-d	0 a	0 a	99 a
6	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	7DBP	A					
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	7DBP	A					
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E					
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	6-8"W-2	E					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	11.9 ab	39 abc	0 a	0 a	99 a
7	VALOR XLT	40.3	WG			3	oz/a	7DBP	A					
7	VALOR SX	51	WG	0.056	lb ai/a			7DBP	A					
7	CLASSIC	25	WG	0.0194	lb ai/a			7DBP	A					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E					
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	11.8 ab	34 bcd	0 a	0 a	90 b
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C					

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-05-09 Moisture Percent	GLXMA 11-05-09 Yield bu/A	GLXMA 07-10-09 Injury Percent	GLXMA 07-24-09 Injury Percent	HORPU 06-04-09 Control Percent
	Trt-Eval Interval											14 DA-B	28 DA-B	14 DA-A
9	CANOPY EX	29.5	WG			1.5	oz/a	7DBP	A	12.0 ab	33 bcd	0 a	0 a	99 a
9	CLASSIC	25	WG	0.0212	lb ai/a			7DBP	A					
9	EXPRESS	50	SG	0.00636	lb ai/a			7DBP	A					
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
9	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
9	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
9	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
10	ENVIVE	41.3	WG			3	oz/a	7DBP	A	12.0 ab	37 a-d	0 a	0 a	99 a
10	CLASSIC	25	WG	0.01714	lb ai/a			7DBP	A					
10	HARMONY SG	50	SG	0.00551	lb ai/a			7DBP	A					
10	VALOR SX	51	WG	0.05443	lb ai/a			7DBP	A					
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
10	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
10	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
11	ENVIVE	41.3	WG			3.5	oz/a	7DBP	A	11.9 ab	39 ab	0 a	0 a	99 a
11	CLASSIC	25	WG	0.02	lb ai/a			7DBP	A					
11	HARMONY SG	50	SG	0.00643	lb ai/a			7DBP	A					
11	VALOR SX	51	WG	0.0635	lb ai/a			7DBP	A					
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
11	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
11	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
12	ENVIVE	41.3	WG			5	oz/a	7DBP	A	11.8 ab	38 a-d	0 a	0 a	99 a
12	CLASSIC	25	WG	0.02856	lb ai/a			7DBP	A					
12	HARMONY SG	50	SG	0.00918	lb ai/a			7DBP	A					
12	VALOR SX	51	WG	0.09072	lb ai/a			7DBP	A					
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E					
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A	11.9 ab	35 a-d	0 a	0 a	99 a
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
13	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
13	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
13	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	11.8 b	40 ab	0 a	0 a	99 a
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	B					
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B					
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-B	D					
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D					
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	11.8 b	33 bcd	0 a	0 a	99 a
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
16	NONTREATED										0 e	0 a	0 a	0 c

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code														HORPU
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	
Rating Date										11-05-09	11-05-09	07-10-09	07-24-09	06-04-09
Rating Data Type										Moisture	Yield	Injury	Injury	Control
Rating Unit										Percent	bu/A	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval												14 DA-B	28 DA-B	14 DA-A
LSD (P=.05)										0.27	6.7	0.0	0.0	0.0
Replicate F										1.922	1.864	0.000	0.000	0.000
Replicate Prob(F)										0.1406	0.1492	1.0000	1.0000	1.0000
Treatment F										0.934	16.514	0.000	0.000	0.000
Treatment Prob(F)										0.5325	0.0001	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 06-04-09 Control Percent 14 DA-A	AMBTR 06-26-09 Control Percent 0 DA-B	AMBTR 07-10-09 Control Percent 14 DA-B	AMBTR 07-24-09 Control Percent 28 DA-B	AMBTR 08-21-09 Control Percent 56 DA-B
1	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7DBP	A	99 a	94 a	98 a	93 cde	80 d
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A					
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C					
2	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	99 a	70 b	98 a	92 de	84 cd
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A					
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
2	N-PAK AMS	100	SL	3.13	lb ae/a	2.5	% v/v	6-8"W-1	C					
2	TOUCHDOWN TOTAL	4.17	SL			24	fl oz/a	6-8"W-1	C					
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	93 a	97 a	99 ab	99 ab
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B					
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D					
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D					
4	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	99 a	72 b	97 a	98 abc	98 ab
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A					
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"W-1	C					
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6-8"W-1	C					
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	94 a	98 a	99 a	99 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B					
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B					
5	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	V1-2	B					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D					
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	99 a	95 a	97 a	95 a-e	99 a
6	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	7DBP	A					
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	7DBP	A					
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E					
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	6-8"W-2	E					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	99 a	93 a	97 a	94 a-e	98 ab
7	VALOR XLT	40.3	WG			3	oz/a	7DBP	A					
7	VALOR SX	51	WG	0.056	lb ai/a			7DBP	A					
7	CLASSIC	25	WG	0.0194	lb ai/a			7DBP	A					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E					
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	72 b	98 a	94 a-e	83 cd
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C					

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code														
Rating Date										06-04-09	06-26-09	07-10-09	07-24-09	08-21-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										14 DA-A	0 DA-B	14 DA-B	28 DA-B	56 DA-B
9	CANOPY EX	29.5	WG			1.5	oz/a	7DBP	A	99 a	96 a	98 a	95 a-d	87 bcd
9	CLASSIC	25	WG	0.0212	lb ai/a			7DBP	A					
9	EXPRESS	50	SG	0.00636	lb ai/a			7DBP	A					
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
9	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
9	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
9	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
10	ENVIVE	41.3	WG			3	oz/a	7DBP	A	99 a	92 a	96 ab	94 a-e	89 a-d
10	CLASSIC	25	WG	0.01714	lb ai/a			7DBP	A					
10	HARMONY SG	50	SG	0.00551	lb ai/a			7DBP	A					
10	VALOR SX	51	WG	0.05443	lb ai/a			7DBP	A					
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
10	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
10	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
11	ENVIVE	41.3	WG			3.5	oz/a	7DBP	A	99 a	96 a	98 a	97 a-d	92 abc
11	CLASSIC	25	WG	0.02	lb ai/a			7DBP	A					
11	HARMONY SG	50	SG	0.00643	lb ai/a			7DBP	A					
11	VALOR SX	51	WG	0.0635	lb ai/a			7DBP	A					
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
11	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
11	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
12	ENVIVE	41.3	WG			5	oz/a	7DBP	A	99 a	98 a	98 a	96 a-d	99 ab
12	CLASSIC	25	WG	0.02856	lb ai/a			7DBP	A					
12	HARMONY SG	50	SG	0.00918	lb ai/a			7DBP	A					
12	VALOR SX	51	WG	0.09072	lb ai/a			7DBP	A					
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E					
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A	99 a	66 b	96 ab	93 b-e	83 cd
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
13	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C					
13	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C					
13	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	90 b	71 b	94 bc	98 a-d	99 a
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	B					
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B					
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-B	D					
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D					
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	90 b	71 b	93 c	89 e	79 d
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A					
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C					
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C					
16	NONTREATED									0 c	0 c	0 d	0 f	0 e

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code														
Rating Date										06-04-09	06-26-09	07-10-09	07-24-09	08-21-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										14 DA-A	0 DA-B	14 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										0.3	16.4	2.3	5.5	12.0
Replicate F										0.652	0.766	0.505	1.891	1.988
Replicate Prob(F)										0.5858	0.5191	0.6806	0.1447	0.1293
Treatment F										75967.179	17.905	933.865	151.437	32.804
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	ERICA	ERICA	SENGL
	Pest Code									ERICA	ERICA	ERICA	ERICA	ERICA	SENGL
	Crop Code														
	Rating Date									06-04-09	06-26-09	07-10-09	07-24-09	08-21-09	06-04-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing														
	Trt-Eval Interval									14 DA-A	0 DA-B	14 DA-B	28 DA-B	56 DA-B	14 DA-A
1	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A						
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C						
2	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A						
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A						
2	N-PAK AMS	100	SL	3.13	lb ae/a	2.5	% v/v	6-8"W-1	C						
2	TOUCHDOWN TOTAL	4.17	SL			24	fl oz/a	6-8"W-1	C						
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B						
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D						
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D						
4	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	99 a	99 a	99 a	98 ab	99 a	99 a
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A						
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"W-1	C						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6-8"W-1	C						
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B						
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B						
5	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	V1-2	B						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D						
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
6	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	7DBP	A						
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	7DBP	A						
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E						
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	6-8"W-2	E						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
7	VALOR XLT	40.3	WG			3	oz/a	7DBP	A						
7	VALOR SX	51	WG	0.056	lb ai/a			7DBP	A						
7	CLASSIC	25	WG	0.0194	lb ai/a			7DBP	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E						
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C						

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA	ERICA	ERICA	ERICA	ERICA	SENGL
	Pest Code									ERICA	ERICA	ERICA	ERICA	ERICA	SENGL
	Crop Code														
	Rating Date									06-04-09	06-26-09	07-10-09	07-24-09	08-21-09	06-04-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing														
	Trt-Eval Interval									14 DA-A	0 DA-B	14 DA-B	28 DA-B	56 DA-B	14 DA-A
9	CANOPY EX	29.5	WG			1.5	oz/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
9	CLASSIC	25	WG	0.0212	lb ai/a			7DBP	A						
9	EXPRESS	50	SG	0.00636	lb ai/a			7DBP	A						
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C						
9	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C						
9	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C						
9	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
10	ENVIVE	41.3	WG			3	oz/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
10	CLASSIC	25	WG	0.01714	lb ai/a			7DBP	A						
10	HARMONY SG	50	SG	0.00551	lb ai/a			7DBP	A						
10	VALOR SX	51	WG	0.05443	lb ai/a			7DBP	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C						
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C						
10	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C						
10	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
11	ENVIVE	41.3	WG			3.5	oz/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
11	CLASSIC	25	WG	0.02	lb ai/a			7DBP	A						
11	HARMONY SG	50	SG	0.00643	lb ai/a			7DBP	A						
11	VALOR SX	51	WG	0.0635	lb ai/a			7DBP	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C						
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C						
11	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C						
11	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
12	ENVIVE	41.3	WG			5	oz/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
12	CLASSIC	25	WG	0.02856	lb ai/a			7DBP	A						
12	HARMONY SG	50	SG	0.00918	lb ai/a			7DBP	A						
12	VALOR SX	51	WG	0.09072	lb ai/a			7DBP	A						
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E						
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C						
13	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C						
13	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C						
13	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	95 b	89 b	97 b	94 c	99 b	99 a
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	B						
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-B	D						
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	97 ab	99 a	97 b	97 b	99 b	99 a
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C						
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C						
16	NONTREATED									0 c	0 c	0 c	0 d	0 c	0 b

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										ERICA	ERICA	ERICA	ERICA	ERICA	SENGL
Crop Code															
Rating Date										06-04-09	06-26-09	07-10-09	07-24-09	08-21-09	06-04-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										14 DA-A	0 DA-B	14 DA-B	28 DA-B	56 DA-B	14 DA-A
LSD (P=.05)										2.4	3.6	1.0	1.5	0.2	0.0
Replicate F										1.634	1.233	0.283	0.583	2.143	0.000
Replicate Prob(F)										0.1949	0.3089	0.8371	0.6295	0.1080	1.0000
Treatment F										856.842	386.880	4908.057	2075.320	83953.008	0.000
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GGGAN 06-26-09 Control Percent 0 DA-B	GGGAN 07-10-09 Control Percent 14 DA-B	GGGAN 07-24-09 Control Percent 28 DA-B	GGGAN 08-21-09 Control Percent 56 DA-B
1	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7DBP	A	73 cd	99 a	98 a	91 ab
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C				
2	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	60 de	99 a	96 a	86 b
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
2	N-PAK AMS	100	SL	3.13	lb ae/a	2.5	% v/v	6-8"W-1	C				
2	TOUCHDOWN TOTAL	4.17	SL			24	fl oz/a	6-8"W-1	C				
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	83 bc	98 a	99 a	98 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
4	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	68 d	89 b	70 b	55 c
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"W-1	C				
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6-8"W-1	C				
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	87 ab	99 a	99 a	98 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B				
5	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	V1-2	B				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	81 bc	99 a	97 a	99 a
6	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	7DBP	A				
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	7DBP	A				
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	6-8"W-2	E				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	94 ab	99 a	97 a	98 a
7	VALOR XLT	40.3	WG			3	oz/a	7DBP	A				
7	VALOR SX	51	WG	0.056	lb ai/a			7DBP	A				
7	CLASSIC	25	WG	0.0194	lb ai/a			7DBP	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E				
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	23 f	98 a	97 a	92 ab
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C				

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GGGAN 06-26-09 Control Percent 0 DA-B	GGGAN 07-10-09 Control Percent 14 DA-B	GGGAN 07-24-09 Control Percent 28 DA-B	GGGAN 08-21-09 Control Percent 56 DA-B
9	CANOPY EX	29.5	WG			1.5	oz/a	7DBP	A	81 bc	99 a	98 a	96 a
9	CLASSIC	25	WG	0.0212	lb ai/a			7DBP	A				
9	EXPRESS	50	SG	0.00636	lb ai/a			7DBP	A				
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
9	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
9	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
9	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
10	ENVIVE	41.3	WG			3	oz/a	7DBP	A	93 ab	99 a	97 a	96 a
10	CLASSIC	25	WG	0.01714	lb ai/a			7DBP	A				
10	HARMONY SG	50	SG	0.00551	lb ai/a			7DBP	A				
10	VALOR SX	51	WG	0.05443	lb ai/a			7DBP	A				
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
10	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
10	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
11	ENVIVE	41.3	WG			3.5	oz/a	7DBP	A	98 a	99 a	98 a	96 a
11	CLASSIC	25	WG	0.02	lb ai/a			7DBP	A				
11	HARMONY SG	50	SG	0.00643	lb ai/a			7DBP	A				
11	VALOR SX	51	WG	0.0635	lb ai/a			7DBP	A				
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
11	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
11	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
12	ENVIVE	41.3	WG			5	oz/a	7DBP	A	99 a	99 a	98 a	98 a
12	CLASSIC	25	WG	0.02856	lb ai/a			7DBP	A				
12	HARMONY SG	50	SG	0.00918	lb ai/a			7DBP	A				
12	VALOR SX	51	WG	0.09072	lb ai/a			7DBP	A				
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A	48 e	99 a	98 a	97 a
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
13	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
13	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
13	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	82 bc	99 a	99 a	98 a
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	B				
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-B	D				
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	18 f	99 a	98 a	96 a
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
16	NONTREATED									0 g	0 c	0 c	0 d

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										GGGAN	GGGAN	GGGAN	GGGAN
Crop Code													
Rating Date										06-26-09	07-10-09	07-24-09	08-21-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										0 DA-B	14 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										13.5	1.1	3.2	8.5
Replicate F										0.690	3.262	1.250	1.195
Replicate Prob(F)										0.5628	0.0299	0.3028	0.3223
Treatment F										41.583	4193.758	509.967	74.021
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 06-26-09 Control Percent 0 DA-B	AMATA 07-10-09 Control Percent 14 DA-B	AMATA 07-24-09 Control Percent 28 DA-B	AMATA 08-21-09 Control Percent 56 DA-B
1	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7DBP	A	97 a	99 ab	95 abc	76 bc
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C				
2	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	23 d	98 ab	91 bc	70 cd
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
2	N-PAK AMS	100	SL	3.13	lb ae/a	2.5	% v/v	6-8"W-1	C				
2	TOUCHDOWN TOTAL	4.17	SL			24	fl oz/a	6-8"W-1	C				
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	50 c	98 ab	99 ab	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
4	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	23 d	99 a	99 ab	99 a
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"W-1	C				
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6-8"W-1	C				
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	50 c	99 ab	99 a	99 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B				
5	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	V1-2	B				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	95 a	99 a	93 abc	99 a
6	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	7DBP	A				
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	7DBP	A				
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	6-8"W-2	E				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	87 ab	99 a	81 d	99 a
7	VALOR XLT	40.3	WG			3	oz/a	7DBP	A				
7	VALOR SX	51	WG	0.056	lb ai/a			7DBP	A				
7	CLASSIC	25	WG	0.0194	lb ai/a			7DBP	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E				
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	5 ef	97 bc	75 d	43 f
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C				

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 06-26-09 Control Percent 0 DA-B	AMATA 07-10-09 Control Percent 14 DA-B	AMATA 07-24-09 Control Percent 28 DA-B	AMATA 08-21-09 Control Percent 56 DA-B
9	CANOPY EX	29.5	WG			1.5	oz/a	7DBP	A	50 c	98 ab	89 c	68 cd
9	CLASSIC	25	WG	0.0212	lb ai/a			7DBP	A				
9	EXPRESS	50	SG	0.00636	lb ai/a			7DBP	A				
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
9	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
9	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
9	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
10	ENVIVE	41.3	WG			3	oz/a	7DBP	A	94 a	99 ab	91 c	70 cd
10	CLASSIC	25	WG	0.01714	lb ai/a			7DBP	A				
10	HARMONY SG	50	SG	0.00551	lb ai/a			7DBP	A				
10	VALOR SX	51	WG	0.05443	lb ai/a			7DBP	A				
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
10	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
10	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
11	ENVIVE	41.3	WG			3.5	oz/a	7DBP	A	99 a	99 a	92 abc	87 b
11	CLASSIC	25	WG	0.02	lb ai/a			7DBP	A				
11	HARMONY SG	50	SG	0.00643	lb ai/a			7DBP	A				
11	VALOR SX	51	WG	0.0635	lb ai/a			7DBP	A				
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
11	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
11	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
12	ENVIVE	41.3	WG			5	oz/a	7DBP	A	99 a	99 a	94 abc	99 a
12	CLASSIC	25	WG	0.02856	lb ai/a			7DBP	A				
12	HARMONY SG	50	SG	0.00918	lb ai/a			7DBP	A				
12	VALOR SX	51	WG	0.09072	lb ai/a			7DBP	A				
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A	15 de	95 cd	89 c	60 de
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
13	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C				
13	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C				
13	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C				
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	72 b	99 a	99 ab	99 a
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	B				
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-B	D				
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	5 ef	94 d	75 d	53 ef
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C				
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
16	NONTREATED									0 f	0 e	0 e	0 g

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date										06-26-09	07-10-09	07-24-09	08-21-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										0 DA-B	14 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										14.6	2.1	7.3	11.1
Replicate F										1.289	1.760	4.130	0.161
Replicate Prob(F)										0.2911	0.1683	0.0114	0.9218
Treatment F										55.525	1112.965	87.535	51.086
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 06-26-09 Control Percent 0 DA-B	ABUTH 07-10-09 Control Percent 14 DA-B	ABUTH 07-24-09 Control Percent 28 DA-B	ABUTH 08-21-09 Control Percent 56 DA-B
1	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7DBP	A	0 d	91 abc	66 bc	41 bc
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
1	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
1	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
1	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C				
2	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	3 d	87 bcd	55 cde	28 cd
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
2	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
2	N-PAK AMS	100	SL	3.13	lb ae/a	2.5	% v/v	6-8"W-1	C				
2	TOUCHDOWN TOTAL	4.17	SL			24	fl oz/a	6-8"W-1	C				
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	40 b	93 ab	95 a	97 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
3	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
4	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	7DBP	A	23 c	92 abc	48 cde	18 de
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A				
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
4	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
4	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	6-8"W-1	C				
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6-8"W-1	C				
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	93 a	98 a	99 a	98 a
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
5	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V1-2	B				
5	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	V1-2	B				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	97 a	97 a	88 a	98 a
6	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	7DBP	A				
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	7DBP	A				
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
6	DURANGO	4	SL	0.75	lb ae/a	24	fl oz/a	6-8"W-2	E				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	7DBP	A	95 a	94 ab	58 cde	98 a
7	VALOR XLT	40.3	WG			3	oz/a	7DBP	A				
7	VALOR SX	51	WG	0.056	lb ai/a			7DBP	A				
7	CLASSIC	25	WG	0.0194	lb ai/a			7DBP	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A				
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E				
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	5 d	87 bcd	45 de	23 d
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A				
8	PRIME OIL COC	100	SL	1	% v/v	1	%v/v	7DBP	A				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C				
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	6-8"W-1	C				

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										ABUTH		ABUTH		ABUTH		ABUTH
Crop Code																
Rating Date										06-26-09		07-10-09		07-24-09		08-21-09
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing																
Trt-Eval Interval										0 DA-B		14 DA-B		28 DA-B		56 DA-B
9	CANOPY EX	29.5	WG			1.5	oz/a	7DBP	A	92	a	97	a	86	ab	91 a
9	CLASSIC	25	WG	0.0212	lb ai/a			7DBP	A							
9	EXPRESS	50	SG	0.00636	lb ai/a			7DBP	A							
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C							
9	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C							
9	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C							
9	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C							
10	ENVIVE	41.3	WG			3	oz/a	7DBP	A	95	a	96	a	92	a	95 a
10	CLASSIC	25	WG	0.01714	lb ai/a			7DBP	A							
10	HARMONY SG	50	SG	0.00551	lb ai/a			7DBP	A							
10	VALOR SX	51	WG	0.05443	lb ai/a			7DBP	A							
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A							
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C							
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C							
10	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C							
10	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C							
11	ENVIVE	41.3	WG			3.5	oz/a	7DBP	A	98	a	98	a	88	a	97 a
11	CLASSIC	25	WG	0.02	lb ai/a			7DBP	A							
11	HARMONY SG	50	SG	0.00643	lb ai/a			7DBP	A							
11	VALOR SX	51	WG	0.0635	lb ai/a			7DBP	A							
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C							
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C							
11	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C							
11	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C							
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C							
12	ENVIVE	41.3	WG			5	oz/a	7DBP	A	98	a	98	a	90	a	99 a
12	CLASSIC	25	WG	0.02856	lb ai/a			7DBP	A							
12	HARMONY SG	50	SG	0.00918	lb ai/a			7DBP	A							
12	VALOR SX	51	WG	0.09072	lb ai/a			7DBP	A							
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-2	E							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-2	E							
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7DBP	A	18	c	83	d	63	cd	50 b
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C							
13	SYNCHRONY XP	28.4	WG			0.375	oz/a	6-8"W-1	C							
13	CLASSIC	25	WG	0.00504	lb ai/a			6-8"W-1	C							
13	HARMONY SG	50	SG	0.00162	lb ai/a			6-8"W-1	C							
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	19	c	85	cd	94	a	98 a
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	B							
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V1-2	B							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-B	D							
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D							
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	5	d	86	bcd	40	e	18 de
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	7DBP	A							
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	6-8"W-1	C							
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-8"W-1	C							
16	NONTREATED									0	d	0	e	0	f	0 e

PRE and POST Programs in No-Till Soybean.

Trial ID: 09-1-MMW80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										ABUTH	ABUTH	ABUTH	ABUTH
Crop Code													
Rating Date										06-26-09	07-10-09	07-24-09	08-21-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										0 DA-B	14 DA-B	28 DA-B	56 DA-B
LSD (P=.05)										9.1	7.6	20.3	18.6
Replicate F										0.664	1.840	1.960	2.522
Replicate Prob(F)										0.5787	0.1535	0.1336	0.0697
Treatment F										189.324	78.645	14.733	34.380
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (HAJM03X4); DuPont.
2. Ratings: CI at 3-7, 14 + 28 da B; WC at 0, 14, 28 + 56 da B.
3. Yield.
4. Planting was delayed due to wet field conditions.
   Plots were evaluated for crop injury on 6-30-09 (4 DA-B), but crop had not emerged, not rated.
   GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
5. Harvested 11-5-09, (2) 30 inch rows by 28 ft.

Double-Crop Soybean Weed Control.

Trial ID: 09-ARC-5B-DC Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 06-25-09

Objectives: Evaluate Flexstar GT programs for crop tolerance, weed control, and soybean yield.

Crop 1: GLXMA Soybean **Variety:** FS 45T70 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-25-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 15 IN

Pest 1 Type: W **Code:** IPOSS morningglory, species
Pest 2 Type: W **Code:** PANDI Panicum dichotomiflorum Michx. panicum, fall
Pest 3 Type: W **Code:** DIGSA Digitaria sanguinalis (L.) Scop. crabgrass, large

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. TRAZW	2009

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** WEIR
CEC: 10 **Fert. Level:** P1: 26 LB/A, K: 177 LB/A

Application Description

	A	B
Application Date:	06-26-09	07-31-09
Time of Day:	15:00	10:00
Application Method:	Spray	Spray
Application Timing:	BURNDN	4-6"W
Application Placement:	BROFOL	BROFOL
Applied By:	DKT	DKT
Air Temperature, Unit:	93 F	80 F
% Relative Humidity:	51	50
Wind Velocity, Unit:	2 MPH	3 MPH
Wind Direction:	SW	W
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	84 F	78 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	60	60
	06-26-09	07-31-09
Crop stage at application:	NA	V4
Height Min, Max (inch):		8 10

Pest Stage At Each Application

Application Date:	06-26-09	07-31-09
Weed Code:	IPOSS	IPOSS
Stage Majority (leaves):	4	8
Stage Min, Max:	2 8	2 22
Height Majority:	3 IN	5 IN
Height Min, Max:	1 4	2 12
Density, Unit:	0.1 FT2	4 FT2
Weed Code:	PANDI	PANDI
Stage Majority (leaves):	4	6
Stage Min, Max:	2 12	3 18
Height Majority:	6 IN	10 IN
Height Min, Max:	2 16	10 24
Density, Unit:	0.1 FT2	1 FT2
Weed Code:	DIGSA	DIGSA
Stage Majority (leaves):	6	6
Stage Min, Max:	2 16	4 14
Height Majority:	6 IN	6 IN
Height Min, Max:	2 12	2 10
Density, Unit:	0.1 FT2	2 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Double-Crop Soybean Weed Control.

Trial ID: 09-ARC-5B-DC Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code													IPOSS	IPOSS	IPOSS
Crop Code										GLXMA	GLXMA	GLXMA			
Rating Date										11-05-09	11-05-09	08-07-09	07-31-09	08-14-09	09-25-09
Rating Data Type										Moisture	Yield	Injury	Control	Control	Control
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent
Rating Timing													35 DA-A		
Trt-Eval Interval												7 DA-B	0 DA-B	14 DA-B	56 DA-B
1	FLEXSTAR GT	3.31	SL	0.93	lb ai/a	2.25	pt/a	BURNDN	A	11.1 b	43 a	3 a	86 c	99 a	99 a
1	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
1	FLEXSTAR GT	3.31	SL	0.93	lb ai/a	2.25	pt/a	4-6"W	B						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
2	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	BURNDN	A	11.0 b	46 a	0 b	91 b	98 ab	98 a
2	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
2	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
3	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	BURNDN	A	11.0 b	48 a	0 b	95 a	98 ab	99 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
3	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
4	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B	11.0 b	46 a	0 b		58 e	99 a
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	BURNDN	A	11.1 b	44 a	0 b	90 b	91 bc	99 a
5	PREFIX	5.29	EC	1.32	lb ai/a	32	fl oz/a	BURNDN	A						
5	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	BURNDN	A	11.3 ab	47 a	0 b	90 b	91 c	99 a
6	SENCOR	75	WG	0.14	lb ai/a	3	oz/a	BURNDN	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
6	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
7	NONTREATED									12.0 a	33 b	0 b	0 d	0 f	0 c
8	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"W	B	11.1 b	44 a	0 b		80 d	80 b
8	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	4-6"W	B						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
LSD (P=.05)										0.71	6.6	0.0	3.2	6.9	2.2
Replicate F										0.736	2.641	0.000	2.468	1.908	1.000
Replicate Prob(F)										0.5421	0.0760	1.0000	0.1020	0.1592	0.4123
Treatment F										1.793	4.298	0.000	1187.054	209.533	2131.524
Treatment Prob(F)										0.1418	0.0043	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Double-Crop Soybean Weed Control.

Trial ID: 09-ARC-5B-DC Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	PANDI	PANDI	PANDI	DIGSA	DIGSA	DIGSA
	Pest Code									PANDI	PANDI	PANDI	DIGSA	DIGSA	DIGSA
	Crop Code														
	Rating Date									07-31-09	08-14-09	09-25-09	07-31-09	08-14-09	09-25-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing									35 DA-A			35 DA-A		
	Trt-Eval Interval									0 DA-B	14 DA-B	56 DA-B	0 DA-B	14 DA-B	56 DA-B
1	FLEXSTAR GT	3.31	SL	0.93	lb ai/a	2.25	pt/a	BURNDN	A	95 a	99 a	99 a	93 a	98 a	99 a
1	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
1	FLEXSTAR GT	3.31	SL	0.93	lb ai/a	2.25	pt/a	4-6"W	B						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
2	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	BURNDN	A	95 a	99 a	99 a	93 a	99 a	99 a
2	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
2	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
3	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	BURNDN	A	96 a	99 a	99 a	88 ab	99 a	99 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
3	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
4	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B		86 b	99 a		93 b	99 a
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	BURNDN	A	95 a	99 a	99 a	93 a	99 a	99 a
5	PREFIX	5.29	EC	1.32	lb ai/a	32	fl oz/a	BURNDN	A						
5	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	BURNDN	A						
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	48	fl oz/a	BURNDN	A	84 b	99 a	99 a	87 b	99 a	99 a
6	SENCOR	75	WG	0.14	lb ai/a	3	oz/a	BURNDN	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	BURNDN	A						
6	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	4-6"W	B						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
7	NONTREATED									0 c	0 c	0 b	0 c	0 c	0 b
8	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"W	B		98 a	99 a		99 a	99 a
8	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	4-6"W	B						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	B						
	LSD (P=.05)									2.0	4.3	0.0	5.6	2.0	0.0
	Replicate F									1.019	0.746	0.000	0.691	0.900	0.000
	Replicate Prob(F)									0.4121	0.5369	1.0000	0.5718	0.4579	1.0000
	Treatment F									3238.371	567.258	0.000	405.719	2535.865	0.000
	Treatment Prob(F)									0.0001	0.0001	1.0000	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (SC051A4).
2. Ratings: CI at 7 DA-B; WC at 0, 14, 28 and 56 DA-B.
3. Yield.
4. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
5. The planned 28 DA-B rating was not made due to an oversight.
6. Harvested 11-5-09, (4) 15 inch rows by 27 ft.

FBS 1032 and FBS 1030 Soybean Manganese Study.

Trial ID: 09-22-MN50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-24-09

Objectives: Evaluate FBS 1032 and FBS 1030 treatments for efficacy, yield and quality on Roundup Ready soybean versus competitor Mn applications.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-24-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** IPOSS morningglory, species
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 26 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.1 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** CASEYVILLE
CEC: 10 **Fert. Level:** P1: 99 LB/A, K: 493 LB/A

Application Description

	A
Application Date:	08-05-09
Time of Day:	10:15
Application Method:	Spray
Application Timing:	2-3WAV3
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	80 F
% Relative Humidity:	92
Wind Velocity, Unit:	3 MPH
Wind Direction:	E
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	70
	08-05-09
Crop stage at application:	R2
Height Min, Max (inch):	24 30

Pest Stage At Each Application

Application Date:	08-05-09
Weed Code:	IPOSS
Stage Majority (leaves):	COTY
Stage Min, Max:	COTY 2
Height Majority:	1 IN
Height Min, Max:	1 1.5
Density, Unit:	0.25 FT2
Weed Code:	AMATA
Stage Majority (leaves):	2
Stage Min, Max:	2 4
Height Majority:	1 IN
Height Min, Max:	1 2
Density, Unit:	0.25 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

FBS 1032 and FBS 1030 Soybean Manganese Study.

Trial ID: 09-22-MN50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-03-09 Moisture Percent	GLXMA 11-03-09 Test wt. lb/bu	GLXMA 11-03-09 Protein Percent	GLXMA 11-03-09 Oil Percent	GLXMA 11-03-09 Yield bu/A	IPOSS 08-26-09 Control Percent	AMATA 08-26-09 Control Percent
	Pest Code														IPOSS	AMATA
	Crop Code									GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
	Rating Date									11-03-09	11-03-09	11-03-09	11-03-09	11-03-09	08-26-09	08-26-09
	Rating Data Type									Moisture	Test wt.	Protein	Oil	Yield	Control	Control
	Rating Unit									Percent	lb/bu	Percent	Percent	bu/A	Percent	Percent
	Rating Timing															
	Trt-Eval Interval														21 DA-A	21 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	12.5 a	55.9 a	39.7 a	19.4 a	48 ab	99 a	99 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	12.6 a	56.0 a	39.9 a	19.7 a	48 ab	99 a	99 a
2	FBS 1032	100	SL	32	oz/a	32	oz/a	2-3WAV3	A							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A							
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	12.6 a	56.0 a	39.8 a	19.3 a	47 b	99 a	99 a
3	FBS 1030	100	SL	6	oz/a	6	oz/a	2-3WAV3	A							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	12.6 a	55.8 a	40.2 a	19.3 a	50 a	99 a	99 a
4	MAX-IN MN	100	SL	32	oz/a	32	oz/a	2-3WAV3	A							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A							
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	12.6 a	56.0 a	40.0 a	19.4 a	49 ab	99 a	99 a
5	FBS 1030	100	SL	6	oz/a	6	oz/a	2-3WAV3	A							
5	MAX-IN MN	100	SL	32	oz/a	32	oz/a	2-3WAV3	A							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A							
LSD (P=.05)										0.22	0.27	0.76	0.75	3.0	0.3	0.0
Replicate F										7.267	0.136	1.925	0.994	2.358	1.000	0.000
Replicate Prob(F)										0.0049	0.9369	0.1795	0.4289	0.1276	0.4262	1.0000
Treatment F										0.143	0.903	0.547	0.543	1.694	1.000	0.000
Treatment Prob(F)										0.9627	0.4927	0.7049	0.7072	0.2210	0.4449	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

FBS 1032 and FBS 1030 Soybean Manganese Study.

Trial ID: 09-22-MN50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 08-12-09 SPAD	GLXMA 08-26-09 SPAD	GLXMA 08-19-09 GrowthStage R	GLXMA 08-26-09 GrowthStage R	GLXMA 08-19-09 Vigor 0-9	GLXMA 08-26-09 Vigor 0-9
	Pest Code														
	Crop Code									GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	Rating Date									08-12-09	08-26-09	08-19-09	08-26-09	08-19-09	08-26-09
	Rating Data Type									SPAD	SPAD	GrowthStage	GrowthStage	Vigor	Vigor
	Rating Unit											R	R	0-9	0-9
	Rating Timing														
	Trt-Eval Interval									7 DA-A	21 DA-A	14 DA-A	21 DA-A	14 DA-A	21 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	29.5 b	34.7 ab	3.0 a	4.0 a	7.5 a	8.0 ab
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	27.9 b	35.6 a	3.0 a	4.0 a	7.5 a	7.5 b
2	FBS 1032	100	SL	32	oz/a	32	oz/a	2-3WAV3	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	29.5 b	33.3 b	3.0 a	4.0 a	7.8 a	8.0 ab
3	FBS 1030	100	SL	6	oz/a	6	oz/a	2-3WAV3	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	32.5 a	36.2 a	3.0 a	4.0 a	7.5 a	8.0 ab
4	MAX-IN MN	100	SL	32	oz/a	32	oz/a	2-3WAV3	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	28.9 b	34.8 ab	3.0 a	4.0 a	7.5 a	8.3 a
5	FBS 1030	100	SL	6	oz/a	6	oz/a	2-3WAV3	A						
5	MAX-IN MN	100	SL	32	oz/a	32	oz/a	2-3WAV3	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
LSD (P=.05)										2.79	2.08	0.00	0.00	0.99	0.74
Replicate F										7.904	4.746	0.000	0.000	1.400	1.357
Replicate Prob(F)										0.0036	0.0209	1.0000	1.0000	0.2906	0.3026
Treatment F										3.625	2.598	0.000	0.000	0.120	1.286
Treatment Prob(F)										0.0369	0.0897	1.0000	1.0000	0.9727	0.3294

Means followed by same letter do not significantly differ (P=.05, LSD)

FBS 1032 and FBS 1030 Soybean Manganese Study.

Trial ID: 09-22-MN50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 08-19-09 Height cm 5 Plants 14 DA-A	GLXMA 08-19-09 Height cm Overall 14 DA-A	GLXMA 08-26-09 Height cm 5 Plants 21 DA-A	GLXMA 08-26-09 Height cm Overall 21 DA-A	GLXMA 10-15-09 Height cm 5 Plants EOS	GLXMA 10-15-09 Height cm Overall EOS
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	81 a	81 a	94 a	93 a	94 a	94 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	81 a	83 a	92 a	90 a	94 a	94 a
2	FBS 1032	100	SL	32	oz/a	32	oz/a	2-3WAV3	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	82 a	82 a	95 a	94 a	95 a	95 a
3	FBS 1030	100	SL	6	oz/a	6	oz/a	2-3WAV3	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	82 a	82 a	95 a	95 a	95 a	94 a
4	MAX-IN MN	100	SL	32	oz/a	32	oz/a	2-3WAV3	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3WAV3	A	82 a	82 a	96 a	94 a	96 a	96 a
5	FBS 1030	100	SL	6	oz/a	6	oz/a	2-3WAV3	A						
5	MAX-IN MN	100	SL	32	oz/a	32	oz/a	2-3WAV3	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3WAV3	A						
LSD (P=.05)										4.8	2.5	5.2	5.9	4.8	4.8
Replicate F										0.530	2.849	2.833	3.352	1.647	1.898
Replicate Prob(F)										0.6705	0.0820	0.0831	0.0555	0.2308	0.1838
Treatment F										0.129	0.936	0.907	0.959	0.346	0.306
Treatment Prob(F)										0.9688	0.4760	0.4906	0.4645	0.8417	0.8686

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Floratine BioSciences.
2. Ratings: Soybean growth stage at application A and every 21 da after application A.
   Vigor and plant height at 21 da application and at harvest.
   WC at 21 DAT; SPAD meter on new trifoliate (center leaflet) at 7 DAT.
3. Yield, seed oil and protein content, and test weight.
4. Application A is 2-3 weeks after the V3 blanket application, approximately R1 growth stage.
5. Blanket application of Roundup PowerMax (22 floz/A) plus liquid AMS (5%v/v) to all plots 10 ft wide at 7DBP was applied on 5-29-09.
   Blanket application of Roundup PowerMax (22 floz/A) plus liquid AMS (5%v/v) to all plots 10 ft wide at V3 was applied 7-21-09.
6. SPAD = Minolta chlorophyll meter (model SPAD 502) reading on new trifoliate (center leaflet).
   GrowthStage R = Soybean reproductive growth stage. EOS = End of season.
   Soybean height; 5 Plants is average height of 5 random plants per plot, Overall is looking across the top of the plants.
   Soybean vigor scale is 0-9, 0 = dead, 9 = very vigorous.
7. Harvested 11-3-09, (2) 30 inch rows by 23 ft.

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 07-01-09

Objectives: To evaluate weed control and weed population shifts over a long period of time in transgenic crops.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 07-01-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common
Pest 3 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 4 Type: W	**Code:** AMAPA	Amaranthus palmeri S.Wats.	amaranth, Palmer
Pest 5 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 6 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** See comments
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2 **Texture:** SILT LOAM
pH: 6.3 **Soil Name:** BETHALTO
CEC: 12 **Fert. Level:** P1 80 LB/A, K 430 LB/A

Application Description

	A	B	C	D	E	F	G	H	I	J	K
Application Date:	07-02-09	07-27-09	07-21-09	08-06-09	08-12-09	07-21-09	08-12-09	07-29-09	08-06-09	07-27-09	08-03-09
Time of Day:	10:00	11:00	10:00	9:00	10:00	10:00	10:00	10:00	9:00	11:00	8:30
Application Method:	Spray	Spray	Spray	Spray	Spray	Spray	Spray	Spray	Spray	Spray	Spray
Application Timing:	PRE	2-4"W-1	4-6"W-1	10DA2-4"1	2WA2-4"1	2-4"W-2	2-4"W-3-1	10DA2-4"2	2WA2-4"2	2-4"W-3-2	4-6"W-2
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Air Temperature, Unit:	72 F	82 F	74 F	72 F	80 F	74 F	80 F	76 F	72 F	82 F	70 F
% Relative Humidity:	80	64	90	86	70	90	70	82	86	64	92
Wind Velocity, Unit:	5 MPH	5 MPH	3 MPH	3 MPH	5 MPH	3 MPH	5 MPH	5 MPH	3 MPH	5 MPH	5 MPH
	F	F	F								
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
	07-02-09	07-27-09	07-21-09	08-06-09	08-12-09	07-21-09	08-12-09	07-29-09	08-06-09	07-27-09	08-03-09
Crop stage at application:	NA	V3	V2	V4	R1	V2	R1	V3	V4	V3-V4	V4
Height Min, Max (inch):		6 6	4 4	11 11	13 13	4 4	13 13	9 9	11 11	10 10	11 11

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	07-02-09	07-27-09	07-21-09	08-06-09	08-12-09	07-21-09	08-12-09	07-29-09	08-06-09	07-27-09	08-03-09
Weed Code:	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA
Stage Majority (leaves):	NA	8	11	13	16	13	16	15	14	10	8
Stage Min, Max:		6 8	7 11	9 13	8 16	9 13	8 16	5 15	8 14	6 10	4 8
Height Majority:		10 IN	10 IN	9 IN	15 IN	9 IN	15 IN	18 IN	8 IN	16 IN	8 IN
Height Min, Max:		7 10	7 10	5 9	10 15	5 9	10 15	10 18	4 8	8 16	4 8
Density, Unit:		3 FT2	3 FT2	3 FT2	3 FT2	3 FT2	3 FT2	3 FT2	3 FT2	3 FT2	3 FT2
Weed Code:	XANST	XANST	XANST	XANST	XANST	XANST	XANST	XANST	XANST	XANST	XANST
Stage Majority (leaves):	NA	8	NA	NA	NA	NA	NA	NA	NA	NA	6
Stage Min, Max:		4 8									4 6
Height Majority:		9 IN									6 IN
Height Min, Max:		4 9									4 6
Density, Unit:		1 FT2									1 FT2
Weed Code:	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	7	NA	NA	NA	NA	NA	NA	NA	NA	8
Stage Min, Max:		5 7									5 8
Height Majority:		6 IN									6 IN
Height Min, Max:		4 6									4 6
Density, Unit:		1.5 FT2									1.5 FT2
Weed Code:	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA	AMAPA
Stage Majority (leaves):	NA	12	26	16	16	16	16	NA	14	13	13
Stage Min, Max:		5 12	6 26	8 16	10 16	10 16	10 16		8 14	9 13	8 13
Height Majority:		6 IN	9 IN	7 IN	8 IN	7 IN	8 IN		8 IN	6 IN	6 IN
Height Min, Max:		2 6	2 9	4 7	5 8	5 7	5 8		3 8	4 6	4 6
Density, Unit:		3 FT2	3 FT2	3 FT2	3 FT2	3 FT2	3 FT2		3 FT2	3 FT2	3 FT2
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	24	NA	42	NA	20	20	20	26	NA	35	8
Stage Min, Max:	10 24		16 42		10 20	10 20	10 20	14 26		20 35	6 8
Height Majority:	20 IN		22 IN		16 IN	14 IN	14 IN	20 IN		20 IN	6 IN
Height Min, Max:	8 20		8 22		8 16	9 14	8 14	9 20		8 20	4 6
Density, Unit:	1 FT2		1 FT2		1 FT2	1 FT2	1 FT2	1 FT2		1 FT2	1 FT2
Weed Code:	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	7	NA	NA	NA	NA	NA	NA	NA	NA	7
Stage Min, Max:		4 7									5 7
Height Majority:		6 IN									6 IN
Height Min, Max:		3 6									4 6
Density, Unit:		1.5 FT2									1.5 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI	40 PSI	40 PSI	40 PSI	40 PSI	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8003	XR 8003	XR 8003	XR 8003	XR 8003	XR 8003	XR 8003	XR 8003
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8003
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	20 GPA

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-03-09 Height Inch EOS	GLXMA 11-12-09 Moisture Percent	GLXMA 11-12-09 Yield bu/A	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT	GLXMA Injury Percent 56 DAT
1	SOYBEAN IN 2009									0 e		0 i	0 d	0 b	0 b
1	NO-TILL														
1	NONTREATED														
2	SOYBEAN IN 2009									35 a	12.8 a-e	37 a-d	0 d	0 b	0 b
2	NO-TILL														
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
2	HANDWEED														
3	SOYBEAN IN 2009									33 ab	12.7 cde	25 gh	0 d	0 b	0 b
3	NO-TILL														
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
3	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
3	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
3	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
4	SOYBEAN IN 2009									30 abc	12.8 a-d	28 e-h	0 d	0 b	0 b
4	NO-TILL														
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
4	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
4	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
4	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-2	J						
5	SOYBEAN IN 2009									33 ab	12.6 e	22 h	7 c	0 b	0 b
5	NO-TILL														
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
5	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
5	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
5	SELECT	2	EC	0.094	lb ai/a	6.0	oz/a	2-4"W-3-2	J						
5	PRIME OIL COC	100	SL	1.0	% v/v	1.0	% v/v	2-4"W-3-2	J						
6	SOYBEAN IN 2009									31 abc	12.7 b-e	29 d-h	5 cd	0 b	0 b
6	NO-TILL														
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
6	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
7	SOYBEAN IN 2009									32 abc	12.7 de	33 b-g	0 d	0 b	0 b
7	NO-TILL														
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-2	F						
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"2	I						
8	SOYBEAN IN 2009									30 abc	12.8 a-d	31 c-h	3 cd	0 b	0 b
8	NO-TILL														
8	TOUCHDOWN TOTAL	4.17	SL	0.77	lb ae/a	23.6	fl oz/a	PRE	A						
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
9	SOYBEAN IN 2009									29 abc	12.9 ab	22 h	20 a	16 a	10 a
9	NO-TILL														
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
9	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F						
9	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-2	F						
9	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F						
9	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F						
10	SOYBEAN IN 2009									29 abc	12.7 cde	28 e-h	17 ab	17 a	10 a
10	NO-TILL														
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
10	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F						
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F						
10	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F						
10	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"2	H						
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"2	H						
11	SOYBEAN IN 2009									20 d	12.8 a-d	9 i	0 d	0 b	0 b
11	REDUCED-TILL														
11	NONTREATED														

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-03-09 Height Inch EOS	GLXMA 11-12-09 Moisture Percent	GLXMA 11-12-09 Yield bu/A	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT	GLXMA Injury Percent 56 DAT
12	SOYBEAN IN 2009									27 bc	12.8 a-d	42 a	0 d	0 b	0 b
12	REDUCED-TILL														
12	HANDWEED														
13	SOYBEAN IN 2009									29 bc	12.9 abc	41 ab	0 d	0 b	0 b
13	REDUCED-TILL														
13	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
13	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
13	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
14	SOYBEAN IN 2009									28 bc	12.9 a	40 ab	0 d	0 b	0 b
14	REDUCED-TILL														
14	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
14	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
14	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-1	G						
15	SOYBEAN IN 2009									29 bc	12.9 a-d	36 a-e	0 d	0 b	0 b
15	REDUCED-TILL														
15	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
15	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
15	SELECT	2	EC	0.094	lb ai/a	6	oz/a	2-4"W-3-1	G						
15	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-3-1	G						
16	SOYBEAN IN 2009									29 bc	12.8 a-d	39 abc	0 d	0 b	0 b
16	REDUCED-TILL														
16	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
16	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K						
17	SOYBEAN IN 2009									26 cd	12.8 a-d	41 ab	0 d	0 b	0 b
17	REDUCED-TILL														
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-1	B						
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"1	E						
18	SOYBEAN IN 2009									27 bc	12.9 abc	35 a-f	13 b	0 b	0 b
18	REDUCED-TILL														
18	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K						
19	SOYBEAN IN 2009									26 cd	12.9 ab	28 e-h	16 ab	15 a	10 a
19	REDUCED-TILL														
19	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B						
19	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-1	B						
19	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B						
19	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B						
20	SOYBEAN IN 2009									26 cd	12.9 ab	26 fgh	16 ab	15 a	10 a
20	REDUCED-TILL														
20	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B						
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B						
20	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B						
20	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"1	D						
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"1	D						
LSD (P=.05)										6.1	0.19	9.0	5.7	4.3	0.0
Replicate F										0.932	1.839	0.834	0.803	0.589	0.000
Replicate Prob(F)										0.4335	0.1575	0.4827	0.4979	0.6248	1.0000
Treatment F										11.486	1.810	11.641	12.621	17.848	0.000
Treatment Prob(F)										0.0001	0.0638	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA Control Percent 14 DAT	SETFA Control Percent 28 DAT	SETFA Control Percent 56 DAT	XANST Control Percent 14 DAT	XANST Control Percent 28 DAT	XANST Control Percent 56 DAT
1	SOYBEAN IN 2009									92 e	92 e	92 e	92 c	92 c	92 c
1	NO-TILL														
1	NONTREATED														
2	SOYBEAN IN 2009									100 a	100 a	100 a	100 a	100 a	100 a
2	NO-TILL														
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
2	HANDWEED														
3	SOYBEAN IN 2009									98 abc	98 abc	96 cd	99 ab	99 ab	99 ab
3	NO-TILL														
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
3	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
3	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
3	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
4	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
4	NO-TILL														
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
4	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
4	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
4	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-2	J						
5	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
5	NO-TILL														
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
5	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
5	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
5	SELECT	2	EC	0.094	lb ai/a	6.0	oz/a	2-4"W-3-2	J						
5	PRIME OIL COC	100	SL	1.0	% v/v	1.0	% v/v	2-4"W-3-2	J						
6	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
6	NO-TILL														
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
6	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
7	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
7	NO-TILL														
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-2	F						
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"2	I						
8	SOYBEAN IN 2009									98 bc	98 bc	98 abc	99 ab	99 ab	99 ab
8	NO-TILL														
8	TOUCHDOWN TOTAL	4.17	SL	0.77	lb ae/a	23.6	fl oz/a	PRE	A						
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
9	SOYBEAN IN 2009									95 d	95 d	95 d	99 ab	99 ab	99 ab
9	NO-TILL														
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
9	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F						
9	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-2	F						
9	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F						
9	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F						
10	SOYBEAN IN 2009									99 abc	99 abc	99 ab	99 ab	99 ab	99 ab
10	NO-TILL														
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
10	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F						
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F						
10	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F						
10	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"2	H						
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"2	H						
11	SOYBEAN IN 2009									0 f	0 f	0 f	0 d	0 d	0 d
11	REDUCED-TILL														
11	NONTREATED														

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										SETFA	SETFA	SETFA	XANST	XANST	XANST
Crop Code															
Rating Date															
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										14 DAT	28 DAT	56 DAT	14 DAT	28 DAT	56 DAT
Trt-Eval Interval															
12	SOYBEAN IN 2009									100 a	100 a	100 a	100 a	100 a	100 a
12	REDUCED-TILL														
12	HANDWEED														
13	SOYBEAN IN 2009									99 ab	99 ab	98 abc	99 ab	99 ab	99 ab
13	REDUCED-TILL														
13	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
13	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
13	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
14	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
14	REDUCED-TILL														
14	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
14	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
14	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-1	G						
15	SOYBEAN IN 2009									97 cd	97 cd	97 bcd	98 b	98 b	98 b
15	REDUCED-TILL														
15	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
15	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
15	SELECT	2	EC	0.094	lb ai/a	6	oz/a	2-4"W-3-1	G						
15	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-3-1	G						
16	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
16	REDUCED-TILL														
16	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
16	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K						
17	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
17	REDUCED-TILL														
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-1	B						
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"1	E						
18	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
18	REDUCED-TILL														
18	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K						
19	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 ab	99 ab	99 ab
19	REDUCED-TILL														
19	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B						
19	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-1	B						
19	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B						
19	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B						
20	SOYBEAN IN 2009									99 abc	99 abc	99 ab	99 ab	99 ab	99 ab
20	REDUCED-TILL														
20	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B						
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B						
20	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B						
20	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"1	D						
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"1	D						
LSD (P=.05)										2.2	2.2	2.6	1.6	1.6	1.6
Replicate F										1.655	1.655	0.374	1.298	1.298	1.298
Replicate Prob(F)										0.1869	0.1869	0.7721	0.2840	0.2840	0.2840
Treatment F										825.083	825.083	564.580	1621.810	1621.810	1621.810
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOHE Control Percent 14 DAT	IPOHE Control Percent 28 DAT	IPOHE Control Percent 56 DAT	AMAPA Control Percent 14 DAT	AMAPA Control Percent 28 DAT	AMAPA Control Percent 56 DAT
1	SOYBEAN IN 2009									92 cd	92 def	92 cd	92 b	92 ab	92 abc
1	NO-TILL														
1	NONTREATED														
2	SOYBEAN IN 2009									100 a	100 a	100 a	100 a	100 a	100 a
2	NO-TILL														
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
2	HANDWEED														
3	SOYBEAN IN 2009									99 ab	99 a	99 a	99 a	99 a	99 ab
3	NO-TILL														
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
3	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
3	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
3	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
4	SOYBEAN IN 2009									99 ab	99 a	99 a	99 a	99 a	99 ab
4	NO-TILL														
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
4	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
4	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
4	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-2	J						
5	SOYBEAN IN 2009									98 ab	99 a	99 a	92 b	94 ab	94 abc
5	NO-TILL														
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
5	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
5	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
5	SELECT	2	EC	0.094	lb ai/a	6.0	oz/a	2-4"W-3-2	J						
5	PRIME OIL COC	100	SL	1.0	% v/v	1.0	% v/v	2-4"W-3-2	J						
6	SOYBEAN IN 2009									97 ab	97 abc	97 ab	99 a	99 a	99 ab
6	NO-TILL														
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
6	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
7	SOYBEAN IN 2009									99 ab	99 ab	99 ab	99 a	99 a	99 ab
7	NO-TILL														
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-2	F						
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"2	I						
8	SOYBEAN IN 2009									95 bc	95 bcd	95 bc	99 a	99 a	99 ab
8	NO-TILL														
8	TOUCHDOWN TOTAL	4.17	SL	0.77	lb ae/a	23.6	fl oz/a	PRE	A						
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
9	SOYBEAN IN 2009									99 ab	99 a	99 a	99 a	99 a	99 ab
9	NO-TILL														
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
9	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F						
9	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-2	F						
9	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F						
9	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F						
10	SOYBEAN IN 2009									98 ab	98 ab	98 ab	99 a	99 a	99 ab
10	NO-TILL														
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A						
10	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F						
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F						
10	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F						
10	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"2	H						
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"2	H						
11	SOYBEAN IN 2009									0 g	0 i	0 g	0 d	0 d	0 e
11	REDUCED-TILL														
11	NONTREATED														

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOHE Control Percent 14 DAT	IPOHE Control Percent 28 DAT	IPOHE Control Percent 56 DAT	AMAPA Control Percent 14 DAT	AMAPA Control Percent 28 DAT	AMAPA Control Percent 56 DAT
12	SOYBEAN IN 2009									100 a	100 a	100 a	100 a	100 a	100 a
12	REDUCED-TILL														
12	HANDWEED														
13	SOYBEAN IN 2009									99 ab	99 a	99 a	98 a	98 a	94 abc
13	REDUCED-TILL														
13	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
13	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
13	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
14	SOYBEAN IN 2009									99 ab	99 a	99 a	99 a	99 a	99 ab
14	REDUCED-TILL														
14	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
14	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
14	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-1	G						
15	SOYBEAN IN 2009									99 ab	99 a	99 a	89 bc	91 ab	89 bc
15	REDUCED-TILL														
15	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A						
15	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A						
15	SELECT	2	EC	0.094	lb ai/a	6	oz/a	2-4"W-3-1	G						
15	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-3-1	G						
16	SOYBEAN IN 2009									78 f	90 fg	90 de	99 a	97 ab	99 ab
16	REDUCED-TILL														
16	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A						
16	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K						
17	SOYBEAN IN 2009									83 e	95 cde	97 ab	99 a	99 a	99 ab
17	REDUCED-TILL														
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-1	B						
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"1	E						
18	SOYBEAN IN 2009									79 ef	85 h	85 f	99 a	97 ab	97 abc
18	REDUCED-TILL														
18	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K						
19	SOYBEAN IN 2009									91 cd	91 efg	91 de	85 c	71 c	71 d
19	REDUCED-TILL														
19	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B						
19	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-1	B						
19	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B						
19	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B						
20	SOYBEAN IN 2009									89 d	89 g	89 e	86 c	86 b	86 c
20	REDUCED-TILL														
20	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B						
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B						
20	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B						
20	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"1	D						
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"1	D						
LSD (P=.05)										4.2	3.5	3.4	5.3	10.9	10.8
Replicate F										0.418	0.425	0.458	0.933	1.342	1.844
Replicate Prob(F)										0.7404	0.7359	0.7127	0.4309	0.2698	0.1494
Treatment F										229.015	315.657	336.126	140.766	33.628	34.760
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 10 DAT	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	ABUTH Control Percent 14 DAT	ABUTH Control Percent 28 DAT	ABUTH Control Percent 56 DAT
1	SOYBEAN IN 2009									0 c	0 f	0 e	0 f	99 ab	99 a	99 a
1	NO-TILL															
1	NONTREATED															
2	SOYBEAN IN 2009									68 ab	100 a	100 a	100 a	100 a	100 a	100 a
2	NO-TILL															
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
2	HANDWEED															
3	SOYBEAN IN 2009									74 ab	90 a-d	90 ab	89 bc	99 ab	99 a	99 a
3	NO-TILL															
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
3	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A							
3	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A							
3	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A							
4	SOYBEAN IN 2009									75 ab	86 bcd	94 ab	94 abc	99 ab	99 a	99 a
4	NO-TILL															
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
4	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A							
4	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A							
4	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-2	J							
5	SOYBEAN IN 2009									83 a	78 de	74 cd	74 de	99 ab	99 a	99 a
5	NO-TILL															
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
5	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A							
5	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A							
5	SELECT	2	EC	0.094	lb ai/a	6.0	oz/a	2-4"W-3-2	J							
5	PRIME OIL COC	100	SL	1.0	% v/v	1.0	% v/v	2-4"W-3-2	J							
6	SOYBEAN IN 2009									61 b	84 cd	84 bc	84 cd	99 ab	99 a	99 a
6	NO-TILL															
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
6	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A							
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C							
7	SOYBEAN IN 2009									74 ab	96 abc	96 a	96 ab	99 ab	99 a	99 a
7	NO-TILL															
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-2	F							
7	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"2	I							
8	SOYBEAN IN 2009									60 b	84 cd	84 bc	84 cd	99 ab	99 a	99 a
8	NO-TILL															
8	TOUCHDOWN TOTAL	4.17	SL	0.77	lb ae/a	23.6	fl oz/a	PRE	A							
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C							
9	SOYBEAN IN 2009									66 ab	78 de	78 c	78 d	99 ab	99 a	99 a
9	NO-TILL															
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
9	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F							
9	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-2	F							
9	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F							
9	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F							
10	SOYBEAN IN 2009									70 ab	66 e	66 d	66 e	99 ab	99 a	99 a
10	NO-TILL															
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A							
10	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-2	F							
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-2	F							
10	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-2	F							
10	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"2	H							
10	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"2	H							
11	SOYBEAN IN 2009										0 f	0 e	0 f	0 e	0 e	0 d
11	REDUCED-TILL															
11	NONTREATED															

Long-Term Tillage by Herbicide Study in a Transgenic Corn and Soybean Rotation.

Trial ID: 09-9B-Soybeans Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 10 DAT	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	ABUTH Control Percent 14 DAT	ABUTH Control Percent 28 DAT	ABUTH Control Percent 56 DAT
12	SOYBEAN IN 2009										100 a	100 a	100 a	100 a	100 a	100 a
12	REDUCED-TILL															
12	HANDWEED															
13	SOYBEAN IN 2009										99 a	99 a	99 ab	99 ab	99 a	99 a
13	REDUCED-TILL															
13	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A							
13	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A							
13	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A							
14	SOYBEAN IN 2009										99 a	99 a	99 ab	99 ab	99 a	99 a
14	REDUCED-TILL															
14	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A							
14	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A							
14	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-3-1	G							
15	SOYBEAN IN 2009										94 abc	94 ab	94 abc	99 ab	99 a	99 a
15	REDUCED-TILL															
15	AUTHORITY	75	WG	0.25	lb ai/a	5.3	oz/a	PRE	A							
15	FIRSTRATE	84	WG	0.031	lb ai/a	0.59	oz/a	PRE	A							
15	SELECT	2	EC	0.094	lb ai/a	6	oz/a	2-4"W-3-1	G							
15	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-3-1	G							
16	SOYBEAN IN 2009										94 abc	97 a	97 ab	78 d	85 c	85 b
16	REDUCED-TILL															
16	PROWL	3.3	EC	1.0	lb ai/a	2.4	pt/a	PRE	A							
16	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K							
17	SOYBEAN IN 2009										99 a	99 a	99 ab	80 c	95 b	97 a
17	REDUCED-TILL															
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2-4"W-1	B							
17	ROUNDUP WEATHERMAX	4.5	SL	0.58	lb ae/a	16.5	fl oz/a	2WA2-4"1	E							
18	SOYBEAN IN 2009										99 a	99 a	99 ab	76 d	79 d	79 c
18	REDUCED-TILL															
18	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W-2	K							
19	SOYBEAN IN 2009										98 ab	98 a	98 ab	99 ab	99 a	99 a
19	REDUCED-TILL															
19	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B							
19	SELECT	2	EC	0.125	lb ai/a	8.0	oz/a	2-4"W-1	B							
19	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B							
19	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B							
20	SOYBEAN IN 2009										98 ab	99 a	99 ab	98 b	98 a	98 a
20	REDUCED-TILL															
20	STORM	4	EC	0.75	lb ai/a	1.5	pt/a	2-4"W-1	B							
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	2-4"W-1	B							
20	28% UAN	100	SL	2.0	qt/a	2	qt/a	2-4"W-1	B							
20	SELECT	2	EC	0.094	lb ai/a	6	oz/a	10DA2-4"1	D							
20	PRIME OIL COC	100	SL	1.0	% v/v	1	% v/v	10DA2-4"1	D							
LSD (P=.05)										20.3	13.3	10.3	10.3	1.9	3.5	3.3
Replicate F										0.901	0.114	0.208	0.246	2.060	1.096	2.122
Replicate Prob(F)										0.4536	0.9517	0.8905	0.8639	0.1157	0.3585	0.1074
Treatment F										10.915	39.669	67.235	66.886	1202.148	329.593	367.383
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU - RFK. Study conducted since 1998 on same area.
2. Ratings:
3. Tillages are no-till and reduced-till, see treatment list.
4. At 10 DAT (days after burndown) little barley (dead) ground cover was 90-100% in all no-till plots resulting in weed suppression, except AMBTR, which was rated.
5. DAT = Days after various applications. EOS = End of season.
6. Harvested 11-12-09, (2) 30 inch rows by 24 ft.

Corn, Tilled Weed Control Studies

Southern Illinois University

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Compare the residual weed control provided by various competitive corn herbicide programs.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 5 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.7 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1: 101 LB/A, K: 388 LB/A

Application Description

	A	B	C	D	E
Application Date:	06-29-09	07-13-09	07-20-09	07-13-09	07-24-09
Time of Day:	20:45	11:30	12:15	11:30	12:00
Application Method:	Spray	Spray	Spray	Spray	Spray
Application Timing:	PRE	2-4"W-1	2-4"W-2	V2-3	2-4"RG
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NVH	NVH	NVH	NVH	DKP
Air Temperature, Unit:	80 F	78 F	78 F	78 F	84 F
% Relative Humidity:	92	92	80	92	92
Wind Velocity, Unit:	1 MPH	4 MPH	3 MPH	4 MPH	1 MPH
Wind Direction:	W	SE	E	SE	N
Dew Presence (Y/N):	N	N	N	N	N
Soil Moisture:	NORMAL	ABONOR	NORMAL	ABONOR	ABONOR
% Cloud Cover:	0	20	25	20	90
	06-29-09	07-13-09	07-20-09	07-13-09	07-24-09
Crop stage at application:	NA	V3	V4	V3	V5
Height Min, Max (inch):		4 6	7 10	4 6	10 16

Pest Stage At Each Application

Application Date:	06-29-09	07-13-09	07-20-09	07-13-09	07-24-09
Weed Code:	CYPES	CYPES	CYPES	CYPES	CYPES
Stage Majority (leaves):	NA	5	5	5	NA
Stage Min, Max:		3 8	3 7	3 8	
Height Majority:		3 IN	4 IN	3 IN	
Height Min, Max:		2 5	3 6	2 5	
Density, Unit:		1 FT2	1 FT2	1 FT2	
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	2	3	2	4
Stage Min, Max:		1 4	COTY 5	1 4	2 6
Height Majority:		3 IN	3 IN	3 IN	4 IN
Height Min, Max:		2 4	1 4	2 4	1 5
Density, Unit:		1 FT2	0.1 FT2	1 FT2	1 FT2
Weed Code:	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	COTY	2	COTY	2
Stage Min, Max:		COTY 1	COTY 3	COTY 1	COTY 2
Height Majority:		1 IN	2 IN	1 IN	3 IN
Height Min, Max:		1 1.5	1 2.5	1 1.5	1 4
Density, Unit:		0.75 FT2	0.3 FT2	0.75 FT2	0.5 FT2
Weed Code:	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	NA	NA	NA	NA
Weed Code:	AMATA	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	NA	NA	NA	2
Stage Min, Max:					COTY 2
Height Majority:					1 IN
Height Min, Max:					0.5 1
Density, Unit:					0.01 FT2

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-16-10 Moisture Percent	ZEAMD 01-16-10 Yield bu/A	ZEAMD 07-20-09 Injury Percent 0 DA-C	ZEAMD 08-17-09 Injury Percent 28 DA-C	CYPES 07-20-09 Control Percent 0 DA-C	CYPES 08-17-09 Control Percent 28 DA-C	CYPES 09-14-09 Control Percent 56 DA-C
1	NONTREATED									20.7 c	73 c	0 c	0 a	0 h	0 d	0 d
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	22.4 ab	101 ab	0 c	0 a	98 a	98 a	98 a
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A							
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	PRE	A	22.1 abc	105 ab	0 c	0 a	95 a-d	96 a	95 a
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	2-4"W-2	C							
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	PRE	A	21.8 abc	117 a	0 c	0 a	96 a-d	97 a	97 a
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C							
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W-2	C							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
5	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	21.4 abc	102 ab	3 b	0 a	98 a	97 a	97 a
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
6	BICEP II MAGNUM	5.5	SC	2.9	lb ai/a	2.1	qt/a	PRE	A	21.5 abc	110 ab	0 c	0 a	98 a	98 a	96 a
6	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C							
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4"W-2	C							
6	28% UAN	100	SL	1	% v/v	1	% v/v	2-4"W-2	C							
7	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C	21.8 abc	109 ab		0 a		96 a	97 a
7	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
8	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C	21.6 abc	114 a		0 a		98 a	98 a
8	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C							
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W-2	C							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
9	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	21.5 abc	105 ab	0 c	0 a	88 f	80 b	75 b
9	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A							
10	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PRE	A	21.3 abc	111 ab	0 c	0 a	80 g	50 c	43 c
10	AATREX	4	SC	1.5	lb ai/a	1.5	qt/a	PRE	A							
11	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PRE	A	21.9 abc	94 b	0 c	0 a	97 ab	94 a	92 a
12	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	PRE	A	21.5 abc	114 ab	0 c	0 a	91 def	95 a	95 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-2	C							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-1	B	22.7 a	110 ab	0 c	0 a	93 b-e	97 a	98 a
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-1	B							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"RG	E							
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	E							
14	GUARDSMAN MAX	5	SE	1.56	lb ai/a	2.5	pt/a	PRE	A	21.3 abc	111 ab	0 c	0 a	97 ab	95 a	94 a
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-2	C							
14	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"W-2	C							
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
15	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	20.7 c	116 a	0 c	0 a	96 a-d	97 a	95 a
15	RESOLVE Q	22.4	WG			1.25	oz/a	2-4"W-2	C							
15	RESOLVE SG	25	SG	0.01437	lb ai/a			2-4"W-2	C							
15	HARMONY SG	50	SG	0.00313	lb ai/a			2-4"W-2	C							
15	DPX-4145	50	WG	0.00719	lb ai/a			2-4"W-2	C							
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	2-4"W-2	C							
15	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C							
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
16	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	21.0 bc	114 ab	3 b	0 a	96 a-d	94 a	92 a
16	ACCENT Q	54.5	WG			0.9	oz/a	2-4"W-2	C							
16	ACCENT	75	WG	0.02453	lb ai/a			2-4"W-2	C							
16	DPX-4145	50	WG	0.00613	lb ai/a			2-4"W-2	C							
16	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C							
16	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4"W-2	C							
16	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-16-10 Moisture Percent	ZEAMD 01-16-10 Yield bu/A	ZEAMD 07-20-09 Injury Percent 0 DA-C	ZEAMD 08-17-09 Injury Percent 28 DA-C	CYPES 07-20-09 Control Percent 0 DA-C	CYPES 08-17-09 Control Percent 28 DA-C	CYPES 09-14-09 Control Percent 56 DA-C
17	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D	21.5 abc	113 ab	3 b	0 a	98 ab	97 a	97 a
17	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D							
17	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D							
17	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D							
17	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	V2-3	D							
17	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D							
17	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D							
18	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D	22.4 ab	97 ab	4 ab	0 a	96 a-d	95 a	94 a
18	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D							
18	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D							
18	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D							
18	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	V2-3	D							
18	AATREX	4	SC	0.5	lb ai/a	1	pt/a	V2-3	D							
18	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D							
18	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D							
19	BASIS	75	WG	0.0234	lb ai/a	0.5	oz/a	PRE	A	21.4 abc	106 ab	5 a	0 a	98 ab	98 a	97 a
19	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D							
19	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D							
19	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D							
19	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D							
19	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	V2-3	D							
19	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D							
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D							
20	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	PRE	A	20.7 c	102 ab	0 c	0 a	87 f	92 ab	92 a
20	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C							
20	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
21	SURESTART	4.25	SE	1.33	lb ai/a	2.5	pt/a	PRE	A	21.1 bc	113 ab	0 c	0 a	92 c-f	94 a	94 a
21	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C							
21	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
22	SURESTART	4.25	SE	1.06	lb ai/a	2	pt/a	PRE	A	22.0 abc	106 ab	0 c	0 a	90 ef	96 a	94 a
22	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A							
22	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C							
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
23	SURESTART	4.25	SE	1.6	lb ai/a	3	pt/a	PRE	A	21.5 abc	106 ab	0 c	0 a	97 abc	97 a	97 a
23	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C							
23	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
24	SURESTART	4.25	SE	1.6	lb ai/a	3	pt/a	PRE	A	22.2 ab	103 ab	0 c	0 a	97 ab	96 a	96 a
24	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A							
24	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C							
24	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C							
LSD (P=.05)										1.46	20.1	1.4	0.0	5.1	13.3	14.0
Replicate F										12.666	12.238	1.088	0.000	2.562	0.664	1.355
Replicate Prob(F)										0.0001	0.0001	0.3463	1.0000	0.0891	0.5199	0.2680
Treatment F										1.108	1.715	10.152	0.000	135.610	21.310	20.183
Treatment Prob(F)										0.3726	0.0594	0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-20-09 Control Percent 0 DA-C	AMBTR 08-17-09 Control Percent 28 DA-C	AMBTR 09-14-09 Control Percent 56 DA-C	IPOHE 07-20-09 Control Percent 0 DA-C	IPOHE 08-17-09 Control Percent 28 DA-C	IPOHE 09-14-09 Control Percent 56 DA-C
1	NONTREATED									0 h	0 g	0 i	0 g	0 d	0 f
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	97 a	93 a-e	92 a-e	98 a	96 a	92 a-d
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	PRE	A	91 ef	97 ab	96 ab	92 ab	94 ab	93 a-d
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	2-4"W-2	C						
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	PRE	A	90 ef	91 c-f	90 b-g	99 a	97 a	94 abc
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W-2	C						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
5	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	93 b-e	92 a-e	88 d-g	98 a	93 ab	94 a-d
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
6	BICEP II MAGNUM	5.5	SC	2.9	lb ai/a	2.1	qt/a	PRE	A	93 cde	95 a-d	92 a-e	99 a	97 a	92 a-d
6	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4"W-2	C						
6	28% UAN	100	SL	1	% v/v	1	% v/v	2-4"W-2	C						
7	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C		95 a-d	96 ab		97 a	96 a
7	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
8	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C		97 a	97 a		95 a	94 abc
8	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W-2	C						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
9	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	98 a	89 def	85 fgh	98 a	93 ab	91 bcd
9	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
10	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PRE	A	97 ab	89 ef	86 e-h	99 a	96 a	89 d
10	AATREX	4	SC	1.5	lb ai/a	1.5	qt/a	PRE	A						
11	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PRE	A	98 a	86 f	79 h	92 ab	88 c	84 e
12	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	PRE	A	90 ef	89 def	90 b-g	73 c	95 a	92 a-d
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-2	C						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-1	B	96 abc	93 a-e	91 a-f	91 ab	96 a	94 a-d
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-1	B						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"RG	E						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	E						
14	GUARDSMAN MAX	5	SE	1.56	lb ai/a	2.5	pt/a	PRE	A	93 cde	91 b-f	91 a-f	96 a	95 a	93 a-d
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-2	C						
14	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"W-2	C						
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
15	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	92 de	94 a-e	93 a-d	95 a	96 a	95 ab
15	RESOLVE Q	22.4	WG			1.25	oz/a	2-4"W-2	C						
15	RESOLVE SG	25	SG	0.01437	lb ai/a			2-4"W-2	C						
15	HARMONY SG	50	SG	0.00313	lb ai/a			2-4"W-2	C						
15	DPX-4145	50	WG	0.00719	lb ai/a			2-4"W-2	C						
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	2-4"W-2	C						
15	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C						
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
16	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	92 de	90 c-f	90 b-g	85 b	94 ab	91 a-d
16	ACCENT Q	54.5	WG			0.9	oz/a	2-4"W-2	C						
16	ACCENT	75	WG	0.02453	lb ai/a			2-4"W-2	C						
16	DPX-4145	50	WG	0.00613	lb ai/a			2-4"W-2	C						
16	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C						
16	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4"W-2	C						
16	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-20-09 Control Percent 0 DA-C	AMBTR 08-17-09 Control Percent 28 DA-C	AMBTR 09-14-09 Control Percent 56 DA-C	IPOHE 07-20-09 Control Percent 0 DA-C	IPOHE 08-17-09 Control Percent 28 DA-C	IPOHE 09-14-09 Control Percent 56 DA-C
17	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D	97 a	90 c-f	88 c-g	99 a	95 a	95 ab
17	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D						
17	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D						
17	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D						
17	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	V2-3	D						
17	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D						
17	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D						
18	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D	97 a	89 c-f	90 b-g	99 a	96 a	93 a-d
18	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D						
18	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D						
18	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D						
18	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	V2-3	D						
18	AATREX	4	SC	0.5	lb ai/a	1	pt/a	V2-3	D						
18	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D						
18	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D						
19	BASIS	75	WG	0.0234	lb ai/a	0.5	oz/a	PRE	A	92 de	93 a-e	95 abc	97 a	95 ab	94 a-d
19	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D						
19	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D						
19	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D						
19	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D						
19	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	V2-3	D						
19	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D						
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D						
20	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	PRE	A	86 g	88 ef	83 gh	20 f	91 bc	90 cd
20	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
20	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
21	SURESTART	4.25	SE	1.33	lb ai/a	2.5	pt/a	PRE	A	88 fg	92 a-e	94 a-d	43 e	97 a	94 abc
21	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
21	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
22	SURESTART	4.25	SE	1.06	lb ai/a	2	pt/a	PRE	A	96 ab	95 abc	92 a-e	93 ab	94 ab	94 a-d
22	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
22	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
23	SURESTART	4.25	SE	1.6	lb ai/a	3	pt/a	PRE	A	95 a-d	97 ab	96 ab	57 d	97 a	94 a-d
23	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
23	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
24	SURESTART	4.25	SE	1.6	lb ai/a	3	pt/a	PRE	A	97 a	95 a-d	95 ab	99 a	94 ab	93 a-d
24	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
24	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
24	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
LSD (P=.05)										3.4	5.7	6.7	9.9	4.3	4.9
Replicate F										0.725	1.484	1.923	0.414	8.847	11.775
Replicate Prob(F)										0.4902	0.2373	0.1577	0.6635	0.0006	0.0001
Treatment F										295.681	91.435	66.637	63.891	168.867	124.443
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 07-20-09 Control Percent 0 DA-C	ABUTH 08-17-09 Control Percent 28 DA-C	ABUTH 09-14-09 Control Percent 56 DA-C	AMATA 07-20-09 Control Percent 0 DA-C	AMATA 08-17-09 Control Percent 28 DA-C	AMATA 09-14-09 Control Percent 56 DA-C
1	NONTREATED									0 c	0 c	0 c	0 b	0 c	0 c
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	99 a	98 ab	98 ab	99 a	99 a	99 a
2	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	PRE	A	96 b	98 ab	98 ab	99 a	99 a	99 a
3	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	2-4"W-2	C						
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	PRE	A	99 a	99 a	99 a	99 a	99 a	99 a
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W-2	C						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
5	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	99 a	98 ab	98 ab	99 a	99 a	99 a
5	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
6	BICEP II MAGNUM	5.5	SC	2.9	lb ai/a	2.1	qt/a	PRE	A	99 a	99 a	99 a	99 a	99 a	99 a
6	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4"W-2	C						
6	28% UAN	100	SL	1	% v/v	1	% v/v	2-4"W-2	C						
7	A16907	3.7	SC	0.694	lb ai/a	1.5	pt/a	2-4"W-2	C		99 a	99 a		99 a	99 a
7	TOUCHDOWN TOTAL	4.17	SL	0.98	lb ae/a	30	fl oz/a	2-4"W-2	C						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
8	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"W-2	C		99 a	99 a		99 a	99 a
8	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W-2	C						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
9	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	99 a	97 ab	97 ab	99 a	99 a	99 a
9	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
10	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PRE	A	99 a	99 a	99 a	99 a	98 b	96 b
10	AATREX	4	SC	1.5	lb ai/a	1.5	qt/a	PRE	A						
11	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PRE	A	99 a	98 ab	96 b	99 a	99 a	99 a
12	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	PRE	A	96 b	96 b	96 ab	99 a	99 a	99 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-2	C						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-1	B	99 a	98 ab	99 a	99 a	99 a	99 a
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-1	B						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"RG	E						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	E						
14	GUARDSMAN MAX	5	SE	1.56	lb ai/a	2.5	pt/a	PRE	A	99 a	99 a	99 a	99 a	99 a	98 a
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W-2	C						
14	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"W-2	C						
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
15	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	98 ab	97 ab	98 ab	99 a	99 a	99 a
15	RESOLVE Q	22.4	WG			1.25	oz/a	2-4"W-2	C						
15	RESOLVE SG	25	SG	0.01437	lb ai/a			2-4"W-2	C						
15	HARMONY SG	50	SG	0.00313	lb ai/a			2-4"W-2	C						
15	DPX-4145	50	WG	0.00719	lb ai/a			2-4"W-2	C						
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	2-4"W-2	C						
15	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C						
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
16	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	96 ab	97 ab	98 ab	99 a	99 a	99 a
16	ACCENT Q	54.5	WG			0.9	oz/a	2-4"W-2	C						
16	ACCENT	75	WG	0.02453	lb ai/a			2-4"W-2	C						
16	DPX-4145	50	WG	0.00613	lb ai/a			2-4"W-2	C						
16	AATREX	4	SC	1	lb ai/a	1	qt/a	2-4"W-2	C						
16	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4"W-2	C						
16	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						

Residual Corn Herbicide Program Comparison.

Trial ID: 09-50E-MS120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 07-20-09 Control Percent 0 DA-C	ABUTH 08-17-09 Control Percent 28 DA-C	ABUTH 09-14-09 Control Percent 56 DA-C	AMATA 07-20-09 Control Percent 0 DA-C	AMATA 08-17-09 Control Percent 28 DA-C	AMATA 09-14-09 Control Percent 56 DA-C
17	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D	99 a	99 a	99 a	99 a	99 a	99 a
17	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D						
17	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D						
17	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D						
17	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	V2-3	D						
17	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D						
17	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D						
18	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D	99 a	98 ab	98 ab	99 a	99 a	99 a
18	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D						
18	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D						
18	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D						
18	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	V2-3	D						
18	AATREX	4	SC	0.5	lb ai/a	1	pt/a	V2-3	D						
18	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D						
18	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D						
19	BASIS	75	WG	0.0234	lb ai/a	0.5	oz/a	PRE	A	99 a	99 ab	99 ab	99 a	99 a	99 a
19	STEADFAST Q	37.7	WG			1.5	oz/a	V2-3	D						
19	ACCENT	75	WG	0.02362	lb ai/a			V2-3	D						
19	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-3	D						
19	DPX-4145	50	WG	0.0078	lb ai/a			V2-3	D						
19	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	V2-3	D						
19	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2-3	D						
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	D						
20	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	PRE	A	99 a	99 a	99 a	99 a	99 a	99 a
20	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
20	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
21	SURESTART	4.25	SE	1.33	lb ai/a	2.5	pt/a	PRE	A	99 a	99 a	99 a	99 a	98 b	98 ab
21	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
21	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
22	SURESTART	4.25	SE	1.06	lb ai/a	2	pt/a	PRE	A	99 a	97 ab	98 ab	99 a	99 a	99 a
22	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
22	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
23	SURESTART	4.25	SE	1.6	lb ai/a	3	pt/a	PRE	A	99 a	99 a	99 a	99 a	99 a	99 a
23	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
23	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
24	SURESTART	4.25	SE	1.6	lb ai/a	3	pt/a	PRE	A	99 a	98 ab	98 ab	99 a	99 a	99 a
24	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
24	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	2-4"W-2	C						
24	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W-2	C						
LSD (P=.05)										2.8	2.6	2.8	0.0	0.8	1.8
Replicate F										0.196	8.275	3.336	0.000	1.678	1.700
Replicate Prob(F)										0.8229	0.0009	0.0444	1.0000	0.1980	0.1940
Treatment F										463.835	471.448	422.412	0.000	4765.177	1016.640
Treatment Prob(F)										0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (RDL01A4), Monsanto, BASF, DuPont, Dow.
2. Ratings: CI/WC prior to application C; CI/WC at 28 + 56 da C.
3. Yield.
4. Harvested 1-16-10, (2) 30 inch rows by 24 ft.

Bayer PRE plus POST Herbicides in Corn.

Trial ID: 09-50E-N60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Demonstrate the efficacy of Bayer herbicide programs in corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 3 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 4 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 5 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 6 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.7 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1: 101 LB/A, K: 388 LB/A

Application Description

	A	B	C
Application Date:	06-29-09	07-07-09	07-16-09
Time of Day:	21:00	12:15	12:30
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	V1-2	V3-4
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	NVH	NVH	NVH
Air Temperature, Unit:	80 F	84 F	83 F
% Relative Humidity:	56	68	68
Wind Velocity, Unit:	1 MPH	1 MPH	3 MPH
Wind Direction:	W	SW	SW
Dew Presence (Y/N):	N	N	N
Soil Moisture:	NORMAL	ABONOR	NORMAL
% Cloud Cover:	0	40	15
	06-29-09	07-07-09	07-16-09
Crop stage at application:	NA	V1	V4
Height Min, Max (inch):		2 4	16 18

Bayer PRE plus POST Herbicides in Corn.

Trial ID: 09-50E-N60 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	06-29-09	07-07-09	07-16-09
Weed Code:	SETFA	SETFA	SETFA
Stage Majority (leaves):	NA	NA	COTY
Stage Min, Max:			COTY 2
Height Majority:			0.25 IN
Height Min, Max:			0.25 0.5
Density, Unit:			0.01 FT2
Weed Code:	CYPES	CYPES	CYPES
Stage Majority (leaves):	NA	3	4
Stage Min, Max:		3 3	3 6
Height Majority:		3 IN	3 IN
Height Min, Max:		1 4	1.5 5
Density, Unit:		2 FT2	1.5 FT2
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	COTY	COTY
Stage Min, Max:		COTY COTY	COTY 1
Height Majority:		0.75 IN	0.5 IN
Height Min, Max:		0.5 1	0.5 1
Density, Unit:		2.5 FT2	.001 FT2
Weed Code:	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	COTY	COTY
Stage Min, Max:		COTY COTY	COTY 1
Height Majority:		0.5 IN	0.75 IN
Height Min, Max:		0.25 0.75	0.5 1
Density, Unit:		0.02 FT2	.001 FT2
Weed Code:	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	COTY	1
Stage Min, Max:		COTY COTY	COTY 2
Height Majority:		0.5 IN	1 IN
Height Min, Max:		0.25 0.75	0.5 2
Density, Unit:		0.02 FT2	.001 FT2
Weed Code:	XANST	XANST	XANST
Stage Majority (leaves):	NA	COTY	3
Stage Min, Max:		COTY COTY	COTY 4
Height Majority:		0.5 IN	2 IN
Height Min, Max:		0.25 0.75	1 3
Density, Unit:		0.01 FT2	0.01 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Bayer PRE plus POST Herbicides in Corn.

Trial ID: 09-50E-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 07-12-09 Injury Percent 10 DAE	ZEAMD 08-01-09 Injury Percent 30 DAE	ZEAMD 08-30-09 Injury Percent 60 DAP	SETFA 07-12-09 Control Percent 10 DAE	SETFA 08-01-09 Control Percent 30 DAE	SETFA 08-30-09 Control Percent 60 DAP
1	NONTREATED									0 b	0 a	0 a	0 b	0 c	0 c
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	1 ab	0 a	0 a	98 a	98 ab	97 ab
2	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
3	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PRE	A	1 ab	0 a	0 a	99 a	97 b	95 b
3	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	B	3 a	0 a	0 a	99 a	99 a	98 a
4	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	B						
5	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	V1-2	B	0 b	0 a	0 a	98 a	98 ab	98 a
5	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
6	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	0 b	0 a	0 a	99 a	98 ab	98 a
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
6	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
6	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
7	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	0 b	0 a	0 a	98 a	99 a	98 a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
7	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
7	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
8	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	1 ab	0 a	0 a	98 a	99 a	99 a
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
8	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
9	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	1 ab	0 a	0 a	98 a	98 ab	98 a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
9	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
10	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	0 b	0 a	0 a	99 a	99 a	98 a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
10	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
10	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
11	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	0 b	0 a	0 a	98 a	99 a	99 a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
11	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
12	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	PRE	A	0 b	0 a	0 a	99 a	99 a	99 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3-4	C						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
LSD (P=.05)										2.0	0.0	0.0	1.1	1.5	2.5
Replicate F										0.723	0.000	0.000	0.799	1.803	1.085
Replicate Prob(F)										0.4965	1.0000	1.0000	0.4625	0.1884	0.3555
Treatment F										1.384	0.000	0.000	5355.146	3209.285	1115.440
Treatment Prob(F)										0.2481	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer PRE plus POST Herbicides in Corn.

Trial ID: 09-50E-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										CYPES	CYPES	CYPES	AMBTR	AMBTR	AMBTR
Crop Code															
Rating Date										07-12-09	08-01-09	08-30-09	07-12-09	08-01-09	08-30-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										10 DAE	30 DAE	60 DAP	10 DAE	30 DAE	60 DAP
Trt-Eval Interval															
1	NONTREATED									0 e	0 e	0 e	0 b	0 e	0 e
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	93 a	87 bcd	80 bcd	95 a	96 ab	87 cd
2	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
3	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PRE	A	90 abc	83 cd	72 d	96 a	96 ab	84 d
3	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	B	93 a	92 ab	88 ab	96 a	97 ab	94 ab
4	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	B						
5	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	V1-2	B	80 cd	82 d	76 cd	95 a	94 bc	95 ab
5	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
6	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	83 a-d	83 cd	86 abc	95 a	96 ab	94 ab
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
6	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
6	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
7	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	78 d	87 bcd	86 abc	93 a	96 ab	95 ab
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
7	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
7	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
8	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	90 abc	92 ab	86 abc	95 a	94 bc	92 abc
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
8	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
9	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	82 bcd	90 abc	90 a	94 a	92 cd	91 abc
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
9	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
10	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	94 a	93 ab	93 a	96 a	98 a	96 a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
10	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
10	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
11	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	84 a-d	92 ab	94 a	96 a	95 ab	96 ab
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
11	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
12	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	PRE	A	91 ab	94 a	93 a	95 a	90 d	89 bcd
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3-4	C						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
LSD (P=.05)										10.8	7.6	10.2	4.2	3.2	6.4
Replicate F										0.554	0.935	1.813	3.060	0.537	0.247
Replicate Prob(F)										0.5827	0.4076	0.1866	0.0672	0.5921	0.7831
Treatment F										48.480	100.679	55.256	366.551	653.794	149.018
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer PRE plus POST Herbicides in Corn.

Trial ID: 09-50E-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										IPOHE	IPOHE	IPOHE	ABUTH	ABUTH	ABUTH
Crop Code															
Rating Date										07-12-09	08-01-09	08-30-09	07-12-09	08-01-09	08-30-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										10 DAE	30 DAE	60 DAP	10 DAE	30 DAE	60 DAP
Trt-Eval Interval															
1	NONTREATED									0 f	0 d	0 c	0 b	0 b	0 b
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	93 a-d	96 ab	92 b	99 a	99 a	99 a
2	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
3	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PRE	A	96 ab	96 bc	93 ab	99 a	99 a	99 a
3	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	B	95 abc	97 ab	97 a	99 a	99 a	99 a
4	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	B						
5	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	V1-2	B	97 a	98 ab	95 ab	99 a	99 a	98 a
5	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
6	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	92 b-e	99 a	96 ab	99 a	99 a	98 a
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
6	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
6	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
7	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	90 de	99 a	98 a	99 a	98 a	98 a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
7	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
7	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
8	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	88 e	97 ab	95 ab	98 a	97 a	98 a
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
8	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
9	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	91 cde	93 c	94 ab	99 a	99 a	99 a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
9	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
10	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	90 de	98 ab	96 ab	98 a	98 a	98 a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
10	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
10	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
11	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	93 a-d	96 bc	94 ab	99 a	98 a	98 a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
11	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
12	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	PRE	A	96 a	97 ab	96 ab	98 a	98 a	98 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3-4	C						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
LSD (P=.05)										4.2	3.2	5.2	1.4	2.1	1.9
Replicate F										5.232	1.318	1.773	0.906	5.940	3.233
Replicate Prob(F)										0.0138	0.2881	0.1932	0.4187	0.0087	0.0588
Treatment F										358.938	649.261	240.228	3785.177	1597.300	2028.195
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer PRE plus POST Herbicides in Corn.

Trial ID: 09-50E-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										XANST		XANST		XANST	
Crop Code															
Rating Date										07-12-09		08-01-09		08-30-09	
Rating Data Type										Control		Control		Control	
Rating Unit										Percent		Percent		Percent	
Rating Timing										10 DAE		30 DAE		60 DAP	
Trt-Eval Interval															
1	NONTREATED									0	b	0	b	0	c
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	98	a	98	a	97	a
2	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
3	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	PRE	A	97	a	97	a	92	b
3	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	A						
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	B	98	a	98	a	98	a
4	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	B						
5	BALANCE FLEXX	2	SC	0.094	lb ai/a	6	fl oz/a	V1-2	B	98	a	98	a	98	a
5	AATREX	4	SC	1	lb ai/a	2	pt/a	V1-2	B						
6	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	96	a	98	a	98	a
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
6	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
6	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
7	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	98	a	98	a	98	a
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	V3-4	C						
7	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
7	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	V3-4	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
8	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	98	a	98	a	96	ab
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
8	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
9	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	98	a	99	a	98	a
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V3-4	C						
9	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	V3-4	C						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
10	CORVUS	2.62	SC	0.0614	lb ai/a	3	fl oz/a	PRE	A	98	a	97	a	98	a
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
10	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
10	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
11	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	98	a	98	a	98	a
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	PRE	A						
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V3-4	C						
11	AATREX	4	SC	1	lb ai/a	2	pt/a	V3-4	C						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V3-4	C						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
12	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	PRE	A	98	a	98	a	98	a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V3-4	C						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V3-4	C						
LSD (P=.05)										2.6		3.6		3.4	
Replicate F										9.533		1.609		3.640	
Replicate Prob(F)										0.0010		0.2227		0.0431	
Treatment F										1001.019		516.653		570.662	
Treatment Prob(F)										0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer PRE plus POST Herbicides in Corn.

Trial ID: 09-50E-N60 Location: Belleville Res. Center

Trial Comments

1. Protocol: Bayer (JJA-2).
2. Ratings: CI/WC at 10, 30 + 60 DAE.
3. Estimate percent ground cover of each weed species at each application and evaluation timing.
4. On 7-7-09 at V1-2 application, percent ground cover for SETFA, CYPES, AMBTR, IPOHE, ABUTH, and XANST was 0, 15, 30, 1, 1, and 1, respectively.
   On 7-12-09 at 10 DAE, percent ground cover for SETFA, CYPES, AMBTR, IPOHE, ABUTH, and XANST was 3, 20, 15, 8, 3, and 2, respectively.
   On 7-16-09 at V3-4 application, percent ground cover for SETFA, CYPES, AMBTR, IPOHE, ABUTH, and XANST was 4, 20, 20, 8, 4, and 3, respectively.
   On 8-1-09 at 30 DAE, percent ground cover for SETFA, CYPES, AMBTR, IPOHE, ABUTH, and XANST was 5, 15, 30, 8, 5, and 5, respectively.
   On 8-30-09 at 60 DAE, percent ground cover for SETFA, CYPES, AMBTR, IPOHE, ABUTH, and XANST was 5, 15, 35, 10, 5, and 5, respectively.
5. Not harvested.

Control Options for Roundup Ready Corn in Simulated Replant.

Trial ID: 09-2B-E35 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Evaluate control options for control of a failed stand of glyphosate-resistant corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** ZEAMX	Zea mays L.	corn, volunteer
Pest 2 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 3 Type: W	**Code:** GGGAN		grasses, annual
Pest 4 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 5 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 6 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** PIERRON
CEC: 8 **Fert. Level:** P1: 91 LB/A, K: 410 LB/A

Application Description

	A
Application Date:	07-13-09
Time of Day:	11:00
Application Method:	Spray
Application Timing:	V2-3
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	78 F
% Relative Humidity:	92
Wind Velocity, Unit:	4 MPH
Wind Direction:	S
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	30
	07-13-09
Crop stage at application:	V3
Height Min, Max (inch):	6 8

Control Options for Roundup Ready Corn in Simulated Replant.

Trial ID: 09-2B-E35 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	07-13-09
Weed Code:	ZEAMX
Stage Majority (leaves):	3
Stage Min, Max:	3 3
Height Majority:	8 IN
Height Min, Max:	6 8
Density, Unit:	2 FT2
Weed Code:	CYPES
Stage Majority (leaves):	6
Stage Min, Max:	4 10
Height Majority:	5 IN
Height Min, Max:	3 8
Density, Unit:	1.5 FT2
Weed Code:	GGGAN
Stage Majority (leaves):	2
Stage Min, Max:	COTY 5
Height Majority:	3 IN
Height Min, Max:	0.25 7
Density, Unit:	6 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	3
Stage Min, Max:	1 5
Height Majority:	4 IN
Height Min, Max:	2 5
Density, Unit:	0.75 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	COTY
Stage Min, Max:	COTY 1
Height Majority:	1 IN
Height Min, Max:	1 1.5
Density, Unit:	3 FT2
Weed Code:	AMATA
Stage Majority (leaves):	3
Stage Min, Max:	1 6
Height Majority:	2 IN
Height Min, Max:	1 3
Density, Unit:	0.75 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Control Options for Roundup Ready Corn in Simulated Replant.

Trial ID: 09-2B-E35 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMX 07-20-09 Control Percent 7 DA-A	ZEAMX 07-27-09 Control Percent 14 DA-A	ZEAMX 08-10-09 Control Percent 28 DA-A	CYPES 07-20-09 Control Percent 7 DA-A	CYPES 07-27-09 Control Percent 14 DA-A	CYPES 08-10-09 Control Percent 28 DA-A
1	NONTREATED									0 c	0 c	0 e	0 d	0 d	0 c
2	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	98 a	99 a	99 a	90 ab	87 ab	65 b
2	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	V2-3	A						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
3	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	99 a	99 a	99 a	95 a	94 a	80 a
3	SENCOR	75	WG	0.25	lb ai/a	5.33	oz/a	V2-3	A						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
4	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	95 a	96 a	95 b	88 ab	85 b	80 a
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	V2-3	A	50 b	38 b	10 d	70 c	68 c	65 b
5	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	V2-3	A						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	V2-3	A	57 b	43 b	30 c	82 b	73 c	68 b
6	SENCOR	75	WG	0.25	lb ai/a	5.33	oz/a	V2-3	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
LSD (P=.05)										14.2	7.5	1.3	8.7	8.1	7.7
Replicate F										0.544	2.368	1.000	1.029	0.634	2.385
Replicate Prob(F)										0.5964	0.1439	0.4019	0.3923	0.5503	0.1423
Treatment F										74.852	304.100	13374.601	166.795	178.482	150.169
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Control Options for Roundup Ready Corn in Simulated Replant.

Trial ID: 09-2B-E35 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GGGAN 07-20-09 Control Percent 7 DA-A	GGGAN 07-27-09 Control Percent 14 DA-A	GGGAN 08-10-09 Control Percent 28 DA-A	AMBTR 07-20-09 Control Percent 7 DA-A	AMBTR 07-27-09 Control Percent 14 DA-A	AMBTR 08-10-09 Control Percent 28 DA-A
1	NONTREATED									0 d	0 c	0 d	0 b	0 c	0 e
2	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	97 ab	98 a	90 a	99 a	99 a	94 b
2	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	V2-3	A						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
3	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	98 a	98 a	93 a	99 a	97 b	81 c
3	SENCOR	75	WG	0.25	lb ai/a	5.33	oz/a	V2-3	A						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
4	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	96 ab	93 b	70 b	99 a	96 b	62 d
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	V2-3	A	87 c	90 b	58 c	99 a	99 a	99 a
5	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	V2-3	A						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	V2-3	A	92 bc	92 b	61 c	99 a	99 a	98 ab
6	SENCOR	75	WG	0.25	lb ai/a	5.33	oz/a	V2-3	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
LSD (P=.05)										6.0	3.6	5.2	0.0	0.9	4.5
Replicate F										1.264	3.732	0.789	0.000	1.000	1.874
Replicate Prob(F)										0.3240	0.0616	0.4805	1.0000	0.4019	0.2036
Treatment F										411.432	1156.095	413.069	0.000	21603.252	696.137
Treatment Prob(F)										0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Control Options for Roundup Ready Corn in Simulated Replant.

Trial ID: 09-2B-E35 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH	ABUTH	ABUTH	AMATA	AMATA	AMATA
	Pest Code									ABUTH	ABUTH	ABUTH	AMATA	AMATA	AMATA
	Crop Code														
	Rating Date									07-20-09	07-27-09	08-10-09	07-20-09	07-27-09	08-10-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing														
	Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	7 DA-A	14 DA-A	28 DA-A
1	NONTREATED									0 b	0 c	0 c	0 b	0 c	0 d
2	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	99 a	99 a	99 a	99 a	99 a	92 b
2	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	V2-3	A						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
3	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	99 a	99 a	98 a	99 a	99 a	97 a
3	SENCOR	75	WG	0.25	lb ai/a	5.33	oz/a	V2-3	A						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
4	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	40	fl oz/a	V2-3	A	99 a	96 b	94 b	99 a	93 b	58 c
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	V2-3	A	99 a	99 a	99 a	99 a	99 a	99 a
5	AATREX	4	SC	0.5	lb ai/a	16	fl oz/a	V2-3	A						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	V2-3	A	99 a	99 a	99 a	99 a	99 a	99 a
6	SENCOR	75	WG	0.25	lb ai/a	5.33	oz/a	V2-3	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-3	A						
	LSD (P=.05)									0.0	0.9	1.1	0.0	2.1	3.0
	Replicate F									0.000	1.000	0.143	0.000	1.000	1.980
	Replicate Prob(F)									1.0000	0.4019	0.8686	1.0000	0.4019	0.1887
	Treatment F									0.000	21780.252	12338.973	0.000	3459.136	1725.290
	Treatment Prob(F)									1.0000	0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (PQ001A4) / BASF.
2. Ratings: WC at 7, 14 + 28 DAT.
3. Target a thin stand of corn (1-2 plants / ft of row).
4. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
5. Not harvested.

One-Pass Early Postemergence Corn Herbicide Comparison.

Trial ID: 09-50E-MN50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Compare the foliar and residual weed control from various competitive programs for early postemergence applications in corn in a one-pass application strategy.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 5 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year		
1. GLXMA	2008	

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.7 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1: 101 LB/A, K: 388 LB/A

Application Description

	A
Application Date:	07-07-09
Time of Day:	12:00
Application Method:	Spray
Application Timing:	V1-2
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	84 F
% Relative Humidity:	68
Wind Velocity, Unit:	1 MPH
Wind Direction:	SW
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	40
	07-07-09
Crop stage at application:	V1
Height Min, Max (inch):	2 4

Pest Stage At Each Application

Application Date:	07-07-09
Weed Code:	CYPES
Stage Majority (leaves):	3
Stage Min, Max:	3 3
Height Majority:	3 IN
Height Min, Max:	1 4
Density, Unit:	2 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	COTY
Stage Min, Max:	COTY COTY
Height Majority:	0.75 IN
Height Min, Max:	0.5 1
Density, Unit:	2.5 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	COTY
Stage Min, Max:	COTY COTY
Height Majority:	0.75 IN
Height Min, Max:	0.25 1
Density, Unit:	0.02 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	COTY
Stage Min, Max:	COTY COTY
Height Majority:	0.5 IN
Height Min, Max:	0.25 0.75
Density, Unit:	0.02 FT2
Weed Code:	AMATA
Stage Majority (leaves):	COTY
Stage Min, Max:	COTY COTY
Height Majority:	0.5 IN
Height Min, Max:	0.25 0.75
Density, Unit:	0.02 FT2

One-Pass Early Postemergence Corn Herbicide Comparison.

Trial ID: 09-50E-MN50 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

One-Pass Early Postemergence Corn Herbicide Comparison.

Trial ID: 09-50E-MN50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-15-10 Moisture Percent	ZEAMD 01-15-10 Yield bu/A	ZEAMD 07-21-09 Injury Percent 14 DA-A	ZEAMD 08-04-09 Injury Percent 28 DA-A	ZEAMD 09-01-09 Injury Percent 56 DA-A
1	NONTREATED									21.7 c	70 b	0 a	0 a	0 a
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	A	22.7 a	112 a	0 a	0 a	0 a
2	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A					
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
3	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	V1-2	A	22.7 ab	117 a	0 a	0 a	0 a
3	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A					
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V1-2	A	21.5 c	112 a	0 a	0 a	0 a
4	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A					
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	V1-2	A	21.4 c	119 a	0 a	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
6	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	V1-2	A	21.5 c	108 a	0 a	0 a	0 a
6	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V1-2	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
7	STEADFAST Q	37.7	WG			1.5	oz/a	V1-2	A	21.3 c	106 a	0 a	0 a	0 a
7	ACCENT	75	WG	0.02362	lb ai/a			V1-2	A					
7	RESOLVE SG	25	SG	0.01172	lb ai/a			V1-2	A					
7	DPX-4145	50	WG	0.0078	lb ai/a			V1-2	A					
7	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	V1-2	A					
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	V1-2	A					
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
8	BASIS	75	WG	0.0234	lb ai/a	0.5	oz/a	V1-2	A	21.8 bc	110 a	0 a	0 a	0 a
8	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A					
8	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A					
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
9	RESOLVE Q	22.4	WG			1.25	oz/a	V1-2	A	21.4 c	113 a	0 a	0 a	0 a
9	RESOLVE SG	25	SG	0.01437	lb ai/a			V1-2	A					
9	HARMONY SG	50	SG	0.00313	lb ai/a			V1-2	A					
9	DPX-4145	50	WG	0.00719	lb ai/a			V1-2	A					
9	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A					
9	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A					
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A					
LSD (P=.05)										0.86	21.4	0.0	0.0	0.0
Replicate F										18.574	0.587	0.000	0.000	0.000
Replicate Prob(F)										0.0001	0.5673	1.0000	1.0000	1.0000
Treatment F										3.587	4.266	0.000	0.000	0.000
Treatment Prob(F)										0.0142	0.0066	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

One-Pass Early Postemergence Corn Herbicide Comparison.

Trial ID: 09-50E-MN50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	CYPES 07-21-09 Control Percent 14 DA-A	CYPES 08-04-09 Control Percent 28 DA-A	CYPES 09-01-09 Control Percent 56 DA-A	AMBTR 07-21-09 Control Percent 14 DA-A	AMBTR 08-04-09 Control Percent 28 DA-A	AMBTR 09-01-09 Control Percent 56 DA-A
1	NONTREATED									0 c	0 d	0 d	0 d	0 d	0 c
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	A	87 a	80 abc	75 abc	97 a	93 a	90 a
2	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
3	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	V1-2	A	92 a	85 a	84 a	96 a	93 a	87 ab
3	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V1-2	A	90 a	83 ab	83 a	93 ab	93 a	90 a
4	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	V1-2	A	78 b	68 c	70 bc	91 bc	89 abc	85 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
6	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	V1-2	A	77 b	68 c	67 c	90 bc	85 c	79 ab
6	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V1-2	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
7	STEADFAST Q	37.7	WG			1.5	oz/a	V1-2	A	83 ab	75 abc	80 ab	89 c	87 bc	77 b
7	ACCENT	75	WG	0.02362	lb ai/a			V1-2	A						
7	RESOLVE SG	25	SG	0.01172	lb ai/a			V1-2	A						
7	DPX-4145	50	WG	0.0078	lb ai/a			V1-2	A						
7	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	V1-2	A						
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	V1-2	A						
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
8	BASIS	75	WG	0.0234	lb ai/a	0.5	oz/a	V1-2	A	78 b	72 bc	68 bc	95 a	91 abc	87 ab
8	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A						
8	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
9	RESOLVE Q	22.4	WG			1.25	oz/a	V1-2	A	91 a	85 a	77 abc	93 ab	92 ab	80 ab
9	RESOLVE SG	25	SG	0.01437	lb ai/a			V1-2	A						
9	HARMONY SG	50	SG	0.00313	lb ai/a			V1-2	A						
9	DPX-4145	50	WG	0.00719	lb ai/a			V1-2	A						
9	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A						
9	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
LSD (P=.05)										8.9	12.4	12.5	3.4	6.3	11.3
Replicate F										0.821	0.939	0.583	1.617	1.272	0.182
Replicate Prob(F)										0.4576	0.4115	0.5695	0.2293	0.3072	0.8352
Treatment F										93.445	41.260	38.813	743.341	208.358	56.923
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

One-Pass Early Postemergence Corn Herbicide Comparison.

Trial ID: 09-50E-MN50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOHE	IPOHE	IPOHE	ABUTH	ABUTH	ABUTH
	Pest Code									IPOHE	IPOHE	IPOHE	ABUTH	ABUTH	ABUTH
	Crop Code														
	Rating Date									07-21-09	08-04-09	09-01-09	07-21-09	08-04-09	09-01-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing														
	Trt-Eval Interval									14 DA-A	28 DA-A	56 DA-A	14 DA-A	28 DA-A	56 DA-A
1	NONTREATED									0 c	0 c	0 c	0 c	0 c	0 c
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	A	99 a	98 a	97 a	99 a	99 a	99 a
2	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
3	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	V1-2	A	99 a	98 a	96 a	99 a	99 a	99 a
3	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V1-2	A	99 a	98 a	96 a	99 a	99 a	99 a
4	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	V1-2	A	99 a	99 a	96 a	99 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
6	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	V1-2	A	89 b	75 b	72 b	91 b	95 ab	92 b
6	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V1-2	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
7	STEADFAST Q	37.7	WG			1.5	oz/a	V1-2	A	99 a	99 a	93 a	99 a	95 b	95 ab
7	ACCENT	75	WG	0.02362	lb ai/a			V1-2	A						
7	RESOLVE SG	25	SG	0.01172	lb ai/a			V1-2	A						
7	DPX-4145	50	WG	0.0078	lb ai/a			V1-2	A						
7	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	V1-2	A						
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	V1-2	A						
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
8	BASIS	75	WG	0.0234	lb ai/a	0.5	oz/a	V1-2	A	99 a	99 a	97 a	98 a	99 a	99 a
8	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A						
8	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
9	RESOLVE Q	22.4	WG			1.25	oz/a	V1-2	A	99 a	98 a	92 a	99 a	99 a	99 a
9	RESOLVE SG	25	SG	0.01437	lb ai/a			V1-2	A						
9	HARMONY SG	50	SG	0.00313	lb ai/a			V1-2	A						
9	DPX-4145	50	WG	0.00719	lb ai/a			V1-2	A						
9	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A						
9	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A						
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A						
	LSD (P=.05)									9.7	10.9	9.4	5.7	3.9	3.8
	Replicate F									1.000	0.541	0.049	1.258	0.280	0.031
	Replicate Prob(F)									0.3897	0.5922	0.9523	0.3109	0.7592	0.9698
	Treatment F									103.326	81.316	103.104	292.999	623.046	664.410
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

One-Pass Early Postemergence Corn Herbicide Comparison.

Trial ID: 09-50E-MN50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
	Pest Code									AMATA	AMATA	AMATA
	Crop Code											
	Rating Date									07-21-09	08-04-09	09-01-09
	Rating Data Type									Control	Control	Control
	Rating Unit									Percent	Percent	Percent
	Rating Timing											
	Trt-Eval Interval									14 DA-A	28 DA-A	56 DA-A
1	NONTREATED									0 b	0 b	0 c
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V1-2	A	99 a	98 a	99 a
2	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A			
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A			
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
3	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	V1-2	A	99 a	99 a	99 a
3	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A			
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A			
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
4	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V1-2	A	99 a	99 a	98 a
4	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A			
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A			
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	V1-2	A	99 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	A			
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
6	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	V1-2	A	99 a	96 a	95 b
6	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V1-2	A			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
7	STEADFAST Q	37.7	WG			1.5	oz/a	V1-2	A	99 a	99 a	97 ab
7	ACCENT	75	WG	0.02362	lb ai/a			V1-2	A			
7	RESOLVE SG	25	SG	0.01172	lb ai/a			V1-2	A			
7	DPX-4145	50	WG	0.0078	lb ai/a			V1-2	A			
7	LEXAR	3.7	SC	1.39	lb ai/a	1.5	qt/a	V1-2	A			
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	V1-2	A			
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A			
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
8	BASIS	75	WG	0.0234	lb ai/a	0.5	oz/a	V1-2	A	99 a	99 a	98 ab
8	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A			
8	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A			
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A			
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
9	RESOLVE Q	22.4	WG			1.25	oz/a	V1-2	A	99 a	98 a	97 ab
9	RESOLVE SG	25	SG	0.01437	lb ai/a			V1-2	A			
9	HARMONY SG	50	SG	0.00313	lb ai/a			V1-2	A			
9	DPX-4145	50	WG	0.00719	lb ai/a			V1-2	A			
9	CALLISTO	4	SC	0.0625	lb ai/a	2	fl oz/a	V1-2	A			
9	AATREX	4	SC	1	lb ai/a	1	qt/a	V1-2	A			
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V1-2	A			
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V1-2	A			
	LSD (P=.05)									0.0	3.2	2.9
	Replicate F									0.000	0.826	1.015
	Replicate Prob(F)									1.0000	0.4554	0.3845
	Treatment F									0.000	960.595	1165.858
	Treatment Prob(F)									1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer, Syngenta, Monsanto, Dow, DuPont.
2. Ratings: CI/WC at 14, 28 + 56 DAT.
3. Yield.
4. Harvested 1-15-10, (2) 30 inch rows by 24 ft.

Impact Sequential Programs.

Trial ID: 09-19B-S60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-22-09

Objectives: Compare performance of Impact to other postemergence products when used in sequential weed control programs and in tank-mixes with glyphosate in Roundup Ready corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common
Pest 3 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 5 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 50 LB/A, K2O 100 LB/A

% OM: 2.9 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1 79 LB/A, K 557 LB/A

Application Description

	A	B	C
Application Date:	05-22-09	06-18-09	06-12-09
Time of Day:	9:30	8:00	14:30
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	2-4"W	4-6"W
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	DKT	DKT	NRJ
Air Temperature, Unit:	74 F	80 F	70 F
% Relative Humidity:	92	92	92
Wind Velocity, Unit:	1 MPH	2 MPH	1 MPH
Wind Direction:	E	NE	N
Dew Presence (Y/N):	N	N	N
Soil Moisture:	NORMAL	ABONOR	ABONOR
% Cloud Cover:	2	30	100
	05-22-09	06-18-09	06-12-09
Crop stage at application:	NA	V4	V3-4
Height Min, Max (inch):		10 16	8 14

Pest Stage At Each Application

Application Date:	05-22-09	06-18-09	06-12-09
Weed Code:	SETFA	SETFA	SETFA
Stage Majority (leaves):	NA	NA	2
Stage Min, Max:			1 3
Height Majority:			4 IN
Height Min, Max:			1 7
Density, Unit:			10 FT2
Weed Code:	XANST	XANST	XANST
Stage Majority (leaves):	NA	4	3
Stage Min, Max:		4 8	2 5
Height Majority:		4 IN	4 IN
Height Min, Max:		2 6	2 6
Density, Unit:		1 FT2	4 FT2
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	4	NA
Stage Min, Max:		4 8	
Height Majority:		4 IN	
Height Min, Max:		2 6	
Density, Unit:		0.25 FT2	
Weed Code:	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	2	2
Stage Min, Max:		1 3	COTY 3
Height Majority:		3 IN	1 IN
Height Min, Max:		2 4	0.5 2
Density, Unit:		0.1 FT2	0.5 FT2
Weed Code:	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	NA	2
Stage Min, Max:			COTY 4
Height Majority:			1.5 IN
Height Min, Max:			0.5 2
Density, Unit:			1 FT2

Impact Sequential Programs.

Trial ID: 09-19B-S60 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Impact Sequential Programs.

Trial ID: 09-19B-S60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 11-14-09 Moisture Percent	ZEAMD 11-14-09 Yield bu/A	ZEAMD Injury Percent 7 DAT	ZEAMD Injury Percent 14 DAT	ZEAMD Injury Percent 28 DAT	ZEAMD Injury Percent 56 DAT
1	NONTREATED									15.3 a	21 b	0 a	0 a	0 a	0 a
2	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	15.2 a	102 a	0 a	0 a	0 a	0 a
3	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	15.2 a	111 a	0 a	0 a	0 a	0 a
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B						
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B						
3	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B						
3	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B						
4	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	15.7 a	135 a	0 a	0 a	0 a	0 a
4	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B						
4	ACCENT Q	54.5	WG			0.45	oz/a	2-4"W	B						
4	ACCENT	75	WG	0.01226	lb ai/a			2-4"W	B						
4	DPX-4145	50	WG	0.00307	lb ai/a			2-4"W	B						
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B						
4	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B						
4	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B						
5	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	15.6 a	112 a	0 a	0 a	0 a	0 a
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"W	B						
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B						
5	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B						
5	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B						
6	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	15.3 a	113 a	0 a	0 a	0 a	0 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C						
7	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	15.4 a	105 a	0 a	0 a	0 a	0 a
7	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C						
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C						
8	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	15.3 a	136 a	0 a	0 a	0 a	0 a
8	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C						
8	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	4-6"W	C						
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C						
9	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	15.4 a	135 a	0 a	0 a	0 a	0 a
9	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C						
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C						
9	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	4-6"W	C						
9	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C						
10	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	15.6 a	138 a	0 a	0 a	0 a	0 a
10	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C						
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"W	C						
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C						
LSD (P=.05)										0.68	47.0	0.0	0.0	0.0	0.0
Replicate F										2.604	5.405	0.000	0.000	0.000	0.000
Replicate Prob(F)										0.1032	0.0145	1.0000	1.0000	1.0000	1.0000
Treatment F										0.625	4.814	0.000	0.000	0.000	0.000
Treatment Prob(F)										0.7609	0.0023	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Impact Sequential Programs.

Trial ID: 09-19B-S60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA Control Percent 7 DAT	SETFA Control Percent 14 DAT	SETFA Control Percent 28 DAT	SETFA Control Percent 56 DAT
1	NONTREATED									0 b	0 c	0 d	0 b
2	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	99 ab	98 abc	98 a
3	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	99 a	99 ab	97 a
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B				
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B				
3	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B				
3	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B				
4	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	99 a	99 a	98 a
4	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B				
4	ACCENT Q	54.5	WG			0.45	oz/a	2-4"W	B				
4	ACCENT	75	WG	0.01226	lb ai/a			2-4"W	B				
4	DPX-4145	50	WG	0.00307	lb ai/a			2-4"W	B				
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B				
4	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B				
4	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B				
5	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	99 a	99 ab	98 a
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"W	B				
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B				
5	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B				
5	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B				
6	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	98 b	98 abc	98 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C				
7	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	99 a	97 c	97 a
7	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C				
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C				
8	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	99 a	98 abc	97 a
8	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C				
8	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	4-6"W	C				
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C				
9	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	98 b	98 abc	97 a
9	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C				
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C				
9	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	4-6"W	C				
9	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C				
10	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	99 ab	98 bc	98 a
10	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C				
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"W	C				
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C				
LSD (P=.05)										0.0	0.6	1.3	2.6
Replicate F										0.000	0.730	1.552	2.058
Replicate Prob(F)										1.0000	0.4958	0.2389	0.1568
Treatment F										0.000	21361.651	5386.683	1201.961
Treatment Prob(F)										1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Impact Sequential Programs.

Trial ID: 09-19B-S60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	XANST Control Percent 7 DAT	XANST Control Percent 14 DAT	XANST Control Percent 28 DAT	XANST Control Percent 56 DAT	AMBTR Control Percent 7 DAT	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT
1	NONTREATED									0 c	0 c	0 c	0 c	0 b	0 c	0 d	0 c
2	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	73 b	64 b	47 b	99 a	93 b	96 c	85 b
3	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	98 a	96 a	95 a	99 a	98 a	99 ab	99 a
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B								
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B								
3	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B								
3	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B								
4	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	98 a	96 a	94 a	99 a	99 a	98 ab	98 a
4	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B								
4	ACCENT Q	54.5	WG			0.45	oz/a	2-4"W	B								
4	ACCENT	75	WG	0.01226	lb ai/a			2-4"W	B								
4	DPX-4145	50	WG	0.00307	lb ai/a			2-4"W	B								
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B								
4	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B								
4	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B								
5	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	98 a	97 a	96 a	99 a	99 a	98 ab	99 a
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"W	B								
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B								
5	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B								
5	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B								
6	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 b	92 a	85 a	78 ab	99 a	98 a	98 b	98 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
7	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	95 a	92 a	91 a	99 a	98 a	99 ab	98 a
7	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C								
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C								
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
8	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	95 a	94 a	86 a	99 a	99 a	99 a	99 a
8	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C								
8	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	4-6"W	C								
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
9	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	97 a	94 a	94 a	99 a	99 a	99 a	99 a
9	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C								
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
9	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	4-6"W	C								
9	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
10	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	97 a	97 a	97 a	99 a	99 a	99 a	99 a
10	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C								
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"W	C								
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
LSD (P=.05)										0.3	11.3	16.7	32.2	0.0	1.8	1.3	11.7
Replicate F										1.000	0.794	1.048	1.322	0.000	2.554	1.872	1.036
Replicate Prob(F)										0.3874	0.4671	0.3711	0.2912	1.0000	0.1056	0.1825	0.3751
Treatment F										88144.009	64.392	29.034	8.245	0.000	2642.125	5254.101	62.035
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Impact Sequential Programs.

Trial ID: 09-19B-S60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH Control Percent 7 DAT	ABUTH Control Percent 14 DAT	ABUTH Control Percent 28 DAT	ABUTH Control Percent 56 DAT	AMATA Control Percent 7 DAT	AMATA Control Percent 14 DAT	AMATA Control Percent 28 DAT	AMATA Control Percent 56 DAT
1	NONTREATED									0 b	0 d	0 c	0 b	0 b	0 c	0 c	0 c
2	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	91 c	86 b	92 a	99 a	99 a	93 b	96 ab
3	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	99 a	99 a	99 a	99 a	99 a	99 a	98 a
3	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B								
3	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B								
3	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B								
3	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B								
4	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	99 a	99 a	98 a	99 a	99 a	99 a	99 a
4	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"W	B								
4	ACCENT Q	54.5	WG			0.45	oz/a	2-4"W	B								
4	ACCENT	75	WG	0.01226	lb ai/a			2-4"W	B								
4	DPX-4145	50	WG	0.00307	lb ai/a			2-4"W	B								
4	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B								
4	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B								
4	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B								
5	BICEP II MAGNUM	5.5	SC	1.44	lb ai/a	2.1	pt/a	PRE	A	99 a	99 a	99 a	98 a	99 a	99 a	99 a	99 a
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"W	B								
5	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"W	B								
5	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	B								
5	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B								
6	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	93 bc	91 ab	97 a	99 a	96 b	90 b	94 b
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
7	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	98 ab	95 a	96 a	99 a	99 a	97 a	98 ab
7	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C								
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	C								
7	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
8	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	98 a	93 ab	98 a	99 a	99 a	99 a	98 a
8	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C								
8	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	4-6"W	C								
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
9	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	98 ab	95 a	98 a	99 a	98 a	98 a	99 a
9	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	4-6"W	C								
9	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
9	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	4-6"W	C								
9	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
10	DUAL II MAGNUM	7.64	EC	0.716	lb ai/a	0.75	pt/a	PRE	A	99 a	94 abc	95 a	98 a	99 a	99 a	98 a	98 a
10	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	4-6"W	C								
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"W	C								
10	AATREX	4	SC	0.5	lb ai/a	1	pt/a	4-6"W	C								
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	C								
LSD (P=.05)										0.0	4.8	8.2	6.5	0.0	1.4	3.2	3.7
Replicate F										0.000	3.288	0.650	0.923	0.000	1.465	0.122	1.221
Replicate Prob(F)										1.0000	0.0607	0.5340	0.4154	1.0000	0.2573	0.8856	0.3183
Treatment F										0.000	355.031	120.845	197.018	0.000	4584.425	801.279	611.401
Treatment Prob(F)										1.0000	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: AMVAC (09-TPZ-H-100).
2. Ratings: CI at 7, 14 + 28 da B+C; Overall burndown at 7 da B+C; WC at 14, 28 + 56 da B+C.
3. Yield if possible.
4. Ratings at 7 days after the 2-4"W and 4-6"W applications were on
5. Harvested 11-14-09, (2) 30 inch rows by 22 ft.

Kixor Programs in Corn.

Trial ID: 09-50E-S50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Evaluate the efficacy and crop tolerance of Kixor-based brands in one- and two-pass weed control programs in corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 2 Type: W	**Code:** GGGAN		grasses, annual
Pest 3 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 5 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.7 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1: 101 LB/A, K: 388 LB/A

Application Description

	A	B
Application Date:	06-29-09	07-20-09
Time of Day:	20:30	8:00
Application Method:	Spray	Spray
Application Timing:	PRE	10-14"CN
Application Placement:	BROSOI	BROFOL
Applied By:	NVH	DKP
Air Temperature, Unit:	72 F	68 F
% Relative Humidity:	80	92
Wind Velocity, Unit:	3 MPH	2 MPH
Wind Direction:	W	SE
Dew Presence (Y/N):	N	Y
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	10	10
	06-29-09	07-20-09
Crop stage at application:	NA	V5
Height Min, Max (inch):		4 14

Pest Stage At Each Application

Application Date:	06-29-09	07-20-09
Weed Code:	CYPES	CYPES
Stage Majority (leaves):	NA	3
Stage Min, Max:		3 6
Height Majority:		3 IN
Height Min, Max:		2 6
Density, Unit:		0.2 FT2
Weed Code:	GGGAN	GGGAN
Stage Majority (leaves):	NA	1
Stage Min, Max:		COTY 4
Height Majority:		0.5 IN
Height Min, Max:		0.25 3
Density, Unit:		0.01 FT2
Weed Code:	AMBTR	AMBTR
Stage Majority (leaves):	NA	2
Stage Min, Max:		COTY 6
Height Majority:		3 IN
Height Min, Max:		1 5
Density, Unit:		0.7 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA	1
Stage Min, Max:		COTY 2
Height Majority:		0.5 IN
Height Min, Max:		0.5 1
Density, Unit:		0.01 FT2
Weed Code:	IPOHE	IPOHE
Stage Majority (leaves):	NA	2
Stage Min, Max:		2 6
Height Majority:		3 IN
Height Min, Max:		1 4
Density, Unit:		0.4 FT2

Kixor Programs in Corn.

Trial ID: 09-50E-S50 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Kixor Programs in Corn.

Trial ID: 09-50E-S50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-15-10 Moisture Percent	ZEAMD 01-15-10 Yield bu/A	ZEAMD 07-27-09 Injury Percent 7 DA-B 28 DA-A	ZEAMD 08-24-09 Injury Percent 35 DA-B 56 DA-A	ZEAMD 09-21-09 Injury Percent 63 DA-B 84 DA-A
1	NONTREATED									19.9 a	33 b	0 a	0 a	0 a
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	21.6 a	104 a	0 a	0 a	0 a
3	HARNESS XTRA 5.6	5.6	EC	3.5	lb ai/a	2.5	qt/a	PRE	A	21.3 a	97 a	0 a	0 a	0 a
4	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PRE	A	21.6 a	109 a	0 a	0 a	0 a
5	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	23.2 a	112 a	0 a	0 a	0 a
5	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A					
6	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	21.9 a	101 a	0 a	0 a	0 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B					
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B					
7	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A	23.9 a	95 a	0 a	0 a	0 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B					
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B					
8	SHARPEN	2.85	SC	0.0557	lb ai/a	2.5	fl oz/a	PRE	A	22.4 a	97 a	0 a	0 a	0 a
8	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B					
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B					
9	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	PRE	A	23.0 a	99 a	0 a	0 a	0 a
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B					
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B					
10	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	22.1 a	99 a	0 a	0 a	0 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B					
10	STATUS	56	WG	0.0875	lb ai/a	2.5	oz/a	10-14"CN	B					
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B					
LSD (P=.05)										5.08	36.2	0.0	0.0	0.0
Replicate F										2.643	4.145	0.000	0.000	0.000
Replicate Prob(F)										0.1062	0.0386	1.0000	1.0000	1.0000
Treatment F										0.452	3.475	0.000	0.000	0.000
Treatment Prob(F)										0.8833	0.0184	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Programs in Corn.

Trial ID: 09-50E-S50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	CYPES 07-27-09 Control Percent 7 DA-B 28 DA-A	CYPES 08-24-09 Control Percent 35 DA-B 56 DA-A	CYPES 09-21-09 Control Percent 63 DA-B 84 DA-A	GGGAN 07-27-09 Control Percent 7 DA-B 28 DA-A	GGGAN 08-24-09 Control Percent 35 DA-B 56 DA-A	GGGAN 09-21-09 Control Percent 63 DA-B 84 DA-A
1	NONTREATED									0 d	0 e	0 e	0 c	0 d	0 d
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	98 a	92 a	92 a	98 a	93 abc	93 abc
3	HARNESS XTRA 5.6	5.6	EC	3.5	lb ai/a	2.5	qt/a	PRE	A	83 b	73 c	73 c	95 b	90 c	90 c
4	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PRE	A	96 a	94 a	94 a	98 a	94 ab	94 ab
5	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	72 c	63 d	63 d	98 a	92 bc	92 bc
5	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
6	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	99 a	87 ab	87 ab	99 a	96 ab	96 ab
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
7	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A	93 a	88 ab	88 ab	97 ab	96 a	96 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
8	SHARPEN	2.85	SC	0.0557	lb ai/a	2.5	fl oz/a	PRE	A	98 a	93 a	93 a	98 a	97 a	97 a
8	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
9	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	PRE	A	93 a	87 ab	90 ab	98 a	95 ab	95 ab
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
10	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	94 a	82 b	82 b	97 ab	93 abc	93 abc
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
10	STATUS	56	WG	0.0875	lb ai/a	2.5	oz/a	10-14"CN	B						
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
LSD (P=.05)										8.3	8.5	8.7	2.3	3.7	3.7
Replicate F										1.769	6.398	6.493	0.669	1.522	1.522
Replicate Prob(F)										0.1989	0.0080	0.0075	0.5243	0.2450	0.2450
Treatment F										117.940	97.866	95.383	1590.969	562.257	562.257
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Programs in Corn.

Trial ID: 09-50E-S50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										AMBTR	AMBTR	AMBTR	AMATA	AMATA	AMATA
Crop Code															
Rating Date										07-27-09	08-24-09	09-21-09	07-27-09	08-24-09	09-21-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										7 DA-B	35 DA-B	63 DA-B	7 DA-B	35 DA-B	63 DA-B
Trt-Eval Interval										28 DA-A	56 DA-A	84 DA-A	28 DA-A	56 DA-A	84 DA-A
1	NONTREATED									0 c	0 d	0 d	0 c	0 c	0 c
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	95 ab	80 b	78 bc	99 a	93 a	93 a
3	HARNESS XTRA 5.6	5.6	EC	3.5	lb ai/a	2.5	qt/a	PRE	A	92 b	69 c	69 c	99 a	99 a	99 a
4	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PRE	A	95 ab	82 ab	82 ab	99 a	94 a	94 a
5	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	94 ab	80 b	80 ab	89 b	70 b	70 b
5	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A						
6	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	94 ab	87 ab	85 ab	99 a	99 a	99 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
7	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A	96 a	87 ab	87 ab	99 a	96 a	96 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
8	SHARPEN	2.85	SC	0.0557	lb ai/a	2.5	fl oz/a	PRE	A	97 a	91 a	91 a	99 a	98 a	98 a
8	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
9	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	PRE	A	96 a	92 a	87 ab	98 a	93 a	93 a
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
10	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	94 ab	89 ab	89 ab	99 a	98 a	98 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B						
10	STATUS	56	WG	0.0875	lb ai/a	2.5	oz/a	10-14"CN	B						
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B						
LSD (P=.05)										3.9	10.4	10.9	8.9	15.5	15.5
Replicate F										0.086	2.544	3.591	0.901	0.500	0.500
Replicate Prob(F)										0.9183	0.1064	0.0487	0.4236	0.6147	0.6147
Treatment F										532.744	60.782	54.502	108.652	34.684	34.684
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Kixor Programs in Corn.

Trial ID: 09-50E-S50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										IPOHE	IPOHE	IPOHE
Crop Code												
Rating Date										07-27-09	08-24-09	09-21-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing										7 DA-B	35 DA-B	63 DA-B
Trt-Eval Interval										28 DA-A	56 DA-A	84 DA-A
1	NONTREATED									0 c	0 c	0 c
2	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	97 a	90 a	90 a
3	HARNESS XTRA 5.6	5.6	EC	3.5	lb ai/a	2.5	qt/a	PRE	A	98 a	92 a	92 a
4	INTEGRITY	5.57	EC	0.87	lb ai/a	20	fl oz/a	PRE	A	93 a	90 a	90 a
5	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	92 a	78 b	78 b
5	AATREX	4	SC	1	lb ai/a	1	qt/a	PRE	A			
6	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	98 a	94 a	94 a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B			
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B			
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B			
7	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A	97 a	92 a	92 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B			
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B			
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B			
8	SHARPEN	2.85	SC	0.0557	lb ai/a	2.5	fl oz/a	PRE	A	98 a	91 a	91 a
8	HARNESS XTRA 5.6	5.6	EC	2.1	lb ai/a	1.5	qt/a	PRE	A			
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B			
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B			
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B			
9	SURESTART	4.25	SE	0.93	lb ai/a	1.75	pt/a	PRE	A	83 b	83 b	83 b
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B			
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B			
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B			
10	INTEGRITY	5.57	EC	0.566	lb ai/a	13	fl oz/a	PRE	A	93 a	91 a	91 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	10-14"CN	B			
10	STATUS	56	WG	0.0875	lb ai/a	2.5	oz/a	10-14"CN	B			
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	10-14"CN	B			
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	10-14"CN	B			
LSD (P=.05)										6.1	6.4	6.4
Replicate F										0.745	9.230	9.230
Replicate Prob(F)										0.4886	0.0017	0.0017
Treatment F										216.561	175.657	175.657
Treatment Prob(F)										0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: BASF (C9F-B-02).
2. Ratings: CI/WC at 28, 56 + 84 da A.
3. Yield.
4. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum). Stand reduction due to standing water was observed and recorded by plot.
5. Harvested 1-15-10, (2) 30 inch rows by 24 ft.

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Evaluate the efficacy of Vida and Yukon for weed control in early postemergence applications in corn.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-73 **Description:** RR2/YGCB
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 2 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 3 Type: W	**Code:** IPOSS		morningglory, species
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.1 **Texture:** SILT LOAM
pH: 5.6 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1 80 LB/A, K 435 LB/A

Application Description

	A
Application Date:	07-20-09
Time of Day:	13:00
Application Method:	Spray
Application Timing:	3-5"W
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	78 F
% Relative Humidity:	80
Wind Velocity, Unit:	3 MPH
Wind Direction:	E
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	10
	07-20-09
Crop stage at application:	V5
Height Min, Max (inch):	8 10

Pest Stage At Each Application

Application Date:	07-20-09
Weed Code:	CYPES
Stage Majority (leaves):	4
Stage Min, Max:	2 5
Height Majority:	5 IN
Height Min, Max:	3 7
Density, Unit:	0.01 FT2
Weed Code:	AMATA
Stage Majority (leaves):	3
Stage Min, Max:	2 5
Height Majority:	2 IN
Height Min, Max:	1 3
Density, Unit:	12 FT2
Weed Code:	IPOSS
Stage Majority (leaves):	3
Stage Min, Max:	1 5
Height Majority:	3.5 IN
Height Min, Max:	2 5
Density, Unit:	1 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	2
Stage Min, Max:	COTY 3
Height Majority:	3 IN
Height Min, Max:	0.5 4
Density, Unit:	0.2 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-06-10 Moisture Percent 170 DA-A	ZEAMD 01-06-10 Yield bu/A 170 DA-A	ZEAMD 07-25-09 Injury Percent 5 DA-A	ZEAMD 08-03-09 Injury Percent 14 DA-A	ZEAMD 08-17-09 Injury Percent 28 DA-A	ZEAMD 09-18-09 Injury Percent 60 DA-A
1	NONTREATED									22.8 a	73 b	0 d	0 c	0 a	0 a
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A	23.2 a	136 a	9 b	3 b	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A	24.1 a	120 a	5 c	2 bc	0 a	0 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A	22.8 a	131 a	6 c	1 bc	0 a	0 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A	23.5 a	123 a	5 c	1 bc	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	23.5 a	128 a	0 d	0 c	0 a	0 a
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	22.7 a	121 a	30 a	11 a	0 a	0 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A						
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A						
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A						
LSD (P=.05)										2.59	24.1	2.7	2.3	0.0	0.0
Replicate F										0.676	1.404	1.828	1.023	0.000	0.000
Replicate Prob(F)										0.5778	0.2741	0.1781	0.4059	1.0000	1.0000
Treatment F										0.357	6.692	122.396	25.866	0.000	0.000
Treatment Prob(F)										0.8966	0.0007	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										CYPES	CYPES	CYPES	CYPES
Crop Code													
Rating Date										07-25-09	08-03-09	08-17-09	09-18-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										5 DA-A	14 DA-A	28 DA-A	60 DA-A
1	NONTREATED									0 c	0 e	0 c	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A		92 ab	93 ab	95 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		93 a	93 ab	96 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		88 d	91 ab	94 ab
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		90 bc	90 b	91 b
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	21 b	89 cd	90 ab	91 b
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	38 a	94 a	94 a	94 ab
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										4.3	2.4	3.7	3.6
Replicate F										0.333	2.761	3.858	6.075
Replicate Prob(F)										0.8022	0.0721	0.0271	0.0048
Treatment F										226.333	1822.859	772.544	831.020
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date										07-25-09	08-03-09	08-17-09	09-18-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										5 DA-A	14 DA-A	28 DA-A	60 DA-A
1	NONTREATED									0 c	0 d	0 c	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A		99 ab	99 a	98 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		99 a	98 a	99 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		99 a	99 a	98 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	59 b	99 b	99 a	98 a
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	98 a	97 c	96 b	95 b
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										6.3	0.5	1.4	2.5
Replicate F										0.969	2.400	0.038	0.644
Replicate Prob(F)										0.4665	0.1016	0.9900	0.5967
Treatment F										721.870	55995.244	5800.550	1942.661
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS 07-25-09 Control Percent 5 DA-A	IPOSS 08-03-09 Control Percent 14 DA-A	IPOSS 08-17-09 Control Percent 28 DA-A	IPOSS 09-18-09 Control Percent 60 DA-A
1	NONTREATED									0 c	0 c	0 c	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A		97 a	96 a	95 ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		98 a	96 a	96 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		97 a	95 ab	95 ab
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		97 a	96 a	91 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	30 b	93 b	92 b	91 ab
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	95 a	97 a	96 a	86 b
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										3.1	2.1	3.0	9.5
Replicate F										1.000	0.674	0.565	0.704
Replicate Prob(F)										0.4547	0.5789	0.6451	0.5620
Treatment F										2894.586	2589.186	1230.096	120.405
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Vida and Yukon Early Postemergence in Corn.

Trial ID: 09-10C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										ABUTH	ABUTH	ABUTH	ABUTH
Crop Code													
Rating Date										07-25-09	08-03-09	08-17-09	09-18-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										5 DA-A	14 DA-A	28 DA-A	60 DA-A
1	NONTREATED									0 c	0 c	0 d	0 c
2	YUKON	67.5	WG	0.169	lb ai/a	4	oz/a	3-5"W	A		99 a	99 ab	98 ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
2	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
3	YUKON	67.5	WG	0.127	lb ai/a	3	oz/a	3-5"W	A		99 a	99 a	99 ab
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
3	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
4	YUKON	67.5	WG	0.084	lb ai/a	2	oz/a	3-5"W	A		99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
4	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
5	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	3-5"W	A		97 b	98 bc	98 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
5	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A	69 b	98 ab	99 ab	98 ab
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
6	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
7	VIDA	0.208	SL	0.00081	lb ai/a	0.5	fl oz/a	3-5"W	A	94 a	97 b	97 c	98 b
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-5"W	A				
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	3-5"W	A				
7	N-PAK AMS	3.4	SL	2.5	lb ai/a	5	% v/v	3-5"W	A				
LSD (P=.05)										2.5	1.0	1.1	1.1
Replicate F										4.000	0.340	0.945	0.696
Replicate Prob(F)										0.0701	0.7969	0.4397	0.5667
Treatment F										4525.000	13073.039	10968.025	10091.175
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Gowan (VID-09-02-T02; PER-09-08-T02).
2. Ratings: CI/WC at 5, 14 + 28 DAT; Rate only trts 1, 6, + 7 for WC at 5 DAT.
3. Control of target weeds at 60 + 90+ DAT to evaluate residual aspects of control.
   Appropriately labeled pictures (trts, DAT) of differences in weed control between programs at later evaluation dates.
4. Target CYPES, IPOSS, AMBSS, AMATA.
   Always rate individual species when possible, if not possible always list individual species that were combined.
5. Yield.
6. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
7. Harvested 1-6-10, (2) 30 inch rows by 21 feet.

Postemergence Weed Control in Corn with DuPont Products.

Trial ID: 09-2B-ME60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Evalaute the crop tolerance and efficacy of several postemergence herbicide products from DuPont in corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 5 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 6 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** PIERRON
CEC: 8 **Fert. Level:** P1: 91 LB/A, K: 410 LB/A

Application Description

	A	B
Application Date:	06-30-09	07-13-09
Time of Day:	9:00	15:00
Application Method:	Spray	Spray
Application Timing:	PRE	V2-4
Application Placement:	BROSOI	BROSOI
Applied By:	RFK	NVH
Air Temperature, Unit:	72 F	84 F
% Relative Humidity:	80	78
Wind Velocity, Unit:	3 MPH	4 MPH
Wind Direction:	NW	E
Dew Presence (Y/N):	N	N
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	0	5
	06-30-09	07-13-09
Crop stage at application:	NA	V3
Height Min, Max (inch):		6 8

Postemergence Weed Control in Corn with DuPont Products.

Trial ID: 09-2B-ME60 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	06-30-09	07-13-09
Weed Code:	SETFA	SETFA
Stage Majority (leaves):	NA	2
Stage Min, Max:		COTY 4
Height Majority:		1.5 IN
Height Min, Max:		0.25 3
Density, Unit:		6 FT2
Weed Code:	CYPES	CYPES
Stage Majority (leaves):	NA	6
Stage Min, Max:		4 10
Height Majority:		5 IN
Height Min, Max:		3 8
Density, Unit:		1.5 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA	3
Stage Min, Max:		1 6
Height Majority:		2 IN
Height Min, Max:		1 3
Density, Unit:		0.75 FT2
Weed Code:	AMBTR	AMBTR
Stage Majority (leaves):	NA	3
Stage Min, Max:		1 5
Height Majority:		4 IN
Height Min, Max:		2 5
Density, Unit:		0.02 FT2
Weed Code:	AMBEL	AMBEL
Stage Majority (leaves):	NA	1
Stage Min, Max:		COTY 2
Height Majority:		1 IN
Height Min, Max:		1 2
Density, Unit:		.001 FT2
Weed Code:	IPOHE	IPOHE
Stage Majority (leaves):	NA	1
Stage Min, Max:		COTY 3
Height Majority:		1 IN
Height Min, Max:		1 3
Density, Unit:		0.5 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Postemergence Weed Control in Corn with DuPont Products.

Trial ID: 09-2B-ME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-15-10 Moisture Percent	ZEAMD 01-15-10 Yield bu/A	ZEAMD 07-20-09 Injury Percent 7 DA-B	ZEAMD 07-27-09 Injury Percent 14 DA-B	ZEAMD 08-10-09 Injury Percent 28 DA-B	ZEAMD 09-07-09 Injury Percent 56 DA-B
1	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	21.9 b	120 a	1 b	0 b	0 b	0 a
1	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
1	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
1	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
2	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	22.4 ab	110 a	0 b	0 b	0 b	0 a
2	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B						
2	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
2	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
3	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	22.7 ab	110 a	0 b	0 b	0 b	0 a
3	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
3	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2-4	B						
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
4	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	22.0 b	110 a	0 b	0 b	0 b	0 a
4	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
4	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
4	IGNITE 280	2.34	EC	0.402	lb ae/a	22	fl oz/a	V2-4	B						
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
5	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	24.3 a	113 a	0 b	0 b	0 b	0 a
5	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
5	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
5	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	V2-4	B						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
6	RESOLVE Q	22.4	WG			1.25	oz/a	V2-4	B	21.8 b	121 a	0 b	0 b	0 b	0 a
6	RESOLVE SG	25	SG	0.01437	lb ai/a			V2-4	B						
6	HARMONY SG	50	SG	0.00313	lb ai/a			V2-4	B						
6	DPX-4145	50	WG	0.00719	lb ai/a			V2-4	B						
6	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
6	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
7	ACCENT	75	WG	0.0313	lb ai/a	0.67	oz/a	V2-4	B	21.7 b	121 a	1 b	0 b	0 b	0 a
7	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
7	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
8	STEADFAST Q	37.7	WG			1.5	oz/a	V2-4	B	22.1 b	113 a	3 a	1 a	1 a	0 a
8	ACCENT	75	WG	0.0236	lb ai/a			V2-4	B						
8	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-4	B						
8	DPX-4145	50	WG	0.0078	lb ai/a			V2-4	B						
8	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
8	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
9	NONTREATED									21.2 b	43 b	0 b	0 b	0 b	0 a
LSD (P=.05)										1.99	21.7	1.8	0.7	0.7	0.0
Replicate F										4.979	11.486	1.232	1.000	1.000	0.000
Replicate Prob(F)										0.0079	0.0001	0.3198	0.4098	0.4098	1.0000
Treatment F										1.667	10.616	3.155	1.000	1.000	0.000
Treatment Prob(F)										0.1584	0.0001	0.0138	0.4613	0.4613	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Postemergence Weed Control in Corn with DuPont Products.

Trial ID: 09-2B-ME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA 07-27-09 Control Percent 14 DA-B	SETFA 08-10-09 Control Percent 28 DA-B	SETFA 09-07-09 Control Percent 56 DA-B	CYPES 07-27-09 Control Percent 14 DA-B	CYPES 08-10-09 Control Percent 28 DA-B	CYPES 09-07-09 Control Percent 56 DA-B
1	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	97 cd	96 a	96 c	89 bc	88 ab	86 a
1	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
1	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
1	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
2	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	99 a	97 a	97 ab	96 a	92 a	91 a
2	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B						
2	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
2	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
3	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	98 ab	72 b	96 bc	93 abc	91 a	84 ab
3	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
3	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2-4	B						
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
4	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	98 a	97 ab	88 cd	76 c	74 c
4	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
4	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
4	IGNITE 280	2.34	EC	0.402	lb ae/a	22	fl oz/a	V2-4	B						
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
5	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	97 cd	97 a	97 a	94 ab	91 a	89 a
5	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
5	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
5	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	V2-4	B						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
6	RESOLVE Q	22.4	WG			1.25	oz/a	V2-4	B	98 bc	97 a	97 ab	88 cd	78 c	76 bc
6	RESOLVE SG	25	SG	0.01437	lb ai/a			V2-4	B						
6	HARMONY SG	50	SG	0.00313	lb ai/a			V2-4	B						
6	DPX-4145	50	WG	0.00719	lb ai/a			V2-4	B						
6	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
6	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
7	ACCENT	75	WG	0.0313	lb ai/a	0.67	oz/a	V2-4	B	97 d	96 a	97 ab	83 d	83 bc	84 ab
7	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
7	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
8	STEADFAST Q	37.7	WG			1.5	oz/a	V2-4	B	97 cd	97 a	97 ab	84 d	85 ab	85 ab
8	ACCENT	75	WG	0.0236	lb ai/a			V2-4	B						
8	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-4	B						
8	DPX-4145	50	WG	0.0078	lb ai/a			V2-4	B						
8	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
8	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
9	NONTREATED									0 e	0 c	0 d	0 e	0 d	0 d
LSD (P=.05)										0.8	23.4	1.0	5.2	7.1	10.1
Replicate F										0.750	0.912	2.381	0.166	0.165	0.548
Replicate Prob(F)										0.5331	0.4497	0.0946	0.9184	0.9188	0.6545
Treatment F										12721.834	16.339	8361.336	283.105	143.175	67.672
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Postemergence Weed Control in Corn with DuPont Products.

Trial ID: 09-2B-ME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA 07-27-09 Control Percent 14 DA-B	AMATA 08-10-09 Control Percent 28 DA-B	AMATA 09-07-09 Control Percent 56 DA-B	AMBTR 07-27-09 Control Percent 14 DA-B	AMBTR 08-10-09 Control Percent 28 DA-B	AMBTR 09-07-09 Control Percent 56 DA-B
1	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	99 ab	99 ab	97 a	97 ab	96 a
1	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
1	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
1	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
2	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	99 a	99 a	99 a	98 a	97 ab	97 a
2	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B						
2	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
2	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
3	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	99 ab	98 ab	98 a	98 a	97 a
3	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
3	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2-4	B						
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
4	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	99 a	99 a	97 a	97 ab	97 a
4	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
4	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
4	IGNITE 280	2.34	EC	0.402	lb ae/a	22	fl oz/a	V2-4	B						
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
5	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	99 a	99 a	99 a	98 a	97 a
5	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
5	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
5	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	V2-4	B						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
6	RESOLVE Q	22.4	WG			1.25	oz/a	V2-4	B	99 a	99 a	99 ab	97 a	95 b	97 a
6	RESOLVE SG	25	SG	0.01437	lb ai/a			V2-4	B						
6	HARMONY SG	50	SG	0.00313	lb ai/a			V2-4	B						
6	DPX-4145	50	WG	0.00719	lb ai/a			V2-4	B						
6	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
6	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
7	ACCENT	75	WG	0.0313	lb ai/a	0.67	oz/a	V2-4	B	99 a	99 ab	99 ab	98 a	97 ab	97 a
7	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
7	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
8	STEADFAST Q	37.7	WG			1.5	oz/a	V2-4	B	99 a	98 b	98 b	97 a	96 ab	96 a
8	ACCENT	75	WG	0.0236	lb ai/a			V2-4	B						
8	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-4	B						
8	DPX-4145	50	WG	0.0078	lb ai/a			V2-4	B						
8	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
8	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
9	NONTREATED									0 b	0 c	0 c	0 b	0 c	0 b
LSD (P=.05)										0.4	0.8	1.1	2.3	2.5	1.9
Replicate F										0.308	2.428	2.035	2.153	6.353	1.814
Replicate Prob(F)										0.8196	0.0902	0.1357	0.1199	0.0025	0.1716
Treatment F										48160.388	12913.718	8270.098	1678.748	1469.294	2425.810
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Postemergence Weed Control in Corn with DuPont Products.

Trial ID: 09-2B-ME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBEL 07-27-09 Control Percent 14 DA-B	AMBEL 08-10-09 Control Percent 28 DA-B	AMBEL 09-07-09 Control Percent 56 DA-B	IPOHE 07-27-09 Control Percent 14 DA-B	IPOHE 08-10-09 Control Percent 28 DA-B	IPOHE 09-07-09 Control Percent 56 DA-B
1	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	98 a	99 a	98 a	98 ab	98 ab	97 a
1	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
1	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
1	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
2	CINCH ATZ	5.5	SC	1.37	lb ai/a	1	qt/a	PRE	A	99 a	99 a	99 a	99 ab	99 a	98 a
2	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B						
2	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
2	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
3	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	99 a	99 a	99 a	98 ab	98 a
3	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
3	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2-4	B						
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
4	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	99 a	99 a	97 b	97 b	96 a
4	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
4	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
4	IGNITE 280	2.34	EC	0.402	lb ae/a	22	fl oz/a	V2-4	B						
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
5	RESOLVE SG	25	SG	0.01875	lb ai/a	1.2	oz/a	V2-4	B	99 a	99 a	99 a	99 a	98 ab	97 a
5	DPX-4145	50	WG	0.00938	lb ai/a	0.3	oz/a	V2-4	B						
5	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
5	AATREX NINE-O	90	WG	1	lb ai/a	1.11	lb/a	V2-4	B						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
6	RESOLVE Q	22.4	WG			1.25	oz/a	V2-4	B	99 a	98 ab	98 a	98 ab	98 ab	96 a
6	RESOLVE SG	25	SG	0.01437	lb ai/a			V2-4	B						
6	HARMONY SG	50	SG	0.00313	lb ai/a			V2-4	B						
6	DPX-4145	50	WG	0.00719	lb ai/a			V2-4	B						
6	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
6	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
7	ACCENT	75	WG	0.0313	lb ai/a	0.67	oz/a	V2-4	B	98 a	98 ab	98 a	97 b	97 ab	96 a
7	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
7	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
8	STEADFAST Q	37.7	WG			1.5	oz/a	V2-4	B	96 b	97 b	93 b	99 ab	99 a	97 a
8	ACCENT	75	WG	0.0236	lb ai/a			V2-4	B						
8	RESOLVE SG	25	SG	0.01172	lb ai/a			V2-4	B						
8	DPX-4145	50	WG	0.0078	lb ai/a			V2-4	B						
8	MESOTRIONE	50	WG	0.078	lb ai/a	2.5	oz/a	V2-4	B						
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2-4	B						
8	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	V2-4	B						
9	NONTREATED									0 c	0 c	0 c	0 c	0 c	0 b
LSD (P=.05)										1.9	2.2	4.3	1.7	1.7	2.5
Replicate F										1.718	1.721	0.962	2.700	6.603	5.029
Replicate Prob(F)										0.1900	0.1894	0.4265	0.0682	0.0021	0.0076
Treatment F										2469.032	1910.138	479.518	3042.656	3245.000	1470.186
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: DuPont (USA-09-111).
2. Ratings: CI at 7, 14 + 28 da B; WC at 14, 28 + 56 da B.
3. Yield if possible.
4. Harvested 1-15-10, (2) 30 inch rows by 25 ft.

Mesotrione plus Atrazine Premix.

Trial ID: 09-6A-M50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-24-09

Objectives: Evaluate the crop tolerance and weed control from the premix of mesotrione and atrazine.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-73 **Description:** RR2/YGCB
Planting Method: SEEDED **Planting Date:** 05-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** XANST Xanthium strumarium L. cocklebur, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.3 **Soil Name:** CASEYVILLE
CEC: 7 **Fert. Level:** P1 105 LB/A, K 448 LB/A

Application Description

	A	B
Application Date:	05-24-09	06-06-09
Time of Day:	17:00	8:30
Application Method:	Spray	Spray
Application Timing:	PRE	2-4"W
Application Placement:	BROSOI	BROFOL
Applied By:	NVH	NVH
Air Temperature, Unit:	76 F	70 F
% Relative Humidity:	92	88
Wind Velocity, Unit:	2 MPH	2 MPH
Wind Direction:	E	S
Dew Presence (Y/N):	N	N
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	100	50
	05-24-09	06-06-09
Crop stage at application:	NA	V2
Height Min, Max (inch):		3 4

Pest Stage At Each Application

Application Date:	05-24-09	06-06-09
Weed Code:	XANST	XANST
Stage Majority (leaves):	NA	2
Stage Min, Max:		COTY 4
Height Majority:		3 IN
Height Min, Max:		1 4
Density, Unit:		30 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Mesotrione plus Atrazine Premix.

Trial ID: 09-6A-M50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 06-13-09 Injury Percent 7 DA-B	ZEAMD 06-20-09 Injury Percent 14 DA-B	ZEAMD 07-04-09 Injury Percent 28 DA-B	ZEAMD 08-01-09 Injury Percent 56 DA-B	XANST 06-20-09 Control Percent 14 DA-B	XANST 07-04-09 Control Percent 28 DA-B	XANST 08-01-09 Control Percent 56 DA-B
1	NONTREATED									0 a	0 a	0 a	0 a	0 b	0 d	0 d
2	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	0 a	0 a	0 a	0 a	99 a	69 a	57 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B							
2	A16907	3.7	SC	0.58	lb ai/a	20	fl oz/a	2-4"W	B							
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	63 a	48 ab
3	A16907	3.7	SC	0.58	lb ai/a	20	fl oz/a	2-4"W	B							
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	45 b	35 b
4	LAUDIS	3.5	SC	0.0547	lb ai/a	2	fl oz/a	2-4"W	B							
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	43 b	12 cd
5	IMPACT	2.8	SC	0.0109	lb ai/a	0.5	fl oz/a	2-4"W	B							
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	35 c	17 c
6	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"W	B							
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	67 a	35 b
7	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	2-4"W	B							
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B	0 a	0 a	0 a	0 a	99 a	63 a	45 ab
8	A16907	3.7	SC	0.694	lb ai/a	24	fl oz/a	2-4"W	B							
8	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	2-4"W	B							
LSD (P=.05)										0.0	0.0	0.0	0.0	0.0	7.2	14.3
Replicate F										0.000	0.000	0.000	0.000	0.000	1.171	0.299
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	0.3386	0.7463
Treatment F										0.000	0.000	0.000	0.000	0.000	96.662	17.652
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (MS016A4).
2. Ratings: CI at 7, 14 + 28 da B; WC at 14, 28 + 56 da B.
3. Yield.
4. Target common cocklebur.
5. Not harvested due to common cocklebur pressure.

Metolachlor plus Glyphosate.

Trial ID: 09-52-MW60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 05-24-09

Objectives: Compare the efficacy of Parallel versus Dual II Magnum when tank-mixed with glyphosate for weed control in corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 05-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN		grasses, annual
Pest 2 Type: I	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.9 **Soil Name:** PIERRON
CEC: 9 **Fert. Level:** P1: 107 LB/A, K: 420 LB/A

Application Description

	A
Application Date:	06-12-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	4-6"W
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	64 F
% Relative Humidity:	92
Wind Velocity, Unit:	4 MPH
Wind Direction:	N
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	100
	06-12-09
Crop stage at application:	V2-3
Height Min, Max (inch):	4 6

Pest Stage At Each Application

Application Date:	06-12-09
Weed Code:	GGGAN
Stage Majority (leaves):	2
Stage Min, Max:	COTY 4
Height Majority:	3 IN
Height Min, Max:	1 5
Density, Unit:	2 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	5
Stage Min, Max:	1 7
Height Majority:	4 IN
Height Min, Max:	1 6
Density, Unit:	2 FT2
Weed Code:	AMATA
Stage Majority (leaves):	3
Stage Min, Max:	COTY 5
Height Majority:	3 IN
Height Min, Max:	0.5 4
Density, Unit:	20 FT2
Weed Code:	XANST
Stage Majority (leaves):	4
Stage Min, Max:	3 6
Height Majority:	5 IN
Height Min, Max:	3 8
Density, Unit:	3 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Metolachlor plus Glyphosate.

Trial ID: 09-52-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 06-26-09 Injury Percent 14 DA-A	ZEAMD 07-10-09 Injury Percent 28 DA-A	GGGAN 06-26-09 BD-Control Percent 14 DA-A	GGGAN 07-10-09 BD-Control Percent 28 DA-A	GGGAN 07-24-09 Control Percent 42 DA-A	GGGAN 08-07-09 Control Percent 56 DA-A
1	PARALLEL	7.8	EC	0.975	lb ai/a	1	pt/a	4-6"W	A	0 a	0 a	98 b	98 b	98 ab	96 bc
1	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
2	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	4-6"W	A	0 a	0 a	99 a	99 a	97 b	97 abc
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
3	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	0 a	0 a	99 a	99 a	99 a	98 ab
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
4	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	0 a	0 a	99 a	98 ab	98 ab	98 ab
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
5	PARALLEL	7.8	EC	1.95	lb ai/a	2	pt/a	4-6"W	A	0 a	0 a	99 a	99 ab	97 ab	97 abc
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
6	DUAL II MAGNUM	7.64	EC	1.91	lb ai/a	2	pt/a	4-6"W	A	0 a	0 a	99 a	98 ab	99 a	99 a
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
7	PARALLEL	7.8	EC	3.9	lb ai/a	4	pt/a	4-6"W	A	0 a	0 a	99 a	99 a	98 ab	98 ab
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
8	DUAL II MAGNUM	7.64	EC	3.82	lb ai/a	4	pt/a	4-6"W	A	0 a	0 a	99 a	99 a	97 ab	97 abc
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A	0 a	0 a	98 b	98 b	95 c	95 c
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
10	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	0 a	0 a	99 a	99 a	97 b	97 abc
10	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A						
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
11	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	0 a	0 a	99 a	99 a	98 ab	98 ab
11	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A						
11	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A						
12	NONTREATED									0 a	0 a	0 c	0 c	0 d	0 d
LSD (P=.05)										0.0	0.0	0.7	1.0	1.8	2.5
Replicate F										0.000	0.000	0.805	0.258	0.359	0.081
Replicate Prob(F)										1.0000	1.0000	0.5002	0.8548	0.7831	0.9701
Treatment F										0.000	0.000	13956.579	6331.770	1978.151	1048.094
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Metolachlor plus Glyphosate.

Trial ID: 09-52-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 06-26-09 BD-Control Percent 14 DA-A	AMBTR 07-10-09 BD-Control Percent 28 DA-A	AMBTR 07-24-09 Control Percent 42 DA-A	AMBTR 08-07-09 Control Percent 56 DA-A
1	PARALLEL	7.8	EC	0.975	lb ai/a	1	pt/a	4-6"W	A	97 bcd	95 bc	89 bc	89 bc
1	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
2	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	4-6"W	A	97 ab	96 ab	92 abc	92 abc
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
3	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	97 bc	96 ab	92 ab	92 ab
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
4	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	97 bc	95 bc	92 ab	92 ab
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
5	PARALLEL	7.8	EC	1.95	lb ai/a	2	pt/a	4-6"W	A	97 bc	96 ab	92 ab	92 ab
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
6	DUAL II MAGNUM	7.64	EC	1.91	lb ai/a	2	pt/a	4-6"W	A	95 cd	93 c	90 bc	90 bc
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
7	PARALLEL	7.8	EC	3.9	lb ai/a	4	pt/a	4-6"W	A	95 d	94 bc	87 bc	86 bc
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
8	DUAL II MAGNUM	7.64	EC	3.82	lb ai/a	4	pt/a	4-6"W	A	96 bcd	94 bc	86 c	86 c
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A	97 bc	93 bc	88 bc	88 bc
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
10	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	99 a	98 a	98 a	98 a
10	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A				
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
11	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	99 a	98 a	97 a	97 a
11	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A				
11	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
12	NONTREATED									0 e	0 d	0 d	0 d
LSD (P=.05)										1.8	2.8	6.1	6.2
Replicate F										2.156	3.633	6.608	6.699
Replicate Prob(F)										0.1120	0.0228	0.0013	0.0012
Treatment F										2078.618	787.674	156.978	154.128
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Metolachlor plus Glyphosate.

Trial ID: 09-52-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA	AMATA	AMATA	AMATA
	Pest Code									AMATA	AMATA	AMATA	AMATA
	Crop Code												
	Rating Date									06-26-09	07-10-09	07-24-09	08-07-09
	Rating Data Type									BD-Control	BD-Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing												
	Trt-Eval Interval									14 DA-A	28 DA-A	42 DA-A	56 DA-A
1	PARALLEL	7.8	EC	0.975	lb ai/a	1	pt/a	4-6"W	A	99 a	92 a	95 a	94 a
1	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
2	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	4-6"W	A	99 a	95 a	97 a	97 a
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
3	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	99 a	97 a	97 a	96 a
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
4	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	99 a	97 a	98 a	97 a
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
5	PARALLEL	7.8	EC	1.95	lb ai/a	2	pt/a	4-6"W	A	99 a	97 a	97 a	97 a
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
6	DUAL II MAGNUM	7.64	EC	1.91	lb ai/a	2	pt/a	4-6"W	A	99 b	93 a	96 a	96 a
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
7	PARALLEL	7.8	EC	3.9	lb ai/a	4	pt/a	4-6"W	A	99 a	97 a	98 a	98 a
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
8	DUAL II MAGNUM	7.64	EC	3.82	lb ai/a	4	pt/a	4-6"W	A	99 a	98 a	98 a	98 a
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A	99 a	78 b	82 b	82 b
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
10	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	99 a	96 a	98 a	98 a
10	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A				
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
11	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	99 a	96 a	98 a	98 a
11	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A				
11	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
12	NONTREATED									0 c	0 c	0 c	0 c
LSD (P=.05)										0.2	7.5	5.9	5.9
	Replicate F									1.000	0.191	1.543	1.533
	Replicate Prob(F)									0.4051	0.9018	0.2217	0.2243
	Treatment F									156745.016	112.839	189.428	185.406
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Metolachlor plus Glyphosate.

Trial ID: 09-52-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										XANST	XANST	XANST	XANST
Crop Code													
Rating Date										06-26-09	07-10-09	07-24-09	08-07-09
Rating Data Type										BD-Control	BD-Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										14 DA-A	28 DA-A	42 DA-A	56 DA-A
1	PARALLEL	7.8	EC	0.975	lb ai/a	1	pt/a	4-6"W	A	96 c	85 ab	79 a	79 ab
1	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
2	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	4-6"W	A	97 c	84 ab	76 a	75 b
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
3	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	98 abc	92 ab	90 a	88 ab
3	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
4	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	97 c	83 b	80 a	80 ab
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
5	PARALLEL	7.8	EC	1.95	lb ai/a	2	pt/a	4-6"W	A	97 bc	93 ab	91 a	89 ab
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
6	DUAL II MAGNUM	7.64	EC	1.91	lb ai/a	2	pt/a	4-6"W	A	97 c	89 ab	89 a	89 ab
6	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
7	PARALLEL	7.8	EC	3.9	lb ai/a	4	pt/a	4-6"W	A	97 c	88 ab	86 a	86 ab
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
8	DUAL II MAGNUM	7.64	EC	3.82	lb ai/a	4	pt/a	4-6"W	A	97 bc	91 ab	84 a	83 ab
8	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
9	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A	97 c	86 ab	83 a	82 ab
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
10	PARALLEL	7.8	EC	1.46	lb ai/a	1.5	pt/a	4-6"W	A	99 a	94 a	93 a	93 a
10	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A				
10	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
11	DUAL II MAGNUM	7.64	EC	1.43	lb ai/a	1.5	pt/a	4-6"W	A	99 ab	91 ab	88 a	88 ab
11	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"W	A				
11	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	A				
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-6"W	A				
12	NONTREATED									0 d	0 c	0 b	0 c
LSD (P=.05)										1.3	10.8	17.4	17.4
Replicate F										0.555	1.052	0.697	0.390
Replicate Prob(F)										0.6485	0.3827	0.5603	0.7609
Treatment F										3705.303	47.068	17.466	17.166
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: MANA (MEC-01).
2. Ratings: CI at 14 + 28 DAT; WC at 14, 28, 42 + 56 DAT.
3. Note initial foliar burndown at 14 + 28 DAT and then residual control at 42 + 56 DAT.
4. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
   BD-Control = Burndown control.
5. Not harvested.

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-27-09

Objectives: Identify the most effective strategy for use of soil residual herbicides in glyphosate- and glufosinate-resistant corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 2 Type: W	**Code:** IPOSS		morningglory, species
Pest 3 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 4 Type: W	**Code:** GGGAN		grasses, annual
Pest 5 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 94 LB/A, K: 396 LB/A

Application Description

	A	B	C
Application Date:	06-28-09	07-08-09	07-16-09
Time of Day:	19:30	8:00	13:00
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	2"W	12-14"CN
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	DKP	NVH	NVH
Air Temperature, Unit:	80 F	76 F	83 F
% Relative Humidity:	56	92	68
Wind Velocity, Unit:	3 MPH	2 MPH	3 MPH
Wind Direction:	N	W	SW
Dew Presence (Y/N):	N	Y	N
Soil Moisture:	NORMAL	ABONOR	NORMAL
% Cloud Cover:	0	0	10
	06-28-09	07-08-09	07-16-09
Crop stage at application:	NA	V2	V4
Height Min, Max (inch):		6 8	12 14

Pest Stage At Each Application

Application Date:	06-28-09	07-08-09	07-16-09
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	2	1
Stage Min, Max:		COTY 2	COTY 2
Height Majority:		1.5 IN	1 IN
Height Min, Max:		1 2	0.75 2
Density, Unit:		1 FT2	0.1 FT2
Weed Code:	IPOSS	IPOSS	IPOSS
Stage Majority (leaves):	NA	COTY	1
Stage Min, Max:		COTY 1	COTY 2
Height Majority:		1 IN	1 IN
Height Min, Max:		1 1.5	0.5 2
Density, Unit:		0.3 FT2	0.1 FT2
Weed Code:	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	COTY	COTY
Stage Min, Max:		COTY 1	COTY 1
Height Majority:		0.75 IN	0.5 IN
Height Min, Max:		0.5 1	0.5 1
Density, Unit:		0.02 FT2	.001 FT2
Weed Code:	GGGAN	GGGAN	GGGAN
Stage Majority (leaves):	NA	NA	1
Stage Min, Max:			COTY 4
Height Majority:			0.5 IN
Height Min, Max:			0.25 3
Density, Unit:			.001 FT2
Weed Code:	CYPES	CYPES	CYPES
Stage Majority (leaves):	NA	4	3
Stage Min, Max:		3 5	2 6
Height Majority:		4 IN	2 IN
Height Min, Max:		3 6	1.5 4
Density, Unit:		2 FT2	.002 FT2

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 07-12-09 Moisture Percent	ZEAMD 07-12-09 Yield bu/A	ZEAMD 07-16-09 Injury Percent 0 DA-C	ZEAMD 08-06-09 Injury Percent 21 DA-C	ZEAMD 10-15-09 Injury Percent EOS
1	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	23.6 ab	137 ab	0 a	0 a	0 a
1	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	12-14"CN	C					
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
2	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	22.6 b	148 a	0 a	0 a	0 a
2	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	12-14"CN	C					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
3	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	24.2 a	135 ab	0 a	0 a	0 a
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-14"CN	C					
3	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
4	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	23.7 ab	144 a	0 a	0 a	0 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-14"CN	C					
4	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
5	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	24.1 a	141 ab	0 a	0 a	0 a
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	12-14"CN	C					
5	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C					
5	DESTINY HC MSO	100	SL	0.5	% v/v	0.5	% v/v	12-14"CN	C					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
6	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	23.4 ab	145 a	0 a	0 a	0 a
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	12-14"CN	C					
6	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C					
6	DESTINY HC MSO	100	SL	0.5	% v/v	0.5	% v/v	12-14"CN	C					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
7	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	24.0 a	137 ab	0 a	0 a	0 a
7	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	12-14"CN	C					
7	STATUS	56	WG	0.105	lb ai/a	3	oz/a	12-14"CN	C					
7	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	12-14"CN	C					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
8	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	23.8 ab	133 ab	0 a	0 a	0 a
8	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	12-14"CN	C					
8	STATUS	56	WG	0.105	lb ai/a	3	oz/a	12-14"CN	C					
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	12-14"CN	C					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C					
9	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	24.0 a	127 b	0 a	0 a	0 a
9	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	2"W	B					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B					
10	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	23.8 ab	140 ab	0 a	0 a	0 a
10	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	2"W	B					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B					
11	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	23.2 ab	137 ab	0 a	0 a	0 a
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2"W	B					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B					
12	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	24.2 a	141 ab	0 a	0 a	0 a
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2"W	B					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B					
13	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	23.8 ab	134 ab	0 a	0 a	0 a
13	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2"W	B					
13	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B					
14	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	23.9 a	137 ab	0 a	0 a	0 a
14	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2"W	B					
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B					

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code																	
Crop Code										ZEAMD		ZEAMD		ZEAMD	ZEAMD	ZEAMD	
Rating Date										07-12-09		07-12-09		07-16-09	08-06-09	10-15-09	
Rating Data Type										Moisture		Yield		Injury	Injury	Injury	
Rating Unit										Percent		bu/A		Percent	Percent	Percent	
Rating Timing																	
Trt-Eval Interval														0 DA-C	21 DA-C	EOS	
15	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	23.3	ab	140	ab	0	a	0	a	0	a
15	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	2"W	B										
15	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B										
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B										
16	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	23.2	ab	134	ab	0	a	0	a	0	a
16	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	2"W	B										
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B										
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B										
17	NONTREATED									23.6	ab	102	c	0	a	0	a	0	a
18	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	23.1	ab	142	ab	0	a	0	a	0	a
18	WEED FREE																		
LSD (P=.05)										1.30		17.1		0.0		0.0		0.0	
Replicate F										0.969		21.663		0.000		0.000		0.000	
Replicate Prob(F)										0.3896		0.0001		1.0000		1.0000		1.0000	
Treatment F										0.958		2.823		0.000		0.000		0.000	
Treatment Prob(F)										0.5216		0.0049		1.0000		1.0000		1.0000	

Means followed by same letter do not significantly differ (P=.05, LSD)

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-16-09 Control Percent 0 DA-C	AMBTR 08-06-09 Control Percent 21 DA-C	AMBTR 10-15-09 Control Percent EOS	AMBTR 10-15-09 Plants 0.5 m2 EOS	IPOSS 07-16-09 Control Percent 0 DA-C	IPOSS 08-06-09 Control Percent 21 DA-C	IPOSS 10-15-09 Control Percent EOS	IPOSS 10-15-09 Plants 0.5 m2 EOS
1	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	96 b	93 abc	97 def	1.0 cde	97 abc	95 a	98 bc	0.3 bc
1	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	12-14"CN	C								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
2	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	96 bc	95 abc	97 cde	0.3 de	97 abc	97 a	98 bc	0.3 bc
2	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	12-14"CN	C								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
3	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	94 d	93 abc	96 ef	1.3 b-e	97 ab	96 a	98 bc	1.0 b
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-14"CN	C								
3	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
4	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	96 bc	96 ab	98 a-d	0.7 cde	94 d	95 a	98 cd	0.3 bc
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-14"CN	C								
4	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
5	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	95 bcd	93 bc	99 ab	0.3 de	96 bcd	95 a	98 b	0.7 bc
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	12-14"CN	C								
5	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C								
5	DESTINY HC MSO	100	SL	0.5	% v/v	0.5	% v/v	12-14"CN	C								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
6	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	95 bcd	95 abc	98 a-d	0.3 de	95 cd	96 a	99 a	0.0 c
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	12-14"CN	C								
6	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C								
6	DESTINY HC MSO	100	SL	0.5	% v/v	0.5	% v/v	12-14"CN	C								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
7	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	94 d	92 bc	97 b-e	1.0 cde	98 a	96 a	98 b	0.3 bc
7	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	12-14"CN	C								
7	STATUS	56	WG	0.105	lb ai/a	3	oz/a	12-14"CN	C								
7	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	12-14"CN	C								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
8	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	95 cd	94 abc	97 def	0.7 cde	98 a	96 a	98 b	0.3 bc
8	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	12-14"CN	C								
8	STATUS	56	WG	0.105	lb ai/a	3	oz/a	12-14"CN	C								
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	12-14"CN	C								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C								
9	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	96 bc	82 d	93 i	2.7 b	99 a	94 ab	99 a	0.0 c
9	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	2"W	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								
10	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	96 bc	93 bc	96 ef	1.3 b-e	99 a	96 a	99 a	0.0 c
10	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	2"W	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								
11	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	95 bcd	83 d	90 j	2.7 b	99 a	88 c	97 de	0.3 bc
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2"W	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								
12	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	96 b	91 bc	94 hi	1.7 bcd	99 a	96 a	98 bc	0.3 bc
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2"W	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								
13	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	96 b	90 c	95 gh	2.0 bc	99 a	95 a	97 e	0.3 bc
13	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2"W	B								
13	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								
14	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	96 bc	94 abc	95 fg	1.7 bcd	99 a	94 ab	98 cd	0.7 bc
14	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2"W	B								
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR	IPOSS	IPOSS	IPOSS	IPOSS
Crop Code																	
Rating Date										07-16-09	08-06-09	10-15-09	10-15-09	07-16-09	08-06-09	10-15-09	10-15-09
Rating Data Type										Control	Control	Control	Plants	Control	Control	Control	Plants
Rating Unit										Percent	Percent	Percent	0.5 m2	Percent	Percent	Percent	0.5 m2
Rating Timing																	
Trt-Eval Interval										0 DA-C	21 DA-C	EOS	EOS	0 DA-C	21 DA-C	EOS	EOS
15	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	96 bc	82 d	91 j	2.7 b	99 a	89 bc	98 b	0.0 c
15	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	2"W	B								
15	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								
16	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	96 b	92 bc	98 abc	0.3 de	99 a	95 a	98 bc	0.3 bc
16	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	2"W	B								
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B								
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B								
17	NONTREATED									0 e	0 e	0 k	11.7 a	0 e	0 d	0 f	2.3 a
18	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	99 a	99 a	99 a	0.0 e	99 a	99 a	99 a	0.0 c
18	WEED FREE																
LSD (P=.05)										1.6	5.8	1.5	1.34	2.3	5.1	0.6	0.91
Replicate F										1.175	3.783	1.046	2.609	1.869	0.289	0.415	3.029
Replicate Prob(F)										0.3212	0.0328	0.3623	0.0883	0.1698	0.7510	0.6639	0.0616
Treatment F										1702.746	122.458	1826.354	31.637	854.115	164.320	11996.855	2.985
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0032

Means followed by same letter do not significantly differ (P=.05, LSD)

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 07-16-09 Control Percent 0 DA-C	ABUTH 08-06-09 Control Percent 21 DA-C	GGGAN 07-16-09 Control Percent 0 DA-C	GGGAN 08-06-09 Control Percent 21 DA-C	CYPES 07-16-09 Control Percent 0 DA-C	CYPES 08-06-09 Control Percent 21 DA-C
1	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	98 ab	97 abc	99 b	99 a	99 a	97 a
1	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	12-14"CN	C						
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
2	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	98 ab	98 ab	99 a	99 a	99 a	97 a
2	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	12-14"CN	C						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
3	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	98 ab	98 abc	99 a	99 a	99 a	96 ab
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-14"CN	C						
3	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
4	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	99 a	98 ab	99 a	99 a	99 a	97 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-14"CN	C						
4	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
5	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	97 b	97 abc	99 a	96 a	97 abc	96 ab
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	12-14"CN	C						
5	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C						
5	DESTINY HC MSO	100	SL	0.5	% v/v	0.5	% v/v	12-14"CN	C						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
6	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	98 ab	99 a	99 a	96 a	99 a	97 a
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	12-14"CN	C						
6	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	12-14"CN	C						
6	DESTINY HC MSO	100	SL	0.5	% v/v	0.5	% v/v	12-14"CN	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
7	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	PRE	A	99 a	98 abc	99 a	99 a	99 a	98 a
7	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	12-14"CN	C						
7	STATUS	56	WG	0.105	lb ai/a	3	oz/a	12-14"CN	C						
7	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	12-14"CN	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
8	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	PRE	A	98 ab	98 ab	99 a	99 a	99 a	98 a
8	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	12-14"CN	C						
8	STATUS	56	WG	0.105	lb ai/a	3	oz/a	12-14"CN	C						
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	12-14"CN	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	12-14"CN	C						
9	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	99 a	96 bc	99 a	99 a	94 cd	73 d
9	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	2"W	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						
10	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	99 a	98 ab	99 a	97 a	99 ab	96 ab
10	ROUNDUP P-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	2"W	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						
11	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	99 a	97 abc	99 a	99 a	96 abc	75 d
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2"W	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						
12	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	99 a	98 ab	99 a	99 a	98 ab	93 ab
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2"W	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						
13	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	98 ab	97 abc	99 a	99 a	93 d	79 cd
13	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2"W	B						
13	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						
14	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	99 a	99 a	99 a	95 a	96 abc	89 abc
14	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2"W	B						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						

Glyphosate- and Glufosinate-Resistant Corn Weed Management Systems.

Trial ID: 09-51W-N90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 07-16-09 Control Percent 0 DA-C	ABUTH 08-06-09 Control Percent 21 DA-C	GGGAN 07-16-09 Control Percent 0 DA-C	GGGAN 08-06-09 Control Percent 21 DA-C	CYPES 07-16-09 Control Percent 0 DA-C	CYPES 08-06-09 Control Percent 21 DA-C
15	BICEP II MAGNUM	5.5	SC	1.65	lb ai/a	1.2	qt/a	2"W	B	99 a	95 c	99 a	99 a	96 bcd	77 d
15	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	2"W	B						
15	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						
16	LEXAR	3.7	SC	1.85	lb ai/a	2	qt/a	2"W	B	99 a	98 abc	99 a	99 a	96 bcd	84 bcd
16	STEADFAST	75	WG	0.035	lb ai/a	0.75	oz/a	2"W	B						
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2"W	B						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2"W	B						
17	NONTREATED									0 c	0 d	0 c	0 b	0 e	0 e
18	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	PRE	A	99 a	99 a	99 a	99 a	99 a	99 a
18	WEED FREE														
LSD (P=.05)										1.4	2.9	0.2	3.7	3.3	12.2
Replicate F										3.099	0.880	1.000	1.794	2.482	0.798
Replicate Prob(F)										0.0581	0.4239	0.3784	0.1817	0.0986	0.4585
Treatment F										2440.567	510.501	88175.071	324.972	401.373	29.921
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Purdue/OSU/UW/SIU.
2. Ratings: CI/WC at 0 and 21 da"C" and at harvest;
   weed counts at harvest, count per species but not weed size.
3. Yield.
4. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
   IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and PHBPU (tall morningglory).
   EOS = End of season. 0.5 m2 = 0.5 square meter.
   For weed counts at the end of season, only AMBTR and IPOSS were found, no other weeds were present.
5. Harvested 12-12-09, (2) 30 inch rows by 24 ft.

Capreno Application Timing - Site 1.

Trial ID: 09-51W-M100 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-27-09

Objectives: 1. Determine the influence of application timing and atrazine tank-mix on crop response, control of emerged weed species, and residual weed control later in the season. 2. Compare efficacy to Halex GT. 3. Evaluate reduced rates of glyphosate with Capreno.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 2 Type: W **Code:** IPOSS morningglory, species
Pest 3 Type: W **Code:** AMBTR Ambrosia trifida L. ragweed, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 94 LB/A, K: 396 LB/A

Application Description

	A	B	C
Application Date:	07-06-09	07-13-09	07-22-09
Time of Day:	13:00	12:00	14:00
Application Method:	Spray	Spray	Spray
Application Timing:	V2	V4	V6
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKT	DKT	DKT
Air Temperature, Unit:	82 F	78 F	75 F
% Relative Humidity:	80	92	86
Wind Velocity, Unit:	3 MPH	4 MPH	5 MPH
Wind Direction:	N	SE	W
Dew Presence (Y/N):	N	N	N
Soil Moisture:	ABONOR	ABONOR	NORMAL
% Cloud Cover:	80	40	70
	07-06-09	07-13-09	07-22-09
Crop stage at application:	V2	V4	V6
Height Min, Max (inch):	3 4	6 8	8 12

Pest Stage At Each Application

Application Date:	07-06-09	07-13-09	07-22-09
Weed Code:	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	COTY	4
Stage Min, Max:		COTY 2	2 6
Height Majority:		0.5 IN	3 IN
Height Min, Max:		0.5 1.5	1 4
Density, Unit:		1 FT2	1 FT2
Weed Code:	IPOSS	IPOSS	IPOSS
Stage Majority (leaves):	1	1	6
Stage Min, Max:	COTY 3	COTY 3	2 8
Height Majority:	1.5 IN	2 IN	3 IN
Height Min, Max:	1 2	1 2	1 5
Density, Unit:	1 FT2	2 FT2	2 FT2
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	4	4	4
Stage Min, Max:	COTY 4	COTY 4	4 6
Height Majority:	1.5 IN	2 IN	3 IN
Height Min, Max:	1 3	1 3	2 5
Density, Unit:	1 FT2	1 FT2	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Capreno Application Timing - Site 1.

Trial ID: 09-51W-M100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-12-09 Moisture Percent	ZEAMD 12-12-09 Yield bu/A	ZEAMD Injury Percent 7 DAT	ZEAMD Injury Percent 14 DAT	ZEAMD Injury Percent 28 DAT	ZEAMD Injury Percent 56 DAT
1	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	23.7 a	107 c	5 a	0 a	0 a	0 a
1	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V2	A						
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	22.6 ab	125 ab	5 a	0 a	0 a	0 a
2	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V2	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V2	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	23.0 ab	112 bc	5 a	0 a	0 a	0 a
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	23.1 ab	112 bc	5 a	0 a	0 a	0 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V2	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
5	CORVUS	2.62	SC	0.092	lb ai/a	4.5	fl oz/a	V2	A	22.9 ab	118 abc	5 a	0 a	0 a	0 a
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V2	A	23.6 a	118 abc	5 a	0 a	0 a	0 a
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
7	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V2	A	22.4 ab	118 abc	0 b	0 a	0 a	0 a
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	23.1 ab	121 abc	5 a	0 a	0 a	0 a
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V4	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B						
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	23.6 a	130 a	5 a	0 a	0 a	0 a
9	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V4	B						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V4	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B						
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	23.2 ab	120 abc	5 a	0 a	0 a	0 a
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B						
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	23.2 ab	114 abc	5 a	0 a	0 a	0 a
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V4	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B						
12	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V4	B	23.0 ab	124 abc	0 b	0 a	0 a	0 a
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V4	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B						
13	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	22.5 ab	116 abc	5 a	0 a	0 a	0 a
13	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V6	C						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C						
14	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	21.8 b	117 abc	5 a	0 a	0 a	0 a
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V6	C						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C						
15	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	22.5 ab	113 bc	5 a	0 a	0 a	0 a
15	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V6	C						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C						
16	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V6	C	22.2 ab	121 abc	0 b	0 a	0 a	0 a
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V6	C						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C						
17	NONTREATED									21.9 b	53 d	0 b	0 a	0 a	0 a

Capreno Application Timing - Site 1.

Trial ID: 09-51W-M100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-12-09 Moisture Percent	ZEAMD 12-12-09 Yield bu/A	ZEAMD Injury Percent 7 DAT	ZEAMD Injury Percent 14 DAT	ZEAMD Injury Percent 28 DAT	ZEAMD Injury Percent 56 DAT
	Pest Code														
	Crop Code														
	Rating Date														
	Rating Data Type														
	Rating Unit														
	Rating Timing														
	Trt-Eval Interval														
18	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	23.6 a	107 c	5 a	0 a	0 a	0 a
18	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V2	A						
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V2	A						
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A						
19	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	23.3 ab	121 abc	5 a	0 a	0 a	0 a
19	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V4	B						
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V4	B						
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B						
20	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	22.9 ab	114 abc	5 a	0 a	0 a	0 a
20	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V6	C						
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V6	C						
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C						
LSD (P=.05)										1.63	17.2	0.0	0.0	0.0	0.0
Replicate F										1.243	14.482	0.000	0.000	0.000	0.000
Replicate Prob(F)										0.3000	0.0001	1.0000	1.0000	1.0000	1.0000
Treatment F										0.923	6.531	0.000	0.000	0.000	0.000
Treatment Prob(F)										0.5618	0.0001	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Application Timing - Site 1.

Trial ID: 09-51W-M100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA Control Percent 14 DAT	AMATA Control Percent 28 DAT	AMATA Control Percent 56 DAT	AMATA 09-16-09 Plants 0.5 m2 56 DA-C	IPOSS Control Percent 14 DAT	IPOSS Control Percent 28 DAT	IPOSS Control Percent 56 DAT	IPOSS 09-16-09 Plants 0.5 m2 56 DA-C
1	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	96 cd	93 c	91 b	0.3 cd	90 a-d	86 a-d	77 bcd	2.2 bc
1	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V2	A								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	99 a	98 ab	98 ab	0.2 d	96 ab	97 a	93 a	0.7 efg
2	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V2	A								
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V2	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	99 a	96 abc	94 ab	0.2 d	95 ab	90 ab	82 abc	1.3 c-f
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	99 a	94 bc	93 ab	0.3 cd	88 a-e	85 a-d	67 d	2.2 bc
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V2	A								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
5	CORVUS	2.62	SC	0.092	lb ai/a	4.5	fl oz/a	V2	A	99 a	98 ab	96 ab	0.2 d	90 a-d	85 a-d	82 abc	1.2 d-g
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V2	A	99 a	97 abc	96 ab	0.2 d	91 abc	85 a-d	77 bcd	1.5 cde
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
7	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V2	A	99 a	98 ab	98 a	0.0 d	80 c-f	57 f	17 e	2.8 b
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 d	90 a-d	88 abc	90 ab	0.5 fg
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V4	B								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 d	95 ab	92 ab	92 a	0.3 g
9	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V4	B								
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V4	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	97 abc	95 abc	95 ab	0.7 c	95 ab	90 ab	90 ab	0.5 fg
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 d	95 ab	90 ab	90 ab	0.5 fg
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V4	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
12	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V4	B	99 a	99 a	99 a	0.0 d	88 a-e	73 de	73 cd	1.7 cd
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V4	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
13	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	95 d	95 abc	99 a	0.0 d	78 ef	77 cde	85 abc	0.8 d-g
13	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V6	C								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
14	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	98 ab	97 abc	99 a	0.0 d	78 def	75 de	77 bcd	1.7 cd
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V6	C								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
15	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	98 ab	98 ab	99 a	0.0 d	98 a	96 a	94 a	0.3 g
15	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V6	C								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
16	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V6	C	97 abc	97 abc	99 a	0.0 d	73 f	72 e	77 bcd	1.5 cde
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V6	C								
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
17	NONTREATED									0 e	0 e	0 d	2.3 a	0 h	0 h	0 f	4.5 a

Capreno Application Timing - Site 1.

Trial ID: 09-51W-M100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA Control 14 DAT	AMATA Control 28 DAT	AMATA Control 56 DAT	AMATA 09-16-09 Plants 0.5 m2 56 DA-C	IPOSS Control 14 DAT	IPOSS Control 28 DAT	IPOSS Control 56 DAT	IPOSS 09-16-09 Plants 0.5 m2 56 DA-C
18	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	96 bcd	85 d	68 c	1.3 b	17 g	17 g	13 ef	2.8 b
18	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V2	A								
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V2	A								
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
19	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 ab	99 a	0.0 d	98 a	95 a	93 a	0.5 fg
19	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V4	B								
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V4	B								
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
20	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	99 a	95 abc	96 ab	0.3 cd	85 b-f	82 b-e	83 abc	1.0 d-g
20	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V6	C								
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V6	C								
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
LSD (P=.05)										2.2	4.6	6.6	0.42	12.3	12.8	14.1	0.91
Replicate F										5.652	9.557	8.291	5.147	3.211	0.834	2.366	12.734
Replicate Prob(F)										0.0071	0.0004	0.0010	0.0105	0.0515	0.4423	0.1075	0.0001
Treatment F										794.293	184.267	95.285	15.197	36.326	32.449	32.479	11.120
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Application Timing - Site 1.

Trial ID: 09-51W-M100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	AMBTR 09-16-09 Plants 0.5 m2 56 DA-C
1	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	90 c	83 c	82 d	0.7 def
1	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V2	A				
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	95 abc	92 abc	92 abc	0.5 def
2	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V2	A				
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V2	A				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	92 abc	91 abc	90 abc	0.7 def
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2	A				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	91 bc	92 abc	87 bcd	1.0 cde
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V2	A				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
5	CORVUS	2.62	SC	0.092	lb ai/a	4.5	fl oz/a	V2	A	94 abc	94 ab	90 abc	0.7 def
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V2	A	96 ab	92 abc	92 abc	0.3 ef
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
7	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V2	A	90 c	87 bc	85 cd	1.2 cd
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V2	A				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	94 abc	90 abc	88 a-d	1.2 cd
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V4	B				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	95 abc	92 abc	92 abc	0.8 def
9	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V4	B				
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V4	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	93 abc	90 abc	82 d	1.7 c
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	91 bc	91 abc	89 a-d	0.8 def
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V4	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
12	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V4	B	96 ab	96 a	92 abc	0.7 def
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V4	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
13	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	97 a	96 a	93 ab	0.7 def
13	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	V6	C				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
14	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	97 a	96 a	92 abc	0.5 def
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V6	C				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
15	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	96 ab	95 ab	93 ab	0.7 def
15	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V6	C				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
16	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V6	C	93 abc	93 ab	95 a	0.2 f
16	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	V6	C				
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
17	NONTREATED									0 e	0 e	0 f	4.5 a

Capreno Application Timing - Site 1.

Trial ID: 09-51W-M100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
	Pest Code									AMBTR	AMBTR	AMBTR	AMBTR
	Crop Code												
	Rating Date												09-16-09
	Rating Data Type									Control	Control	Control	Plants
	Rating Unit									Percent	Percent	Percent	0.5 m2
	Rating Timing									14 DAT	28 DAT	56 DAT	
	Trt-Eval Interval												56 DA-C
18	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	73 d	50 d	33 e	2.7 b
18	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V2	A				
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V2	A				
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
19	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	95 abc	93 ab	93 abc	0.5 def
19	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V4	B				
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V4	B				
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
20	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	97 a	95 ab	94 ab	0.7 def
20	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V6	C				
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V6	C				
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
LSD (P=.05)										5.7	9.0	7.8	0.72
Replicate F										0.274	0.029	0.604	3.199
Replicate Prob(F)										0.7616	0.9711	0.5518	0.0520
Treatment F										117.403	50.786	74.686	15.041
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU-DT/Bayer.
2. Ratings: CI at 7, 14, 28 + 56 DAT; WC at 14, 28 + 56 DAT; WC in all plots at 56 DA"C"; Weed counts (2) 0.5 m2 per plot at 56 DA"C".
3. Yield.
4. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory). Injury was stunting, shortening of internodes.
5. DAT = Days after treatment. Plants 0.5 m2 = Plants per 0.5 square meter.
   Ratings at 7 DAT were on 7-13-09, 7-20-09, and 7-29-09 for the V2, V4, and V6 applications, respectively.
   Ratings at 14 DAT were on 7-20-09, 7-27-09, and 8-5-09 for the V2, V4, and V6 applications, respectively.
   Ratings at 28 DAT were on 8-3-09, 8-10-09, and 8-19-09 for the V2, V4, and V6 applications, respectively.
   Ratings at 56 DAT were on 8-31-09, 9-7-09, and 9-16-09 for the V2, V4, and V6 applications, respectively.
6. Harvested 12-12-09, (2) 30 inch rows by 24 ft.

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: 1. Determine the influence of application timing and atrazine tank-mix on crop response, control of emerged weed species, and residual weed control later in the season. 2. Compare efficacy to Halex GT. 3. Evaluate reduced rates of glyphosate with Capreno.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 2 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 3 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 4 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 5 Type: W	**Code:** IPOSS		morningglory, species

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** PIERRON
CEC: 8 **Fert. Level:** P1: 91 LB/A, K: 410 LB/A

Application Description

	A	B	C
Application Date:	07-13-09	07-18-09	07-24-09
Time of Day:	14:00	19:45	14:00
Application Method:	Spray	Spray	Spray
Application Timing:	V2	V4	V6
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKT	NVH	DKT
Air Temperature, Unit:	84 F	70 F	86 F
% Relative Humidity:	78	92	72
Wind Velocity, Unit:	4 MPH	4 MPH	4 MPH
Wind Direction:	SE	W	SW
Dew Presence (Y/N):	N	N	N
Soil Moisture:	ABONOR	NORMAL	NORMAL
% Cloud Cover:	40	75	45
	07-13-09	07-18-09	07-24-09
Crop stage at application:	V2	V4	V6
Height Min, Max (inch):	3 5	5 10	8 12

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	07-13-09			07-18-09			07-24-09	
Weed Code:	AMBTR			AMBTR			AMBTR	
Stage Majority (leaves):	COTY			4			4	
Stage Min, Max:	COTY	2		3		6	2	6
Height Majority:	1		IN	5		IN	8	IN
Height Min, Max:	1	2		4	7		6	10
Density, Unit:	1		FT2	1		FT2	2	FT2
Weed Code:	AMATA			AMATA			AMATA	
Stage Majority (leaves):	COTY			4			8	
Stage Min, Max:	COTY	1		2		6	2	16
Height Majority:	1		IN	2		IN	6	IN
Height Min, Max:	1	2		1	3		3	8
Density, Unit:	1		FT2	1		FT2	1	FT2
Weed Code:	ABUTH			ABUTH			ABUTH	
Stage Majority (leaves):	COTY			1			3	
Stage Min, Max:	COTY	2		COTY	3		2	4
Height Majority:	1		IN	1.5		IN	8	IN
Height Min, Max:	1	2		1	2.5		8	10
Density, Unit:	1		FT2	0.75		FT2	1	FT2
Weed Code:	SETFA			SETFA			SETFA	
Stage Majority (leaves):	1			2			3	
Stage Min, Max:	1	2		1	4		2	5
Height Majority:	2		IN	3		IN	8	IN
Height Min, Max:	1	2		1	5		4	12
Density, Unit:	1		FT2	2		FT2	1	FT2
Weed Code:	IPOSS			IPOSS			IPOSS	
Stage Majority (leaves):	COTY			3			4	
Stage Min, Max:	COTY	2		COTY	7		3	6
Height Majority:	1		IN	3.5		IN	6	IN
Height Min, Max:	1	2		1	5		2	8
Density, Unit:	1		FT2	1		FT2	2	FT2

Application Equipment

Appl. Equipment:	CO2 sprayer			CO2 sprayer			CO2 sprayer	
Operating Pressure:	30		PSI	30		PSI	30	PSI
Nozzle Type:	Flat fan			Flat fan			Flat fan	
Nozzle Size:	XR 8002			XR 8002			XR 8002	
Boom Length, Unit:	7.5		FT	7.5		FT	7.5	FT
Spray Volume, Unit:	15		GPA	15		GPA	15	GPA

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-17-10 Moisture Percent		ZEAMD 01-17-10 Yield bu/A		ZEAMD Injury Percent 7 DAT	ZEAMD Injury Percent 14 DAT	ZEAMD Injury Percent 28 DAT	ZEAMD Injury Percent 56 DAT
1	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	21.8	cd	125	ab	5 a	0 a	0 a	0 a
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	23.3	abc	114	abc	5 a	0 a	0 a	0 a
2	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V2	A								
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	24.8	ab	114	ab	5 a	0 a	0 a	0 a
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	22.9	a-d	103	bcd	5 a	0 a	0 a	0 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V2	A								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
5	CORVUS	2.62	SC	0.092	lb ai/a	4.5	fl oz/a	V2	A	25.3	a	91	cd	5 a	0 a	0 a	0 a
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V2	A	22.5	bcd	109	a-d	5 a	0 a	0 a	0 a
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
7	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V2	A	22.4	bcd	115	ab	0 b	0 a	0 a	0 a
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	21.5	cd	105	a-d	5 a	0 a	0 a	0 a
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	21.6	cd	106	a-d	5 a	0 a	0 a	0 a
9	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V4	B								
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	21.0	cd	115	ab	5 a	0 a	0 a	0 a
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	21.7	cd	127	a	5 a	0 a	0 a	0 a
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V4	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
12	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V4	B	22.3	bcd	123	ab	0 b	0 a	0 a	0 a
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V4	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
13	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	21.5	cd	91	d	5 a	0 a	0 a	0 a
13	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V6	C								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
14	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	21.5	cd	107	a-d	5 a	0 a	0 a	0 a
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V6	C								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
15	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	21.3	cd	112	a-d	5 a	0 a	0 a	0 a
15	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V6	C								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
16	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V6	C	21.2	cd	116	ab	0 b	0 a	0 a	0 a
16	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	C								
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
17	NONTREATED									20.5	d	44	e	0 b	0 a	0 a	0 a

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-17-10 Moisture Percent		ZEAMD 01-17-10 Yield bu/A		ZEAMD Injury Percent 7 DAT	ZEAMD Injury Percent 14 DAT	ZEAMD Injury Percent 28 DAT	ZEAMD Injury Percent 56 DAT
18	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	22.0	cd	109	a-d	5 a	0 a	0 a	0 a
18	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V2	A								
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V2	A								
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
19	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	21.3	cd	112	a-d	5 a	0 a	0 a	0 a
19	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V4	B								
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V4	B								
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
20	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	20.8	cd	108	a-d	5 a	0 a	0 a	0 a
20	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V6	C								
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V6	C								
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
LSD (P=.05)										2.69		22.8		0.0	0.0	0.0	0.0
Replicate F										2.384		2.402		0.000	0.000	0.000	0.000
Replicate Prob(F)										0.1059		0.1041		1.0000	1.0000	1.0000	1.0000
Treatment F										1.744		4.867		0.000	0.000	0.000	0.000
Treatment Prob(F)										0.0713		0.0001		1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	AMBTR 09-18-09 Plants 0.5 m2 56 DA-C	AMATA Control Percent 14 DAT	AMATA Control Percent 28 DAT	AMATA Control Percent 56 DAT	AMATA 09-18-09 Plants 0.5 m2 56 DA-C
1	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	84 g	82 d	82 fg	1.0 c-g	99 a	99 a	99 a	0.0 c
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	96 ab	93 b	93 abc	0.5 fgh	99 a	99 a	99 a	0.0 c
2	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V2	A								
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	89 ef	88 bc	82 fg	1.5 bcd	99 a	99 a	97 a	0.2 bc
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	95 a-d	92 bc	85 ef	1.0 c-g	97 abc	95 c	93 b	0.5 b
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V2	A								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
5	CORVUS	2.62	SC	0.092	lb ai/a	4.5	fl oz/a	V2	A	95 a-d	93 b	93 abc	0.3 gh	98 ab	98 abc	98 a	0.0 c
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V2	A	95 abc	93 b	93 bc	0.7 e-h	98 ab	96 abc	96 ab	0.3 bc
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
7	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V2	A	91 def	90 bc	90 cde	0.5 fgh	98 ab	98 abc	98 a	0.2 bc
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	94 bcd	93 b	92 bc	0.3 gh	99 a	99 ab	99 a	0.2 bc
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	95 a-d	93 b	93 bc	0.5 fgh	99 a	99 a	99 a	0.0 c
9	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V4	B								
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	94 bcd	91 bc	87 def	1.7 bc	99 a	98 ab	96 ab	0.2 bc
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	83 g	82 d	77 g	2.2 b	95 bc	95 c	93 b	0.3 bc
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V4	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
12	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V4	B	93 b-e	90 bc	90 cde	0.8 d-g	99 a	99 a	99 a	0.0 c
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V4	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
13	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	96 ab	93 b	93 abc	0.5 fgh	96 abc	96 bc	96 ab	0.2 bc
13	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V6	C								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
14	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	99 a	99 a	92 bc	0.5 fgh	99 a	99 a	97 a	0.2 bc
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V6	C								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
15	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	94 bcd	92 bc	87 def	1.2 c-f	95 c	95 c	93 b	0.2 bc
15	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V6	C								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
16	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V6	C	99 a	99 a	98 a	0.0 h	99 a	99 a	99 a	0.0 c
16	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	C								
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
17	NONTREATED									0 h	0 e	0 h	5.8 a	0 d	0 d	0 c	1.0 a

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR	AMBTR	AMBTR	AMBTR	AMATA	AMATA	AMATA	AMATA
	Pest Code									AMBTR	AMBTR	AMBTR	AMBTR	AMATA	AMATA	AMATA	AMATA
	Crop Code																
	Rating Date												09-18-09				09-18-09
	Rating Data Type									Control	Control	Control	Plants	Control	Control	Control	Plants
	Rating Unit									Percent	Percent	Percent	0.5 m2	Percent	Percent	Percent	0.5 m2
	Rating Timing									14 DAT	28 DAT	56 DAT		14 DAT	28 DAT	56 DAT	
	Trt-Eval Interval												56 DA-C				56 DA-C
18	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	87 fg	87 cd	87 def	1.3 cde	99 a	99 a	98 a	0.2 bc
18	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V2	A								
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V2	A								
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
19	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	91 c-f	91 bc	91 bcd	0.8 d-g	99 a	99 a	98 a	0.0 c
19	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V4	B								
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V4	B								
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
20	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	99 a	99 a	96 ab	0.3 gh	99 a	99 a	99 a	0.0 c
20	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V6	C								
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V6	C								
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
LSD (P=.05)										4.6	5.0	5.1	0.74	2.9	3.1	3.9	0.42
Replicate F										0.344	0.269	0.034	1.948	0.147	0.495	1.057	1.334
Replicate Prob(F)										0.7114	0.7659	0.9668	0.1565	0.8635	0.6137	0.3574	0.2754
Treatment F										178.904	144.007	136.949	23.174	457.170	415.806	259.720	2.605
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0059

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH Control Percent 14 DAT	ABUTH Control Percent 28 DAT	ABUTH Control Percent 56 DAT	ABUTH 09-18-09 Plants 0.5 m2 56 DA-C	SETFA Control Percent 14 DAT	SETFA Control Percent 28 DAT	SETFA Control Percent 56 DAT	SETFA 09-18-09 Plants 0.5 m2 56 DA-C
1	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	96 ab	96 ab	96 ab	0.2 b	99 a	99 a	99 a	0.0 c
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A								
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	94 b	94 b	94 b	0.2 b	99 a	99 a	99 a	0.0 c
2	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V2	A								
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A								
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	96 ab	96 ab	96 ab	0.2 b	98 a	98 a	98 a	0.2 c
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2	A								
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V2	A								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
5	CORVUS	2.62	SC	0.092	lb ai/a	4.5	fl oz/a	V2	A	99 a	99 a	99 a	0.2 b	99 a	99 a	98 a	0.2 c
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V2	A	99 a	99 a	99 a	0.0 b	98 a	96 a	96 a	0.3 c
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
7	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V2	A	99 a	99 a	99 a	0.0 b	98 a	98 a	98 a	0.0 c
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
9	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V4	B								
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V4	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
12	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V4	B	99 a	99 a	99 a	0.0 b	99 a	91 a	91 a	0.8 bc
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V4	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
13	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	99 a	99 a	99 a	0.0 b	65 b	73 b	73 b	2.0 b
13	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V6	C								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
14	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	99 a	99 a	99 a	0.0 b	99 a	99 a	97 a	0.3 c
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V6	C								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
15	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	99 a	99 a	99 a	0.0 b	99 a	99 a	98 a	0.2 c
15	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V6	C								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
16	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V6	C	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
16	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	C								
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
17	NONTREATED									0 c	0 c	0 c	0.7 a	0 c	0 c	0 c	5.2 a

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH Control 14 DAT	ABUTH Control 28 DAT	ABUTH Control 56 DAT	ABUTH Plants 0.5 m2 56 DA-C	SETFA Control 14 DAT	SETFA Control 28 DAT	SETFA Control 56 DAT	SETFA Plants 0.5 m2 56 DA-C
18	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	99 a	99 a	99 a	0.0 b	99 a	99 a	98 a	0.0 c
18	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V2	A								
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V2	A								
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A								
19	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
19	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V4	B								
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V4	B								
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B								
20	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	99 a	99 a	99 a	0.0 b	99 a	99 a	99 a	0.0 c
20	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V6	C								
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V6	C								
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C								
LSD (P=.05)										3.8	3.8	3.8	0.23	5.0	10.7	10.8	1.47
Replicate F										3.049	3.049	3.049	2.839	0.790	0.216	0.356	0.417
Replicate Prob(F)										0.0591	0.0591	0.0591	0.0709	0.4611	0.8067	0.7028	0.6621
Treatment F										268.702	268.702	268.702	3.862	172.234	35.896	35.092	5.497
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS Control Percent 14 DAT	IPOSS Control Percent 28 DAT	IPOSS Control Percent 56 DAT	IPOSS 09-18-09 Plants 0.5 m2 56 DA-C
1	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	91 ab	87 a	85 b-e	0.8 g
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A				
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	92 ab	87 a	87 a-d	1.2 efg
2	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V2	A				
2	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V2	A				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	96 ab	90 a	83 cde	2.5 cd
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V2	A				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
4	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	93 ab	88 a	83 cde	1.5 efg
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V2	A				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
5	CORVUS	2.62	SC	0.092	lb ai/a	4.5	fl oz/a	V2	A	90 bc	87 a	87 a-d	1.8 def
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	fl oz/a	V2	A	97 ab	93 a	92 a	1.0 fg
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
7	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V2	A	92 ab	78 b	75 fg	2.8 bc
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V2	A				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	92 ab	90 a	88 abc	1.0 fg
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
9	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	93 ab	88 a	87 a-d	1.3 efg
9	AATREX NINE-O	90	WG	0.5	lb ai/a	0.556	lb/a	V4	B				
9	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V4	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	97 ab	93 a	85 b-e	2.0 cde
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
11	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	95 ab	88 a	82 de	1.8 def
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V4	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
12	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V4	B	83 c	73 b	73 g	3.7 ab
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V4	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
13	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	60 e	60 c	57 i	3.7 ab
13	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	V6	C				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
14	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	63 de	63 c	63 h	3.5 ab
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V6	C				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
15	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	98 a	90 a	80 ef	1.3 efg
15	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	V6	C				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
16	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	V6	C	70 d	63 c	63 h	2.8 bc
16	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	C				
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
17	NONTREATED									0 g	0 e	0 k	3.8 a

Capreno Application Timing - Site 2.

Trial ID: 09-2B-W100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
	Pest Code									IPOSS	IPOSS	IPOSS	IPOSS
	Crop Code												
	Rating Date												09-18-09
	Rating Data Type									Control	Control	Control	Plants
	Rating Unit									Percent	Percent	Percent	0.5 m2
	Rating Timing									14 DAT	28 DAT	56 DAT	
	Trt-Eval Interval												56 DA-C
18	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V2	A	94 ab	92 a	90 ab	0.7 g
18	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V2	A				
18	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V2	A				
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2	A				
19	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V4	B	93 ab	90 a	87 a-d	1.3 efg
19	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V4	B				
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V4	B				
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V4	B				
20	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	V6	C	33 f	33 d	33 j	3.7 ab
20	ROUNDUP P-MAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	V6	C				
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	V6	C				
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V6	C				
	LSD (P=.05)									7.1	7.6	5.9	0.90
	Replicate F									0.390	0.073	1.257	6.108
	Replicate Prob(F)									0.6799	0.9297	0.2961	0.0050
	Treatment F									101.682	78.613	117.529	12.178
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU-DT/Bayer.
2. Ratings: CI at 7, 14, 28 + 56 DAT; WC at 14, 28 + 56 DAT; WC in all plots at 56 DA"C"; Weed counts (2) 0.5 m2 per plot at 56 DA"C".
3. Yield.
4. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory). Injury was stunting, shortening of internodes.
5. DAT = Days after treatment. Plants 0.5 m2 = Plants per 0.5 square meter.
   Ratings at 7 DAT were on 7-20-09, 7-25-09, and 7-31-09 for the V2, V4, and V6 applications, respectively.
   Ratings at 14 DAT were on 7-27-09, 8-1-09, and 8-7-09 for the V2, V4, and V6 applications, respectively.
   Ratings at 28 DAT were on 8-10-09, 8-15-09, and 8-21-09 for the V2, V4, and V6 applications, respectively.
   Ratings at 56 DAT were on 9-7-09, 9-12-09, and 9-18-09 for the V2, V4, and V6 applications, respectively.
6. Harvested 1-17-10, (2) 30 inch rows by 25 ft.

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Evaluate crop tolerance and weed control from postemergence applications of Capreno and Laudis.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** PANDI Panicum dichotomiflorum Michx. panicum, fall
Pest 2 Type: W **Code:** IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf
Pest 3 Type: W **Code:** ABUTH Abutilon theophrasti Medicus velvetleaf
Pest 4 Type: W **Code:** AMBTR Ambrosia trifida L. ragweed, giant
Pest 5 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** PIERRON
CEC: 8 **Fert. Level:** P1: 92 LB/A, K: 365 LB/A

Application Description

	A	B	C
Application Date:	06-29-09	07-18-09	07-21-09
Time of Day:	21:30	8:45	13:45
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	4"W	6"W
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	NVH	NVH	NVH
Air Temperature, Unit:	72 F	66 F	74 F
% Relative Humidity:	80	92	90
Wind Velocity, Unit:	1 MPH	6 MPH	6 MPH
Wind Direction:	W	N	N
Dew Presence (Y/N):	N	N	N
Soil Moisture:	NORMAL	NORMAL	NORMAL
% Cloud Cover:	0	80	85
	06-29-09	07-18-09	07-21-09
Crop stage at application:	NA	V4	V4-V5
Height Min, Max (inch):		8 9	9 10

Pest Stage At Each Application

Application Date:	06-29-09	07-18-09	07-21-09
Weed Code:	PANDI	PANDI	PANDI
Stage Majority (leaves):	NA	4	7
Stage Min, Max:		1 6	1 11
Height Majority:		4 IN	6 IN
Height Min, Max:		1 7	2 12
Density, Unit:		0.01 FT2	0.01 FT2
Weed Code:	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	3	4
Stage Min, Max:		COTY 5	2 7
Height Majority:		3 IN	5.5 IN
Height Min, Max:		1.5 4	2 10
Density, Unit:		0.5 FT2	0.5 FT2
Weed Code:	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	2	3
Stage Min, Max:		COTY 3	2 5
Height Majority:		3 IN	5 IN
Height Min, Max:		0.5 4	1 6
Density, Unit:		0.2 FT2	0.2 FT2
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	4	6
Stage Min, Max:		COTY 6	2 8
Height Majority:		4 IN	6 IN
Height Min, Max:		0.5 6	1.5 8
Density, Unit:		0.5 FT2	0.3 FT2
Weed Code:	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	4	6
Stage Min, Max:		3 8	4 10
Height Majority:		2.5 IN	5.5 IN
Height Min, Max:		1.5 4	2 6
Density, Unit:		4 FT2	4 FT2

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code													
Crop Code										ZEAMD	ZEAMD	ZEAMD	ZEAMD
Rating Date													
Rating Data Type										Injury	Injury	Injury	Injury
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing											14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										14 DA-A	14 DA-C	28 DA-C	42 DA-C
1	NONTREATED									0 a	0 b	0 a	0 a
2	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	0 a	0 b	0 a	0 a
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
2	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
3	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	0 a	0 b	0 a	0 a
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
3	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	6"W	C				
3	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
4	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		0 b	0 a	0 a
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
4	ROUNDUP POWERMAX	4.5	SL	0.775	lb ae/a	22	fl oz/a	6"W	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C		0 b	0 a	0 a
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
5	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6"W	C				
5	SUPERB HC	100	SL	0.626	% v/v	0.75	pt/a	6"W	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
6	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		0 b	0 a	0 a
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	6"W	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
7	HALEX GT	4.38	CS	3.94	lb ai/a	3.6	qt/a	4"W	B		0 b	0 a	0 a
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	4"W	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	B				
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		4 a	0 a	0 a
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
8	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
9	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	B		1 b	0 a	0 a
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
9	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		4 a	0 a	0 a
10	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
10	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	4"W	B				
10	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	B		0 b	0 a	0 a
11	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	4"W	B				
11	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
12	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	PRE	A	0 a	0 b	0 a	0 a
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
12	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
12	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
LSD (P=.05)										. . .	0.0	1.1	0.0	0.0
Replicate F											0.000	3.477	0.000	0.000
Replicate Prob(F)											1.0000	0.0487	1.0000	1.0000
Treatment F											0.000	15.400	0.000	0.000
Treatment Prob(F)											1.0000	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										PANDI		PANDI		PANDI		PANDI
Crop Code																
Rating Date																
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing												14 DA-B		28 DA-B		42 DA-B
Trt-Eval Interval										14 DA-A		14 DA-C		28 DA-C		42 DA-C
1	NONTREATED									0	b	0	e	0	d	0 d
2	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	98	a	97	abc	99	a	99 a
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A							
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C							
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C							
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C							
2	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C							
3	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	97	a	98	ab	99	ab	99 a
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A							
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C							
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C							
3	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	6"W	C							
3	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C							
4	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C			99	a	99	a	98 a
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C							
4	ROUNDUP POWERMAX	4.5	SL	0.775	lb ae/a	22	fl oz/a	6"W	C							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C							
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C			95	c	98	ab	98 a
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C							
5	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6"W	C							
5	SUPERB HC	100	SL	0.626	% v/v	0.75	pt/a	6"W	C							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C							
6	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C			98	ab	99	ab	98 a
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C							
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	6"W	C							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C							
7	HALEX GT	4.38	CS	3.94	lb ai/a	3.6	qt/a	4"W	B			99	ab	99	a	98 a
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	4"W	B							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	B							
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B			97	abc	99	a	98 a
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B							
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B							
8	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B							
9	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	B			97	abc	94	b	94 b
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B							
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B							
9	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B							
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B			98	ab	99	a	99 a
10	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B							
10	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	4"W	B							
10	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B							
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	B			75	d	20	c	37 c
11	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B							
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	4"W	B							
11	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B							
12	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	PRE	A	98	a	96	bc	98	ab	98 a
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C							
12	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C							
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C							
12	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C							
LSD (P=.05)										1.7		2.6		5.0		2.9
Replicate F										1.444		1.286		0.688		1.985
Replicate Prob(F)										0.3075		0.2964		0.5128		0.1612
Treatment F										9561.778		1029.016		411.174		1041.338
Treatment Prob(F)										0.0001		0.0001		0.0001		0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										IPOHE	IPOHE	IPOHE	IPOHE
Crop Code													
Rating Date													
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing											14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										14 DA-A	14 DA-C	28 DA-C	42 DA-C
1	NONTREATED									0 c	0 d	0 c	0 d
2	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	93 ab	99 a	99 a	98 ab
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
2	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
3	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	92 b	98 c	98 a	98 ab
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
3	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	6"W	C				
3	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
4	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 a	99 a	98 ab
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
4	ROUNDUP POWERMAX	4.5	SL	0.775	lb ae/a	22	fl oz/a	6"W	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C		98 bc	98 a	98 ab
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
5	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6"W	C				
5	SUPERB HC	100	SL	0.626	% v/v	0.75	pt/a	6"W	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
6	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 a	98 a	98 abc
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	6"W	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
7	HALEX GT	4.38	CS	3.94	lb ai/a	3.6	qt/a	4"W	B		99 ab	92 b	97 bc
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	4"W	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	B				
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	96 c
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
8	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
9	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	B		99 a	99 a	97 bc
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
9	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	98 ab
10	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
10	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	4"W	B				
10	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
11	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	4"W	B				
11	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
12	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	PRE	A	96 a	99 a	99 a	99 a
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
12	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
12	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
LSD (P=.05)										3.6	0.6	1.2	1.7
Replicate F										1.923	0.579	5.411	2.655
Replicate Prob(F)										0.2263	0.5688	0.0123	0.0927
Treatment F										2012.923	16962.580	5176.714	2520.976
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										ABUTH	ABUTH	ABUTH	ABUTH
Crop Code													
Rating Date													
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing											14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										14 DA-A	14 DA-C	28 DA-C	42 DA-C
1	NONTREATED									0 b	0 c	0 c	0 c
2	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	94 a	98 b	99 a	99 a
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
2	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
3	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	97 a	99 a	99 a	99 a
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
3	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	6"W	C				
3	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
4	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 ab	99 a	98 b
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
4	ROUNDUP POWERMAX	4.5	SL	0.775	lb ae/a	22	fl oz/a	6"W	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C		99 a	99 a	99 a
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
5	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6"W	C				
5	SUPERB HC	100	SL	0.626	% v/v	0.75	pt/a	6"W	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
6	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 a	99 b	99 ab
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	6"W	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
7	HALEX GT	4.38	CS	3.94	lb ai/a	3.6	qt/a	4"W	B		99 a	99 a	99 a
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	4"W	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	B				
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
8	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
9	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	B		99 a	99 a	99 a
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
9	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 ab
10	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
10	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	4"W	B				
10	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
11	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	4"W	B				
11	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
12	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	PRE	A	98 a	99 a	99 a	99 a
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
12	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
12	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
LSD (P=.05)										4.7	0.4	0.3	0.5
Replicate F										0.284	0.000	1.000	0.300
Replicate Prob(F)										0.7626	1.0000	0.3840	0.7439
Treatment F										1245.075	40357.004	88156.009	26399.430
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR
Crop Code													
Rating Date													
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing											14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										14 DA-A	14 DA-C	28 DA-C	42 DA-C
1	NONTREATED									0 b	0 b	0 c	0 b
2	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	98 a	99 a	99 a	99 a
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
2	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
3	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	99 a	99 a	99 a	99 a
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
3	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	6"W	C				
3	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
4	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 a	99 a	99 a
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
4	ROUNDUP POWERMAX	4.5	SL	0.775	lb ae/a	22	fl oz/a	6"W	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C		99 a	99 a	99 a
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
5	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6"W	C				
5	SUPERB HC	100	SL	0.626	% v/v	0.75	pt/a	6"W	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
6	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 a	99 a	99 a
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	6"W	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
7	HALEX GT	4.38	CS	3.94	lb ai/a	3.6	qt/a	4"W	B		99 a	98 b	99 a
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	4"W	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	B				
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	98 a
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
8	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
9	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	B		99 a	99 a	99 a
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
9	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
10	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
10	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	4"W	B				
10	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
11	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	4"W	B				
11	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
12	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	PRE	A	99 a	99 a	99 ab	99 a
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
12	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
12	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
LSD (P=.05)										1.1	0.4	0.6	0.7
Replicate F										2.455	0.478	0.579	0.155
Replicate Prob(F)										0.1664	0.6262	0.5688	0.8574
Treatment F										23896.002	42136.133	16992.424	13633.508
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date													
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing											14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										14 DA-A	14 DA-C	28 DA-C	42 DA-C
1	NONTREATED									0 b	0 c	0 b	0 c
2	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	99 a	99 a	99 a	99 a
2	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
2	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
2	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
2	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
3	BALANCE FLEXX	2	SC	0.0625	lb ai/a	4	fl oz/a	PRE	A	99 a	99 a	99 a	99 a
3	ATRAZINE 4L	4	SC	0.5	lb ai/a	1	pt/a	PRE	A				
3	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
3	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
3	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	6"W	C				
3	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
4	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 a	99 a	99 a
4	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
4	ROUNDUP POWERMAX	4.5	SL	0.775	lb ae/a	22	fl oz/a	6"W	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
5	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C		99 a	99 a	99 b
5	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
5	ROUNDUP POWERMAX	4.5	SL	0.387	lb ae/a	11	fl oz/a	6"W	C				
5	SUPERB HC	100	SL	0.626	% v/v	0.75	pt/a	6"W	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
6	CAPRENO	3.45	SC	0.054	lb ai/a	2	fl oz/a	6"W	C		99 a	99 a	99 a
6	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	6"W	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6"W	C				
7	HALEX GT	4.38	CS	3.94	lb ai/a	3.6	qt/a	4"W	B		99 a	99 a	99 a
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	4"W	B				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4"W	B				
8	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
8	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
8	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
9	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W	B		99 b	99 a	99 a
9	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4"W	B				
9	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
10	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
10	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
10	DESTINY MSO	100	SL	0.5	% v/v	0.5	% v/v	4"W	B				
10	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
11	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"W	B		99 a	99 a	99 a
11	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	4"W	B				
11	DESTINY MSO	100	SL	1	% v/v	1	% v/v	4"W	B				
11	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	4"W	B				
12	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	PRE	A	99 a	99 a	99 a	99 a
12	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	6"W	C				
12	ATRAZINE 4L	4	SC	1	lb ai/a	2	pt/a	6"W	C				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	6"W	C				
12	28% UAN	100	SL	1.5	qt/a	1.5	qt/a	6"W	C				
LSD (P=.05)										0.0	0.3	0.0	0.3
Replicate F										0.000	1.000	0.000	1.000
Replicate Prob(F)										1.0000	0.3840	1.0000	0.3840
Treatment F										0.000	88156.009	0.000	88156.009
Treatment Prob(F)										1.0000	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Capreno and Laudis Programs in Corn.

Trial ID: 09-2C-MW60 Location: Belleville Res. Center

Trial Comments

1. Protocol: Bayer (DLL).
2. Ratings: CI/WC at 14, 28 + 42 DAT.
3. Target Fall panicum.
4. Not harvested.

Nic-It Evaluation in Corn.

Trial ID: 09-2C-W80 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Determine the selectivity and efficacy of Nic-It when applied POST alone and in tank-mix combinations to field corn.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 2 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 5 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** PIERRON
CEC: 8 **Fert. Level:** P1: 92 LB/A, K: 365 LB/A

Application Description

	A	B
Application Date:	06-29-09	07-16-09
Time of Day:	21:30	11:30
Application Method:	Spray	Spray
Application Timing:	PRE	2-4"W
Application Placement:	BROSOI	BROFOL
Applied By:	NVH	DKP
Air Temperature, Unit:	72 F	83 F
% Relative Humidity:	80	68
Wind Velocity, Unit:	1 MPH	3 MPH
Wind Direction:	W	E
Dew Presence (Y/N):	N	N
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	0	30
	06-29-09	07-16-09
Crop stage at application:	NA	V4
Height Min, Max (inch):		6 11

Pest Stage At Each Application

Application Date:	06-29-09	07-16-09
Weed Code:	PANDI	PANDI
Stage Majority (leaves):	NA	1
Stage Min, Max:		COTY 3
Height Majority:		1 IN
Height Min, Max:		0.25 3
Density, Unit:		0.01 FT2
Weed Code:	CYPES	CYPES
Stage Majority (leaves):	NA	5
Stage Min, Max:		3 8
Height Majority:		6 IN
Height Min, Max:		4 12
Density, Unit:		2 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA	4
Stage Min, Max:		3 7
Height Majority:		2 IN
Height Min, Max:		1 4
Density, Unit:		0.7 FT2
Weed Code:	AMBEL	AMBEL
Stage Majority (leaves):	NA	1
Stage Min, Max:		COTY 3
Height Majority:		2 IN
Height Min, Max:		0.5 2.5
Density, Unit:		0.3 FT2
Weed Code:	IPOHE	IPOHE
Stage Majority (leaves):	NA	2
Stage Min, Max:		COTY 4
Height Majority:		2.5 IN
Height Min, Max:		0.5 4
Density, Unit:		0.01 FT2

Nic-It Evaluation in Corn.

Trial ID: 09-2C-W80 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Nic-It Evaluation in Corn.

Trial ID: 09-2C-W80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 07-23-09 Injury Percent 7 DA-B	ZEAMD 07-30-09 Injury Percent 14 DA-B	ZEAMD 08-06-09 Injury Percent 21 DA-B	ZEAMD 08-13-09 Injury Percent 28 DA-B	ZEAMD 08-27-09 Injury Percent 42 DA-B
01	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	2 ef	0 d	0 b	0 b	0 a
01	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B					
01	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
01	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
02	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	3 def	0 d	0 b	0 b	0 a
02	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B					
02	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
02	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
03	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	9 b	0 d	0 b	0 b	0 a
03	BANVEL	4	SL	0.375	lb ae/a	12	fl oz/a	2-4"W	B					
03	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
03	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
04	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	9 b	4 b	1 b	0 b	0 a
04	BANVEL	4	SL	0.375	lb ai/a	12	fl oz/a	2-4"W	B					
04	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
04	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
05	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	6 bcd	5 b	1 b	0 b	0 a
05	BANVEL	4	SL	0.25	lb ai/a	8	fl oz/a	2-4"W	B					
05	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B					
05	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
05	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
06	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	5 cde	2 cd	1 b	0 b	0 a
06	HARASS	75	WG	0.00234	lb ai/a	0.05	oz/a	2-4"W	B					
06	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
06	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
07	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	2-4"W	B	0 f	0 d	5 b	0 b	0 a
07	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B					
07	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
07	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
08	STOUT	72.5	WG			0.75	oz/a	2-4"W	B	24 a	21 a	14 a	7 a	0 a
08	ACCENT	75	WG	0.0316	lb ai/a			2-4"W	B					
08	HARMONY SG	50	SG	0.00234	lb ai/a			2-4"W	B					
08	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
08	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
09	HARNESS	7	EC	1.25	lb ai/a	22.9	fl oz/a	PRE	A	6 bc	3 bc	0 b	0 b	0 a
09	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B					
09	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B					
09	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B					
10	NONTREATED									0 f	0 d	0 b	0 b	0 a
LSD (P=.05)										3.5	2.2	5.3	0.5	0.0
Replicate F										0.147	0.379	0.121	1.000	0.000
Replicate Prob(F)										0.9308	0.7691	0.9471	0.4079	1.0000
Treatment F										32.793	71.987	5.554	169.000	0.000
Treatment Prob(F)										0.0001	0.0001	0.0002	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Nic-It Evaluation in Corn.

Trial ID: 09-2C-W80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	PANDI 07-30-09 Control Percent 14 DA-B	PANDI 08-06-09 Control Percent 21 DA-B	PANDI 08-13-09 Control Percent 28 DA-B	PANDI 08-27-09 Control Percent 42 DA-B	CYPES 07-30-09 Control Percent 14 DA-B	CYPES 08-06-09 Control Percent 21 DA-B	CYPES 08-13-09 Control Percent 28 DA-B	CYPES 08-27-09 Control Percent 42 DA-B
01	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	97 bc	98 bc	97 abc	98 a	82 bc	86 bc	86 bc	82 a
01	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
01	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
01	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
02	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	98 ab	98 abc	97 abc	98 a	86 b	89 ab	88 ab	83 a
02	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
02	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
02	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
03	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	97 abc	97 c	97 bc	97 a	88 b	87 bc	87 ab	83 a
03	BANVEL	4	SL	0.375	lb ae/a	12	fl oz/a	2-4"W	B								
03	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
03	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
04	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	97 abc	98 bc	97 c	95 b	75 d	81 cd	80 c	81 a
04	BANVEL	4	SL	0.375	lb ai/a	12	fl oz/a	2-4"W	B								
04	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
04	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
05	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	98 a	98 a	98 a	97 a	78 cd	88 b	86 bc	80 a
05	BANVEL	4	SL	0.25	lb ai/a	8	fl oz/a	2-4"W	B								
05	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
05	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
05	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
06	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	96 c	98 abc	98 ab	98 a	75 d	79 d	82 bc	87 a
06	HARASS	75	WG	0.00234	lb ai/a	0.05	oz/a	2-4"W	B								
06	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
06	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
07	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	2-4"W	B	98 a	98 abc	97 abc	97 a	78 cd	85 bcd	81 bc	85 a
07	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
07	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
07	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
08	STOUT	72.5	WG			0.75	oz/a	2-4"W	B	97 abc	98 abc	97 abc	97 a	80 cd	86 bc	86 bc	88 a
08	ACCENT	75	WG	0.0316	lb ai/a			2-4"W	B								
08	HARMONY SG	50	SG	0.00234	lb ai/a			2-4"W	B								
08	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
08	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
09	HARNESS	7	EC	1.25	lb ai/a	22.9	fl oz/a	PRE	A	98 a	98 ab	98 abc	97 a	95 a	95 a	94 a	89 a
09	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B								
09	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
09	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
10	NONTREATED									0 d	0 d	0 d	0 c	0 e	0 e	0 d	0 b
LSD (P=.05)										1.0	0.7	1.2	2.0	6.6	6.2	6.8	10.2
Replicate F										2.591	0.435	0.643	2.190	1.042	2.008	2.857	0.687
Replicate Prob(F)										0.0734	0.7294	0.5941	0.1123	0.3897	0.1365	0.0556	0.5680
Treatment F										7736.137	16636.164	5209.439	1973.302	134.701	167.644	136.196	57.969
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Nic-It Evaluation in Corn.

Trial ID: 09-2C-W80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA	AMATA	AMATA	AMATA	AMBEL	AMBEL	AMBEL	AMBEL
	Pest Code									AMATA	AMATA	AMATA	AMATA	AMBEL	AMBEL	AMBEL	AMBEL
	Crop Code																
	Rating Date									07-30-09	08-06-09	08-13-09	08-27-09	07-30-09	08-06-09	08-13-09	08-27-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing																
	Trt-Eval Interval									14 DA-B	21 DA-B	28 DA-B	42 DA-B	14 DA-B	21 DA-B	28 DA-B	42 DA-B
01	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	87 c	78 bc	78 b	65 b	99 a	99 a	98 a	97 a
01	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
01	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
01	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
02	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	90 bc	82 b	81 b	71 b	99 a	98 a	98 a	98 a
02	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
02	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
02	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
03	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	98 ab	98 a	97 a	96 a	99 a	99 a	99 a	99 a
03	BANVEL	4	SL	0.375	lb ae/a	12	fl oz/a	2-4"W	B								
03	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
03	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
04	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	98 a	99 a	98 a	97 a	99 a	99 a	99 a	99 a
04	BANVEL	4	SL	0.375	lb ai/a	12	fl oz/a	2-4"W	B								
04	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
04	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
05	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	98 ab	99 a	98 a	99 a	99 a	99 a	99 a	99 a
05	BANVEL	4	SL	0.25	lb ai/a	8	fl oz/a	2-4"W	B								
05	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
05	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
05	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
06	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	14 f	9 e	5 d	26 c	98 a	94 b	92 b	96 a
06	HARASS	75	WG	0.00234	lb ai/a	0.05	oz/a	2-4"W	B								
06	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
06	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
07	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	2-4"W	B	76 d	69 c	73 b	71 b	99 a	99 a	99 a	99 a
07	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B								
07	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
07	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
08	STOUT	72.5	WG			0.75	oz/a	2-4"W	B	68 e	53 d	45 c	41 c	99 a	99 a	98 a	93 a
08	ACCENT	75	WG	0.0316	lb ai/a			2-4"W	B								
08	HARMONY SG	50	SG	0.00234	lb ai/a			2-4"W	B								
08	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
08	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
09	HARNESS	7	EC	1.25	lb ai/a	22.9	fl oz/a	PRE	A	99 a	98 a	98 a	98 a	96 b	95 b	91 b	64 b
09	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B								
09	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B								
09	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B								
10	NONTREATED									0 g	0 e	0 d	0 d	0 c	0 c	0 c	0 c
LSD (P=.05)										8.1	11.6	15.8	17.9	2.1	2.9	3.7	8.2
	Replicate F									1.273	2.583	1.653	0.542	1.249	1.685	1.651	0.496
	Replicate Prob(F)									0.3035	0.0741	0.2006	0.6580	0.3114	0.1936	0.2010	0.6883
	Treatment F									170.944	85.639	48.422	30.967	1797.872	929.661	593.316	124.575
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Nic-It Evaluation in Corn.

Trial ID: 09-2C-W80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOHE	IPOHE	IPOHE	IPOHE
	Pest Code									IPOHE	IPOHE	IPOHE	IPOHE
	Crop Code												
	Rating Date									07-30-09	08-06-09	08-13-09	08-27-09
	Rating Data Type									Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing												
	Trt-Eval Interval									14 DA-B	21 DA-B	28 DA-B	42 DA-B
01	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	99 a	99 a	98 a	96 a
01	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B				
01	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
01	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
02	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	99 a	98 ab	98 a	96 a
02	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B				
02	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
02	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
03	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	83 bc	94 c	95 bc	96 a
03	BANVEL	4	SL	0.375	lb ae/a	12	fl oz/a	2-4"W	B				
03	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
03	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
04	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	78 c	96 bc	96 abc	97 a
04	BANVEL	4	SL	0.375	lb ai/a	12	fl oz/a	2-4"W	B				
04	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
04	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
05	NIC-IT	2	OD	0.0234	lb ai/a	1.5	fl oz/a	2-4"W	B	99 a	98 ab	97 ab	97 a
05	BANVEL	4	SL	0.25	lb ai/a	8	fl oz/a	2-4"W	B				
05	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B				
05	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
05	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
06	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B	70 d	95 c	94 cd	96 a
06	HARASS	75	WG	0.00234	lb ai/a	0.05	oz/a	2-4"W	B				
06	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
06	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
07	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	2-4"W	B	99 a	98 ab	98 a	96 a
07	AATREX	4	SC	1	lb ai/a	32	fl oz/a	2-4"W	B				
07	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
07	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
08	STOUT	72.5	WG			0.75	oz/a	2-4"W	B	84 b	98 ab	97 ab	96 a
08	ACCENT	75	WG	0.0316	lb ai/a			2-4"W	B				
08	HARMONY SG	50	SG	0.00234	lb ai/a			2-4"W	B				
08	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
08	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
09	HARNESS	7	EC	1.25	lb ai/a	22.9	fl oz/a	PRE	A	73 d	87 d	92 d	95 a
09	NIC-IT	2	OD	0.0313	lb ai/a	2	fl oz/a	2-4"W	B				
09	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	2-4"W	B				
09	28% UAN	100	SL	3	% v/v	3	% v/v	2-4"W	B				
10	NONTREATED									0 e	0 e	0 e	0 b
	LSD (P=.05)									4.4	2.4	2.5	2.3
	Replicate F									1.620	1.327	0.573	0.912
	Replicate Prob(F)									0.2080	0.2862	0.6375	0.4484
	Treatment F									394.115	1310.257	1249.108	1466.105
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Cheminova (HZEAMXNIC00901).
2. Ratings: CI at 7 days after B; CI/WC at 14, 21, 28 + 42 days after B.
3. Crop injury was stunting.
4. Not harvested.

FBS 1030 and 1039 Evaluation in Corn.

Trial ID: 09-20A-E50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-26-09

Objectives: Evaluate FBS 1030 and FBS 1039 and fertilizer for grain yield and quality on field corn applied with starter, sidedress, and foliar fungicides.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-69 **Description:** RR2(VT3)
Planting Method: SEEDED **Planting Date:** 06-26-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1 78 LB/A, K 423 LB/A

Application Description

	A	B	C
Application Date:	06-26-09	07-18-09	08-21-09
Time of Day:	19:30	9:00	10:30
Application Method:	Planter	Spray	Spray
Application Timing:	START	SIDE	VT
Application Placement:	IN-FURROW	SIDEDRESS	BROFOL
Applied By:	NVH	NVH	NVH
Air Temperature, Unit:	89 F	67 F	76 F
% Relative Humidity:	70	90	80
Wind Velocity, Unit:	3 MPH	6 MPH	8 MPH
Wind Direction:	W	N	W
Dew Presence (Y/N):	N	N	N
Soil Moisture:	NORMAL	NORMAL	ABONOR
% Cloud Cover:	50	60	20

	06-26-09	07-18-09	08-21-09
Crop stage at application:	NA	V5	VT-R1
Height Min, Max (inch):		10 12	90 96

Pest Stage At Each Application

Application Date:	06-26-09	07-18-09	08-21-09
Weed Code:	NA	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8003	XR 8003	XR 8002
Boom Length, Unit:		7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA

FBS 1030 and 1039 Evaluation in Corn.

Trial ID: 09-20A-E50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-16-09 Moisture Percent	ZEAMD 12-16-09 Test wt. lb/bu	ZEAMD 12-16-09 Yield bu/A	ZEAMD 07-24-09 Vigor 0-9 28 DAP	ZEAMD 07-24-09 V Stage 28 DAP	ZEAMD 07-24-09 Height Inch 5 Plants 28 DAP	ZEAMD 07-24-09 Height Inch Overall 28 DAP
1	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	22.4 abc	50.1 a	171 ab	8.0 b	7.0 a	53.0 a	53.5 a
1	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
1	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
1	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
2	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	22.2 bc	50.4 a	166 abc	7.8 b	7.0 a	53.1 a	53.3 a
2	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
2	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
2	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C							
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
3	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	22.5 abc	50.6 a	154 bc	8.0 b	7.0 a	53.5 a	53.8 a
3	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A							
3	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
3	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
4	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	21.7 c	50.3 a	167 abc	8.0 b	7.0 a	53.8 a	54.3 a
4	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A							
4	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
4	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
4	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C							
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
5	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	23.1 ab	49.4 a	148 c	8.8 a	7.0 a	53.8 a	54.5 a
5	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
5	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B							
5	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
6	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	22.3 abc	50.1 a	169 ab	8.0 b	7.0 a	53.2 a	54.3 a
6	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
6	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B							
6	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
6	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C							
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
7	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	23.4 a	49.6 a	162 abc	7.5 b	7.0 a	53.8 a	53.5 a
7	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A							
7	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
7	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B							
7	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
8	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	22.5 abc	49.7 a	175 a	7.5 b	6.3 b	53.3 a	53.3 a
8	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A							
8	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B							
8	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B							
8	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C							
8	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C							
8	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C							
LSD (P=.05)										1.10	1.46	18.7	0.57	0.26	2.23	2.30
Replicate F										4.577	0.314	1.119	0.840	1.000	2.388	2.407
Replicate Prob(F)										0.0128	0.8152	0.3637	0.4872	0.4123	0.0977	0.0958
Treatment F										1.905	0.689	1.907	4.200	9.000	0.185	0.394
Treatment Prob(F)										0.1196	0.6802	0.1193	0.0049	0.0001	0.9855	0.8953

Means followed by same letter do not significantly differ (P=.05, LSD)

FBS 1030 and 1039 Evaluation in Corn.

Trial ID: 09-20A-E50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Code											
Crop Code										ZEAMD	ZEAMD
Rating Date										12-14-09	12-14-09
Rating Data Type										Stalk Rot	AbnormalEar
Rating Unit										0-5	/6 plnts
Rating Timing											
Trt-Eval Interval											
1	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	1.5 a	0.3 a
1	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
1	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
1	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
2	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	1.0 bc	0.3 a
2	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
2	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
2	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C		
2	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
3	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	0.9 c	0.5 a
3	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A		
3	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
3	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
3	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
4	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	1.4 ab	0.5 a
4	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A		
4	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
4	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
4	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C		
4	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
5	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	1.0 bc	0.5 a
5	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
5	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B		
5	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
5	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
6	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	1.0 bc	0.8 a
6	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
6	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B		
6	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
6	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C		
6	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
7	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	1.1 abc	0.0 a
7	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A		
7	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
7	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B		
7	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
7	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
8	10-34-0	100	SL	5	gal/a	5	gal/a	START	A	1.0 bc	0.3 a
8	FBS 1039	100	SL	6	fl oz/a	6	fl oz/a	START	A		
8	28% UAN	100	SL	20	gal/a	20	gal/a	SIDE	B		
8	FBS 1039	100	SL	8	fl oz/a	8	fl oz/a	SIDE	B		
8	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	C		
8	FBS 1030	100	SL	6	fl oz/a	6	fl oz/a	VT	C		
8	NIS (ACTIVATOR 90)	100	SL	0.125	% v/v	0.125	% v/v	VT	C		
LSD (P=.05)										0.42	0.75
Replicate F										0.380	0.636
Replicate Prob(F)										0.7682	0.5999
Treatment F										2.191	0.818
Treatment Prob(F)										0.0777	0.5828

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Floratine BioSciences.
2. Ratings: Plant height, vigor and leaf count (growth stage) at 28 DAP.
3. Yield, moisture and test weight at harvest.
4. Blanket PRE application of Bicep II Magnum (2.4 qt/A) to entire area was applied 6-26-09.

5. Blanket preplant broadcast nitrogen application of 120 lb N/Acre.
6. Side dress application B at corn stage V6-V8 (BBCH 16-18).
7. Corn height; 5 Plants is average height of 5 random plants per plot, Overall is looking across the top of the plants. Corn vigor scale is 0-9, 0 = dead, 9 = very vigorous. Corn V Stage = Vegetative stage of corn.
8. Stalk Rot, 0-5 = University of Illinois stalk rot ratings scale (Hines-Shaw-White).
   0 = no visible discoloration of the internal below ear stalk nodes or pith.
   1 = internal discoloration at the stalk nodes below the ear.
   2 = internal discoloration at the stalk nodes and in the pith below the ear.
   3 = pith separation occurring below the ear.
   4 = complete discoloration and decay of the pith between at least two nodes below the ear, but stalk still standing.
   5 = stalk lodged below the ear due to stalk rot.
9. AbnormalEar, /6 plnts = The number of abnormal ears per 6 corn plants evaluated.
10. Harvested 12-16-09, (2) 30 inch rows by 22 ft.

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Soybean, Tilled Weed Control Studies

Southern Illinois University

Preemergence Broadleaf Herbicides in Soybean - 1.

Trial ID: 09-2A-M90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Compare the efficacy of several preemergence herbicides for residual broadleaf control in soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** PIERRON
CEC: 7 **Fert. Level:** P1:93 LB/A, K:448 LB/A

Application Description

	A	B
Application Date:	07-01-09	08-11-09
Time of Day:	8:00	10:00
Application Method:	Spray	Spray
Application Timing:	PRE	42DAP
Application Placement:	BROSOI	BROFOL
Applied By:	DKP	DKP
Air Temperature, Unit:	70 F	76 F
% Relative Humidity:	92	92
Wind Velocity, Unit:	3 MPH	2 MPH
Wind Direction:	W	W
Dew Presence (Y/N):	N	N
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	60	100
	07-01-09	08-11-09
Crop stage at application:	NA	R1
Height Min, Max (inch):		18 24

Pest Stage At Each Application

Application Date:	07-01-09	08-11-09
Weed Code:	SETFA	SETFA
Stage Majority (leaves):	NA	6
Stage Min, Max:		3 12
Height Majority:		8 IN
Height Min, Max:		4 24
Density, Unit:		0.5 FT2
Weed Code:	AMBEL	AMBEL
Stage Majority (leaves):	NA	8
Stage Min, Max:		4 12
Height Majority:		14 IN
Height Min, Max:		3 24
Density, Unit:		0.7 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA	12
Stage Min, Max:		2 20
Height Majority:		12 IN
Height Min, Max:		3 28
Density, Unit:		0.5 FT2
Weed Code:	ABUTH	ABUTH
Stage Majority (leaves):	NA	8
Stage Min, Max:		2 10
Height Majority:		10 IN
Height Min, Max:		2 20
Density, Unit:		1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Preemergence Broadleaf Herbicides in Soybean - 1.

Trial ID: 09-2A-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 07-15-09 Injury Percent 14 DA-A		GLXMA 07-29-09 Injury Percent 28 DA-A		SETFA 07-29-09 Control Percent 28 DA-A		SETFA 08-12-09 Control Percent 1 DA-B 42 DA-A		SETFA 08-26-09 Control Percent 15 DA-B 56 DA-A	
1	NONTREATED									0	g	0	e	0	c	0	d	0	c
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B									99	a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	6	d	4	d	96	a	90	ab	99	a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
4	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	PRE	A	11	c	5	cd	95	a	90	ab	99	a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
5	VALOR SX	51	WG	0.096	lb ai/a	3	oz/a	PRE	A	10	c	8	bc	96	a	93	ab	99	a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
6	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	PRE	A	3	d-g	2	de	77	b	68	c	98	b
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
7	V-10233	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	18	b	9	b	98	a	95	a	99	a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
8	V-10233	76	WG	0.178	lb ai/a	3.75	oz/a	PRE	A	25	a	18	a	98	a	97	a	99	a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
9	VALOR XLT	40.3	WG			3	oz/a	PRE	A	4	d-g	4	d	97	a	95	a	99	a
9	VALOR SX	51	WG	0.056	lb ai/a			PRE	A										
9	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A										
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
10	GANGSTER (CO-PACK)					2.4	oz/a	PRE	A	4	def	3	de	97	a	96	a	99	a
10	GANGSTER FR	84	WG	0.021	lb ai/a			PRE	A										
10	GANGSTER V	51	WG	0.064	lb ai/a			PRE	A										
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
11	PREFIX	5.29	EC	1.1	lb ai/a	1.67	pt/a	PRE	A	4	def	4	d	96	a	93	ab	98	b
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
12	CANOPY EX	29.5	WG			1.67	oz/a	PRE	A	2	efg	0	e	77	b	67	c	99	a
12	CLASSIC	25	WG	0.0237	lb ai/a			PRE	A										
12	EXPRESS	50	SG	0.0071	lb ai/a			PRE	A										
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
13	ENVIVE	41.3	WG			3	oz/a	PRE	A	5	de	4	d	97	a	94	ab	99	a
13	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A										
13	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A										
13	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A										
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
14	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	1	fg	0	e	92	a	88	b	99	a
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
15	PURSUIT PLUS	2.9	EC	0.91	lb ai/a	2.5	pt/a	PRE	A	4	def	2	de	94	a	93	ab	99	a
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
16	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	2	d-g	0	e	82	b	67	c	99	a
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B										
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B										
LSD (P=.05)										3.8		3.4		7.3		6.7		0.7	

Preemergence Broadleaf Herbicides in Soybean - 1.

Trial ID: 09-2A-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code												SETFA	SETFA	SETFA
Crop Code										GLXMA	GLXMA			
Rating Date										07-15-09	07-29-09	07-29-09	08-12-09	08-26-09
Rating Data Type										Injury	Injury	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing													1 DA-B	15 DA-B
Trt-Eval Interval										14 DA-A	28 DA-A	28 DA-A	42 DA-A	56 DA-A
Replicate F										11.473	5.784	0.873	1.673	2.143
Replicate Prob(F)										0.0002	0.0079	0.4289	0.2059	0.1349
Treatment F										27.113	15.494	99.021	118.230	11793.492
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 1.

Trial ID: 09-2A-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBEL 07-29-09 Control Percent 28 DA-A	AMBEL 08-12-09 Control Percent 1 DA-B 42 DA-A	AMBEL 08-26-09 Control Percent 15 DA-B 56 DA-A	AMATA 07-29-09 Control Percent 28 DA-A	AMATA 08-12-09 Control Percent 1 DA-B 42 DA-A	AMATA 08-26-09 Control Percent 15 DA-B 56 DA-A
1	NONTREATED									0 f	0 g	0 c	0 e	0 e	0 e
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B			80 a			84 bc
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	92 a	81 cd	95 a	98 ab	99 a	99 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
4	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	PRE	A	96 a	88 abc	96 a	99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
5	VALOR SX	51	WG	0.096	lb ai/a	3	oz/a	PRE	A	98 a	95 ab	98 a	99 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
6	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	PRE	A	30 e	13 f	88 a	57 c	47 c	92 ab
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
7	V-10233	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	98 a	95 ab	99 a	99 a	99 a	99 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
8	V-10233	76	WG	0.178	lb ai/a	3.75	oz/a	PRE	A	99 a	97 ab	98 a	99 a	99 a	99 a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
9	VALOR XLT	40.3	WG			3	oz/a	PRE	A	98 a	97 ab	98 a	99 a	98 a	98 a
9	VALOR SX	51	WG	0.056	lb ai/a			PRE	A						
9	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
10	GANGSTER (CO-PACK)					2.4	oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a	98 a
10	GANGSTER FR	84	WG	0.021	lb ai/a			PRE	A						
10	GANGSTER V	51	WG	0.064	lb ai/a			PRE	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
11	PREFIX	5.29	EC	1.1	lb ai/a	1.67	pt/a	PRE	A	78 b	70 d	81 a	99 a	91 a	98 a
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
12	CANOPY EX	29.5	WG			1.67	oz/a	PRE	A	96 a	87 bc	93 a	3 e	0 e	43 d
12	CLASSIC	25	WG	0.0237	lb ai/a			PRE	A						
12	EXPRESS	50	SG	0.0071	lb ai/a			PRE	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
13	ENVIVE	41.3	WG			3	oz/a	PRE	A	99 a	97 ab	99 a	98 ab	94 a	99 a
13	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A						
13	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A						
13	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
14	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	97 a	90 abc	98 a	93 b	80 b	95 a
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
15	PURSUIT PLUS	2.9	EC	0.91	lb ai/a	2.5	pt/a	PRE	A	57 d	37 e	42 b	50 d	37 d	80 c
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
16	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	67 c	22 f	42 b	97 ab	97 a	98 a
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
LSD (P=.05)										7.7	11.1	21.9	5.6	8.5	10.3

Preemergence Broadleaf Herbicides in Soybean - 1.

Trial ID: 09-2A-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										AMBEL	AMBEL	AMBEL	AMATA	AMATA	AMATA
Crop Code															
Rating Date										07-29-09	08-12-09	08-26-09	07-29-09	08-12-09	08-26-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing											1 DA-B	15 DA-B		1 DA-B	15 DA-B
Trt-Eval Interval										28 DA-A	42 DA-A	56 DA-A	28 DA-A	42 DA-A	56 DA-A
Replicate F										1.090	1.839	2.033	3.831	2.063	0.136
Replicate Prob(F)										0.3501	0.1776	0.1485	0.0338	0.1460	0.8734
Treatment F										126.539	82.552	14.420	336.035	156.518	57.930
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 1.

Trial ID: 09-2A-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
	Pest Code									ABUTH		ABUTH		ABUTH	
	Crop Code														
	Rating Date									07-29-09		08-12-09		08-26-09	
	Rating Data Type									Control		Control		Control	
	Rating Unit									Percent		Percent		Percent	
	Rating Timing											1 DA-B		15 DA-B	
	Trt-Eval Interval									28 DA-A		42 DA-A		56 DA-A	
1	NONTREATED									0	e	0	d	0	e
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B					66	bc
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	93	ab	94	a	97	a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
4	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	PRE	A	96	ab	96	a	99	a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
5	VALOR SX	51	WG	0.096	lb ai/a	3	oz/a	PRE	A	95	ab	96	a	98	a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
6	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	PRE	A	3	e	0	d	47	cd
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
7	V-10233	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	99	a	97	a	99	a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
8	V-10233	76	WG	0.178	lb ai/a	3.75	oz/a	PRE	A	99	a	97	a	99	a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
9	VALOR XLT	40.3	WG			3	oz/a	PRE	A	97	ab	96	a	99	a
9	VALOR SX	51	WG	0.056	lb ai/a			PRE	A						
9	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
10	GANGSTER (CO-PACK)					2.4	oz/a	PRE	A	99	a	98	a	99	a
10	GANGSTER FR	84	WG	0.021	lb ai/a			PRE	A						
10	GANGSTER V	51	WG	0.064	lb ai/a			PRE	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
11	PREFIX	5.29	EC	1.1	lb ai/a	1.67	pt/a	PRE	A	15	d	28	c	43	d
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
12	CANOPY EX	29.5	WG			1.67	oz/a	PRE	A	87	b	90	ab	98	a
12	CLASSIC	25	WG	0.0237	lb ai/a			PRE	A						
12	EXPRESS	50	SG	0.0071	lb ai/a			PRE	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
13	ENVIVE	41.3	WG			3	oz/a	PRE	A	96	ab	97	a	98	a
13	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A						
13	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A						
13	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
14	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	89	ab	95	a	97	a
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
15	PURSUIT PLUS	2.9	EC	0.91	lb ai/a	2.5	pt/a	PRE	A	94	ab	94	a	98	a
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
16	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	70	c	83	b	72	b
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	42DAP	B						
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	42DAP	B						
	LSD (P=.05)									10.6		8.5		20.8	

Preemergence Broadleaf Herbicides in Soybean - 1.

Trial ID: 09-2A-M90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										ABUTH	ABUTH	ABUTH
Crop Code												
Rating Date										07-29-09	08-12-09	08-26-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing											1 DA-B	15 DA-B
Trt-Eval Interval										28 DA-A	42 DA-A	56 DA-A
Replicate F										4.728	3.918	3.860
Replicate Prob(F)										0.0170	0.0316	0.0322
Treatment F										101.379	151.622	16.399
Treatment Prob(F)										0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Valent (MD64.04), FMC.
2. Ratings: CI 14 + 28 da PRE; WC 28, 42 + 56 da PRE.
3. Yield not necessary.

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-28-09

Objectives: Evaluate the preemergence efficacy and soybean tolerance of Kixor products, sulfentrazone products, and various herbicide combinations.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-28-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** IPOSS		morningglory, species
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.3 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 67 LB/A, K: 376 LB/A

Application Description

	A	B
Application Date:	06-28-09	08-18-09
Time of Day:	18:45	11:00
Application Method:	Spray	Spray
Application Timing:	PRE	45-60DAA
Application Placement:	BROSOI	BROFOL
Applied By:	DKP	NVH
Air Temperature, Unit:	83 F	80 F
% Relative Humidity:	46	92
Wind Velocity, Unit:	6 MPH	8 MPH
Wind Direction:	N	SW
Dew Presence (Y/N):	N	N
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	0	
	06-28-09	08-18-09
Crop stage at application:	NA	R2
Height Min, Max (inch):		38 40

Pest Stage At Each Application

Application Date:	06-28-09	08-18-09
Weed Code:	CYPES	CYPES
Stage Majority (leaves):	NA	5
Stage Min, Max:		2 7
Height Majority:		12 IN
Height Min, Max:		2 18
Density, Unit:		0.04 FT2
Weed Code:	AMBTR	AMBTR
Stage Majority (leaves):	NA	25
Stage Min, Max:		10 35
Height Majority:		50 IN
Height Min, Max:		12 64
Density, Unit:		1 FT2
Weed Code:	IPOSS	IPOSS
Stage Majority (leaves):	NA	15
Stage Min, Max:		8 30
Height Majority:		25 IN
Height Min, Max:		10 40
Density, Unit:		0.01 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA	35
Stage Min, Max:		20 40
Height Majority:		36 IN
Height Min, Max:		18 48
Density, Unit:		0.04 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-07-09 Moisture Percent	GLXMA 11-07-09 Yield bu/A	GLXMA 07-12-09 Injury Percent 14 DA-A	GLXMA 07-12-09 Necrosis Percent 14 DA-A	GLXMA 07-26-09 Injury Percent 28 DA-A	GLXMA 07-26-09 Necrosis Percent 28 DA-A
1	NONTREATED									11.2 bc	26 e	0 c	0 c	0 c	0 a
2	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	11.5 abc	34 cd	4 b	4 b	0 c	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
3	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	11.5 abc	30 d	4 b	4 b	2 ab	0 a
3	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	PRE	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.5 abc	40 ab	0 c	0 c	1 bc	0 a
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A						
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A						
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	11.8 a	32 d	3 b	3 b	0 c	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	11.6 abc	38 ab	3 b	3 b	0 c	0 a
6	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	PRE	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
7	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	11.1 c	32 d	4 b	4 b	3 a	0 a
7	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	11.7 ab	40 ab	4 b	4 b	0 c	0 a
8	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A						
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	11.5 abc	41 a	0 c	0 c	0 c	0 a
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
10	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	11.5 abc	31 d	0 c	0 c	0 c	0 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
11	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	11.4 abc	32 d	0 c	0 c	0 c	0 a
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	11.4 abc	37 bc	0 c	0 c	0 c	0 a
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
13	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	11.3 bc	38 ab	0 c	0 c	0 c	0 a
13	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-07-09 Moisture Percent	GLXMA 11-07-09 Yield bu/A	GLXMA 07-12-09 Injury Percent 14 DA-A	GLXMA 07-12-09 Necrosis Percent 14 DA-A	GLXMA 07-26-09 Injury Percent 28 DA-A	GLXMA 07-26-09 Necrosis Percent 28 DA-A
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	11.3 bc	40 ab	8 a	8 a	3 a	0 a
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A						
14	VALOR SX	51	WG	0.056	lb ai/a			PRE	A						
14	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B						
14	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B						
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B						
LSD (P=.05)										0.48	4.0	1.6	1.6	1.1	0.0
Replicate F										0.788	5.081	1.546	1.546	1.560	0.000
Replicate Prob(F)										0.4654	0.0137	0.2321	0.2321	0.2292	1.0000
Treatment F										1.225	12.431	22.333	22.333	9.640	0.000
Treatment Prob(F)										0.3173	0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code													
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										08-18-09	08-18-09	09-20-09	09-20-09
Rating Data Type										Injury	Necrosis	Injury	Necrosis
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										0 DA-B	0 DA-B	33 DA-B	33 DA-B
Trt-Eval Interval										51 DA-A	51 DA-A	84 DA-A	84 DA-A
1	NONTREATED									0 a	0 a	0 a	0 a
2	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	0 a	0 a	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
3	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	0 a	0 a	0 a	0 a
3	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	PRE	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	0 a	0 a	0 a	0 a
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	0 a
6	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	PRE	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
7	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	0 a	0 a	0 a	0 a
7	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	0 a
8	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	0 a	0 a	0 a	0 a
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
10	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	0 a	0 a	0 a	0 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
11	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	0 a	0 a	0 a	0 a
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	0 a	0 a	0 a	0 a
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
13	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	0 a	0 a	0 a	0 a
13	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code													
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										08-18-09	08-18-09	09-20-09	09-20-09
Rating Data Type										Injury	Necrosis	Injury	Necrosis
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										0 DA-B	0 DA-B	33 DA-B	33 DA-B
Trt-Eval Interval										51 DA-A	51 DA-A	84 DA-A	84 DA-A
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 a	0 a	0 a	0 a
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A				
14	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
14	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
14	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
LSD (P=.05)										0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										CYPES	CYPES	CYPES	CYPES
Crop Code													
Rating Date										07-12-09	07-26-09	08-18-09	09-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing												0 DA-B	33 DA-B
Trt-Eval Interval										14 DA-A	28 DA-A	51 DA-A	84 DA-A
1	NONTREATED									0 d	0 d	0 e	0 g
2	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	53 c	57 c	53 d	77 cde
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
3	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	86 a	85 a	85 ab	88 abc
3	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	PRE	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	96 a	93 a	87 ab	88 abc
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 d	3 d	0 e	37 f
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	82 ab	82 ab	82 ab	87 a-d
6	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	PRE	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
7	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	90 a	88 a	87 ab	92 ab
7	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	91 a	85 a	73 bc	72 e
8	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	95 a	92 a	85 ab	86 a-d
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
10	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	62 bc	68 bc	63 cd	75 de
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
11	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	78 ab	78 ab	60 cd	82 b-e
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	91 a	92 a	90 ab	87 a-d
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
13	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	89 a	92 a	87 ab	90 ab
13	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										CYPES	CYPES	CYPES	CYPES
Crop Code													
Rating Date										07-12-09	07-26-09	08-18-09	09-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing												0 DA-B	33 DA-B
Trt-Eval Interval										14 DA-A	28 DA-A	51 DA-A	84 DA-A
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	96 a	93 a	92 a	96 a
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A				
14	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
14	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
14	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
LSD (P=.05)										21.0	16.6	17.7	11.9
Replicate F										2.736	3.450	6.695	6.263
Replicate Prob(F)										0.0835	0.0469	0.0045	0.0060
Treatment F										20.766	30.717	25.743	40.283
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-12-09 Control Percent 14 DA-A	AMBTR 07-26-09 Control Percent 28 DA-A	AMBTR 08-18-09 Control Percent 0 DA-B 51 DA-A	AMBTR 09-20-09 Control Percent 33 DA-B 84 DA-A
1	NONTREATED									0 h	0 g	0 g	0 f
2	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	38 e	33 de	20 e	91 b-e
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
3	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	33 ef	27 ef	13 ef	92 a-d
3	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	PRE	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	65 c	65 b	45 cd	91 bcd
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	38 e	18 f	7 fg	89 de
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	67 c	68 b	70 ab	94 ab
6	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	PRE	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
7	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	50 d	40 d	7 fg	91 b-e
7	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	90 a	88 a	77 a	96 a
8	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	80 b	82 a	73 ab	93 abc
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
10	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	17 g	3 g	0 g	87 e
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
11	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	30 f	22 f	0 g	90 cde
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	50 d	50 c	35 d	91 bcd
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
13	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	68 c	63 b	50 c	89 de
13	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-12-09 Control Percent 14 DA-A	AMBTR 07-26-09 Control Percent 28 DA-A	AMBTR 08-18-09 Control Percent 0 DA-B 51 DA-A	AMBTR 09-20-09 Control Percent 33 DA-B 84 DA-A
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	82 b	83 a	67 b	96 a
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A				
14	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
14	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
14	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
LSD (P=.05)										7.3	9.2	10.5	3.9
Replicate F										3.227	7.471	5.658	2.141
Replicate Prob(F)										0.0560	0.0027	0.0091	0.1378
Treatment F										108.060	89.294	69.319	335.203
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS 07-12-09 Control Percent 14 DA-A	IPOSS 07-26-09 Control Percent 28 DA-A	IPOSS 08-18-09 Control Percent 0 DA-B 51 DA-A	IPOSS 09-20-09 Control Percent 33 DA-B 84 DA-A
1	NONTREATED									0 e	0 g	0 d	0 e
2	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	43 d	43 e	30 c	62 c
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
3	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	67 c	62 d	65 ab	75 b
3	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	PRE	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	87 ab	78 bc	75 ab	87 ab
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	27 d	13 f	0 d	40 d
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	73 bc	75 c	70 ab	82 ab
6	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	PRE	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
7	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	93 a	83 abc	82 ab	90 a
7	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	92 a	89 a	72 ab	83 ab
8	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	90 ab	77 c	75 ab	85 ab
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
10	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	87 ab	78 bc	63 b	84 ab
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
11	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	77 abc	80 abc	80 ab	90 a
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	87 ab	83 abc	67 ab	87 ab
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
13	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	90 ab	87 ab	80 ab	87 ab
13	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOSS	IPOSS	IPOSS	IPOSS
	Pest Code									IPOSS	IPOSS	IPOSS	IPOSS
	Crop Code												
	Rating Date									07-12-09	07-26-09	08-18-09	09-20-09
	Rating Data Type									Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing											0 DA-B	33 DA-B
	Trt-Eval Interval									14 DA-A	28 DA-A	51 DA-A	84 DA-A
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	88 ab	88 a	85 a	92 a
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A				
14	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
14	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
14	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
	LSD (P=.05)									18.7	9.6	21.5	12.3
	Replicate F									4.521	8.163	5.093	2.197
	Replicate Prob(F)									0.0206	0.0018	0.0136	0.1313
	Treatment F									19.593	74.008	15.187	36.553
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										AMATA		AMATA		AMATA		AMATA	
Crop Code																	
Rating Date										07-12-09		07-26-09		08-18-09		09-20-09	
Rating Data Type										Control		Control		Control		Control	
Rating Unit										Percent		Percent		Percent		Percent	
Rating Timing														0 DA-B		33 DA-B	
Trt-Eval Interval										14 DA-A		28 DA-A		51 DA-A		84 DA-A	
1	NONTREATED									0	d	0	d	0	e	0	e
2	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	70	bc	40	c	23	d	83	d
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
3	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	89	ab	80	b	75	b	92	bc
3	PROWL H2O	3.8	CS	0.95	lb ai/a	32	fl oz/a	PRE	A								
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99	a	99	a	99	a	99	a
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A								
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A								
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
5	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	63	c	33	c	7	e	88	cd
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
6	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	80	abc	43	c	7	e	88	cd
6	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	PRE	A								
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
7	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	98	a	92	ab	88	ab	98	ab
7	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A								
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	99	a	95	ab	76	b	96	ab
8	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	99	a	92	ab	50	c	91	bc
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
10	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	99	a	93	ab	92	a	96	ab
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
11	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	94	a	91	ab	77	b	96	ab
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	93	a	82	b	57	c	95	ab
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A								
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								
13	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	99	a	90	ab	88	ab	94	abc
13	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A								
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B								
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B								
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B								

Preemergence Broadleaf Herbicides in Soybean - 2.

Trial ID: 09-50W-MS80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date										07-12-09	07-26-09	08-18-09	09-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing												0 DA-B	33 DA-B
Trt-Eval Interval										14 DA-A	28 DA-A	51 DA-A	84 DA-A
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	99 a	99 a	98 a	99 a
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A				
14	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
14	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	45-60DAA	B				
14	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	45-60DAA	B				
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	45-60DAA	B				
LSD (P=.05)										20.9	14.8	13.5	6.6
Replicate F										3.407	0.803	1.311	5.157
Replicate Prob(F)										0.0485	0.4587	0.2867	0.0130
Treatment F										14.098	37.065	60.878	125.432
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: BASF (D91-C-02), FMC, Valent.
2. Ratings: CI/NEC/WC at 14, 28, 56 + 84 da PRE; The 56 da rating should be adjusted to the day of the POST timing.
3. Yield.
4. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
5. Harvested 11-7-09, (2) 30 inch rows by 24 ft.

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-28-09

Objectives: Evaluate several residual herbicides for broadleaf weed management in soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-28-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN		grasses, annual
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.	morningglory, ivyleaf
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 5 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.3 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 67 LB/A, K: 376 LB/A

Application Description

	A	B	C	D
Application Date:	06-28-09	07-22-09	07-24-09	08-12-09
Time of Day:	7:30	14:00	10:45	11:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	V2-3	4-8"W	21DA-B
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL
Applied By:	NVH	NVH	NVH	NVH
Air Temperature, Unit:	76 F	76 F	84 F	80 F
% Relative Humidity:	92	92	92	70
Wind Velocity, Unit:	3 MPH	5 MPH	1 MPH	3 MPH
Wind Direction:	N	NW	N	W
Dew Presence (Y/N):	N	N	Y	N
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL
% Cloud Cover:	0	25	5	5
	06-28-09	07-22-09	07-24-09	08-12-09
Crop stage at application:	NA	V3	V3	R1
Height Min, Max (inch):		6 8	6 8	16 18

Pest Stage At Each Application

Application Date:	06-28-09	07-22-09	07-24-09	08-12-09
Weed Code:	GGGAN	GGGAN	GGGAN	GGGAN
Stage Majority (leaves):	NA	2	2	NA
Stage Min, Max:		1 4	1 4	
Height Majority:		3 IN	4 IN	
Height Min, Max:		1 5	1 6	
Density, Unit:		0.01 FT2	0.01 FT2	
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	4	6	6
Stage Min, Max:		2 6	2 8	5 8
Height Majority:		5 IN	6 IN	7 IN
Height Min, Max:		3 7	3 8	5 9
Density, Unit:		1 FT2	1 FT2	0.1 FT2
Weed Code:	IPOHE	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	3	3	4
Stage Min, Max:		COTY 5	COTY 5	3 8
Height Majority:		2.5 IN	3.5 IN	4 IN
Height Min, Max:		0.5 4	0.5 4	2 6
Density, Unit:		0.5 FT2	0.5 FT2	0.1 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	4	4	NA
Stage Min, Max:		3 6	3 6	
Height Majority:		2.5 IN	2.5 IN	
Height Min, Max:		1.5 4	1.5 5	
Density, Unit:		0.4 FT2	0.1 FT2	
Weed Code:	ABUTH	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	2	2	4
Stage Min, Max:		1 4	1 4	3 6
Height Majority:		1.5 IN	3 IN	5 IN
Height Min, Max:		1 3	1 4	3 8
Density, Unit:		0.6 FT2	0.6 FT2	0.1 FT2

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-07-09 Moisture Percent	GLXMA 11-07-09 Yield bu/A	GLXMA 07-20-09 Injury Percent -4 DA-C -2 DA-B	GLXMA 07-29-09 Injury Percent 5 DA-C 7 DA-B	GLXMA 08-05-09 Injury Percent 12 DA-C 14 DA-B	GLXMA 08-19-09 Injury Percent 28 DA-C 28 DA-B	GLXMA 09-16-09 Injury Percent 54 DA-C 56 DA-B
1	NONTREATED									11.4 a	26 d	0 c	0 e	0 c	0 a	0 a
2	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	11.5 a	45 bc	1 c	0 e	0 c	0 a	0 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C							
3	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	11.4 a	45 abc	0 c	0 e	0 c	0 a	0 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B	11.5 a	46 abc		1 de	0 c	0 a	0 a
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D							
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D							
5	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	11.4 a	46 abc	0 c	19 b	4 b	0 a	0 a
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
5	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	4-8"W	C							
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B	11.4 a	46 abc		29 a	8 a	0 a	0 a
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B							
6	PREFIX	5.26	EC	1.32	lb ai/a	2	pt/a	V2-3	B							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D							
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D							
7	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	PRE	A	11.3 a	48 a	0 c	0 e	0 c	0 a	0 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
7	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C							
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.3 a	47 ab	0 c	0 e	0 c	0 a	0 a
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C	11.4 a	45 bc		0 e	0 c	0 a	0 a
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C							
10	SONIC	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	11.4 a	47 a	0 c	0 e	0 c	0 a	0 a
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
10	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C							
11	SONIC	70	WG	0.197	lb ai/a	4.5	oz/a	PRE	A	11.4 a	47 ab	1 c	0 e	0 c	0 a	0 a
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
11	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C							
12	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	V2-3	B	11.5 a	47 abc		0 e	0 c	0 a	0 a
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B							
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V2-3	B							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D							
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	21DA-B	D							
13	INTRRO	4	SC	2	lb ai/a	2	qt/a	PRE	A	11.3 a	45 abc	5 b	0 e	0 c	0 a	0 a
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C							
14	ENVIVE	41.3	WG			3	oz/a	PRE	A	11.5 a	47 abc	7 b	3 d	0 c	0 a	0 a
14	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A							
14	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A							
14	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A							
14	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C							
14	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C							
14	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C							
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C							

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code																
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										11-07-09	11-07-09	07-20-09	07-29-09	08-05-09	08-19-09	09-16-09
Rating Data Type										Moisture	Yield	Injury	Injury	Injury	Injury	Injury
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent	Percent
Rating Timing												-4 DA-C	5 DA-C	12 DA-C	28 DA-C	54 DA-C
Trt-Eval Interval												-2 DA-B	7 DA-B	14 DA-B	28 DA-B	56 DA-B
15	ENVIVE	41.3	WG			5	oz/a	PRE	A	11.4 a	44 c	9 a	5 c	0 c	0 a	0 a
15	CLASSIC	25	WG	0.02856	lb ai/a			PRE	A							
15	HARMONY SG	50	SG	0.00918	lb ai/a			PRE	A							
15	VALOR SX	51	WG	0.09072	lb ai/a			PRE	A							
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C							
15	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C							
15	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C							
15	ASSURE II	0.88	EC	0.0413	lb ai/a	6	fl oz/a	4-8"W	C							
15	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C							
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
LSD (P=.05)										0.20	2.5	1.8	1.6	0.9	0.0	0.0
Replicate F										1.964	1.806	0.543	0.300	1.114	0.000	0.000
Replicate Prob(F)										0.1340	0.1608	0.6569	0.8253	0.3543	1.0000	1.0000
Treatment F										0.790	37.726	28.594	228.338	45.977	0.000	0.000
Treatment Prob(F)										0.6738	0.0001	0.0001	0.0001	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										GGGAN		GGGAN		GGGAN		GGGAN	
Crop Code																	
Rating Date										07-20-09		08-05-09		08-19-09		09-16-09	
Rating Data Type										Control		Control		Control		Control	
Rating Unit										Percent		Percent		Percent		Percent	
Rating Timing										-4 DA-C		12 DA-C		28 DA-C		54 DA-C	
Trt-Eval Interval										-2 DA-B		14 DA-B		28 DA-B		56 DA-B	
1	NONTREATED									0	c	0	c	0	c	0	d
2	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	99	a	99	a	99	a	99	ab
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
3	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	99	a	99	a	99	a	98	abc
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			99	b	99	a	99	a
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D								
5	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	99	a	99	a	99	ab	99	ab
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
5	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	4-8"W	C								
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			99	a	99	a	99	a
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B								
6	PREFIX	5.26	EC	1.32	lb ai/a	2	pt/a	V2-3	B								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D								
7	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	PRE	A	98	a	99	ab	99	a	99	a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
7	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	98	a	99	a	98	ab	98	abc
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A								
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C			99	a	98	b	97	bc
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
10	SONIC	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	96	b	99	a	98	b	97	c
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
10	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
11	SONIC	70	WG	0.197	lb ai/a	4.5	oz/a	PRE	A	97	ab	99	ab	99	ab	99	ab
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
11	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
12	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	V2-3	B			99	ab	99	a	99	a
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B								
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V2-3	B								
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	21DA-B	D								
13	INTRRO	4	SC	2	lb ai/a	2	qt/a	PRE	A	99	a	99	ab	99	ab	98	abc
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								
14	ENVIVE	41.3	WG			3	oz/a	PRE	A	99	a	99	a	98	ab	98	abc
14	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A								
14	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A								
14	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A								
14	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C								
14	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C								
14	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C								
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										GGGAN	GGGAN	GGGAN	GGGAN
Crop Code													
Rating Date										07-20-09	08-05-09	08-19-09	09-16-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										-4 DA-C	12 DA-C	28 DA-C	54 DA-C
Trt-Eval Interval										-2 DA-B	14 DA-B	28 DA-B	56 DA-B
15	ENVIVE	41.3	WG			5	oz/a	PRE	A	99 a	99 a	99 ab	99 ab
15	CLASSIC	25	WG	0.02856	lb ai/a			PRE	A				
15	HARMONY SG	50	SG	0.00918	lb ai/a			PRE	A				
15	VALOR SX	51	WG	0.09072	lb ai/a			PRE	A				
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C				
15	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C				
15	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C				
15	ASSURE II	0.88	EC	0.0413	lb ai/a	6	fl oz/a	4-8"W	C				
15	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C				
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
LSD (P=.05)										2.2	0.4	1.0	1.7
Replicate F										0.625	0.237	0.743	0.887
Replicate Prob(F)										0.6044	0.8699	0.5327	0.4556
Treatment F										1551.249	27848.597	5098.330	1876.479
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-20-09 Control Percent -4 DA-C -2 DA-B	AMBTR 08-05-09 Control Percent 12 DA-C 14 DA-B	AMBTR 08-19-09 Control Percent 28 DA-C 28 DA-B	AMBTR 09-16-09 Control Percent 54 DA-C 56 DA-B
1	NONTREATED									0 e	0 c	0 e	0 d
2	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	13 d	96 a	97 c	96 b
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C				
3	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	3 e	96 a	97 c	96 b
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B		97 a	98 ab	99 a
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
5	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	5 e	98 a	98 abc	97 ab
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
5	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	4-8"W	C				
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B		97 a	98 ab	98 ab
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B				
6	PREFIX	5.26	EC	1.32	lb ai/a	2	pt/a	V2-3	B				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D				
7	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	PRE	A	86 a	98 a	97 abc	98 ab
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
7	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C				
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	71 b	98 a	97 abc	98 ab
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C				
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C		97 a	97 c	97 ab
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C				
10	SONIC	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	70 b	98 a	97 bc	97 ab
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
10	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C				
11	SONIC	70	WG	0.197	lb ai/a	4.5	oz/a	PRE	A	86 a	97 a	97 bc	97 ab
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
11	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C				
12	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	V2-3	B		98 a	99 a	99 a
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B				
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V2-3	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D				
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	21DA-B	D				
13	INTRRO	4	SC	2	lb ai/a	2	qt/a	PRE	A	0 e	97 a	97 bc	97 ab
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C				
14	ENVIVE	41.3	WG			3	oz/a	PRE	A	64 c	97 a	97 c	97 ab
14	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A				
14	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A				
14	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A				
14	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C				
14	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C				
14	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C				
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C				

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-20-09 Control Percent -2 DA-B	AMBTR 08-05-09 Control Percent 14 DA-B	AMBTR 08-19-09 Control Percent 28 DA-B	AMBTR 09-16-09 Control Percent 56 DA-B
15	ENVIVE	41.3	WG			5	oz/a	PRE	A	83 a	92 b	92 d	86 c
15	CLASSIC	25	WG	0.02856	lb ai/a			PRE	A				
15	HARMONY SG	50	SG	0.00918	lb ai/a			PRE	A				
15	VALOR SX	51	WG	0.09072	lb ai/a			PRE	A				
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C				
15	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C				
15	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C				
15	ASSURE II	0.88	EC	0.0413	lb ai/a	6	fl oz/a	4-8"W	C				
15	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C				
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
LSD (P=.05)										5.7	2.2	1.6	2.1
Replicate F										0.464	0.019	0.487	0.347
Replicate Prob(F)										0.7096	0.9964	0.6929	0.7914
Treatment F										385.117	1062.714	2036.234	1197.795
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	IPOHE 07-20-09 Control Percent -4 DA-C -2 DA-B		IPOHE 08-05-09 Control Percent 12 DA-C 14 DA-B		IPOHE 08-19-09 Control Percent 28 DA-C 28 DA-B		IPOHE 09-16-09 Control Percent 54 DA-C 56 DA-B	
1	NONTREATED									0	e	0	f	0	e	0	e
2	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	25	b	81	e	85	d	75	d
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
3	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	13	cd	87	c	86	cd	76	d
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			91	b	95	ab	96	a
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D								
5	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	18	c	98	a	95	ab	93	ab
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
5	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	4-8"W	C								
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			97	a	97	a	98	a
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B								
6	PREFIX	5.26	EC	1.32	lb ai/a	2	pt/a	V2-3	B								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D								
7	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	PRE	A	97	a	96	a	93	b	93	ab
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
7	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	96	a	97	a	95	ab	94	ab
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A								
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C			86	cd	89	c	83	c
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
10	SONIC	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	95	a	98	a	96	ab	95	ab
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
10	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
11	SONIC	70	WG	0.197	lb ai/a	4.5	oz/a	PRE	A	99	a	97	a	96	ab	94	ab
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
11	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
12	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	V2-3	B			92	b	97	ab	98	a
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B								
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V2-3	B								
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	21DA-B	D								
13	INTRRO	4	SC	2	lb ai/a	2	qt/a	PRE	A	8	d	83	de	87	cd	78	cd
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								
14	ENVIVE	41.3	WG			3	oz/a	PRE	A	95	a	97	a	97	ab	94	ab
14	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A								
14	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A								
14	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A								
14	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C								
14	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C								
14	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C								
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										IPOHE	IPOHE	IPOHE	IPOHE
Crop Code													
Rating Date										07-20-09	08-05-09	08-19-09	09-16-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										-4 DA-C	12 DA-C	28 DA-C	54 DA-C
Trt-Eval Interval										-2 DA-B	14 DA-B	28 DA-B	56 DA-B
15	ENVIVE	41.3	WG			5	oz/a	PRE	A	96 a	96 a	95 ab	90 b
15	CLASSIC	25	WG	0.02856	lb ai/a			PRE	A				
15	HARMONY SG	50	SG	0.00918	lb ai/a			PRE	A				
15	VALOR SX	51	WG	0.09072	lb ai/a			PRE	A				
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C				
15	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C				
15	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C				
15	ASSURE II	0.88	EC	0.0413	lb ai/a	6	fl oz/a	4-8"W	C				
15	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C				
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
LSD (P=.05)										5.8	4.0	3.7	5.4
Replicate F										0.840	0.516	1.409	2.503
Replicate Prob(F)										0.4825	0.6733	0.2534	0.0723
Treatment F										489.252	310.179	353.461	166.440
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										AMATA		AMATA		AMATA		AMATA
Crop Code																
Rating Date										07-20-09		08-05-09		08-19-09		09-16-09
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing										-4 DA-C		12 DA-C		28 DA-C		54 DA-C
Trt-Eval Interval										-2 DA-B		14 DA-B		28 DA-B		56 DA-B
1	NONTREATED									0	c	0	c	0	d	0 c
2	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	99	a	99	a	99	a	99 a
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C							
3	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	99	a	99	a	99	ab	99 a
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			99	a	99	a	99 a
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D							
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D							
5	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	99	a	99	a	99	a	99 a
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
5	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	4-8"W	C							
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			99	a	99	a	99 a
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B							
6	PREFIX	5.26	EC	1.32	lb ai/a	2	pt/a	V2-3	B							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D							
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D							
7	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	PRE	A	98	b	99	a	99	a	99 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
7	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C							
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99	a	99	a	99	a	99 a
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C			99	a	97	c	95 b
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C							
10	SONIC	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	99	a	99	a	99	a	98 a
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
10	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C							
11	SONIC	70	WG	0.197	lb ai/a	4.5	oz/a	PRE	A	99	a	99	a	99	a	99 a
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
11	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C							
12	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	V2-3	B			98	b	97	c	97 a
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B							
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V2-3	B							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D							
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	21DA-B	D							
13	INTRRO	4	SC	2	lb ai/a	2	qt/a	PRE	A	98	b	99	a	98	bc	97 a
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C							
14	ENVIVE	41.3	WG			3	oz/a	PRE	A	99	a	99	a	99	a	98 a
14	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A							
14	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A							
14	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A							
14	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C							
14	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C							
14	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C							
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C							

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date										07-20-09	08-05-09	08-19-09	09-16-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										-4 DA-C	12 DA-C	28 DA-C	54 DA-C
Trt-Eval Interval										-2 DA-B	14 DA-B	28 DA-B	56 DA-B
15	ENVIVE	41.3	WG			5	oz/a	PRE	A	99 a	99 a	99 a	99 a
15	CLASSIC	25	WG	0.02856	lb ai/a			PRE	A				
15	HARMONY SG	50	SG	0.00918	lb ai/a			PRE	A				
15	VALOR SX	51	WG	0.09072	lb ai/a			PRE	A				
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C				
15	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C				
15	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C				
15	ASSURE II	0.88	EC	0.0413	lb ai/a	6	fl oz/a	4-8"W	C				
15	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C				
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
LSD (P=.05)										0.9	0.5	0.8	1.9
Replicate F										1.466	0.189	0.357	0.781
Replicate Prob(F)										0.2435	0.9032	0.7846	0.5112
Treatment F										8275.983	22204.219	8755.392	1394.598
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										ABUTH		ABUTH		ABUTH		ABUTH	
Crop Code																	
Rating Date										07-20-09		08-05-09		08-19-09		09-16-09	
Rating Data Type										Control		Control		Control		Control	
Rating Unit										Percent		Percent		Percent		Percent	
Rating Timing										-4 DA-C		12 DA-C		28 DA-C		54 DA-C	
Trt-Eval Interval										-2 DA-B		14 DA-B		28 DA-B		56 DA-B	
1	NONTREATED									0	d	0	d	0	e	0	d
2	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	3	cd	95	c	95	cd	94	c
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
3	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	18	c	97	abc	95	cd	94	bc
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			95	c	95	bcd	97	ab
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
4	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D								
5	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	15	cd	99	a	97	a-d	98	a
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
5	FLEXSTAR GT	3.31	SL	1.24	lb ai/a	3	pt/a	4-8"W	C								
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B			98	a	98	a	99	a
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	V2-3	B								
6	PREFIX	5.26	EC	1.32	lb ai/a	2	pt/a	V2-3	B								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
6	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	21DA-B	D								
7	SONIC	70	WG	0.141	lb ai/a	3.22	oz/a	PRE	A	87	ab	98	ab	97	abc	96	abc
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
7	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	96	a	98	a	97	ab	97	ab
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A								
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C			96	bc	94	d	96	abc
9	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	4-8"W	C								
10	SONIC	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	72	b	99	a	97	abc	98	a
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
10	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
11	SONIC	70	WG	0.197	lb ai/a	4.5	oz/a	PRE	A	85	ab	98	a	97	abc	98	a
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
11	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	4-8"W	C								
12	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	V2-3	B			97	abc	97	abc	98	a
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V2-3	B								
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	V2-3	B								
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	21DA-B	D								
12	DURANGO DMA	4	SL	0.75	lb ae/a	24	fl oz/a	21DA-B	D								
13	INTRRO	4	SC	2	lb ai/a	2	qt/a	PRE	A	0	d	98	ab	96	a-d	97	abc
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								
14	ENVIVE	41.3	WG			3	oz/a	PRE	A	97	a	98	abc	98	a	98	a
14	CLASSIC	25	WG	0.01714	lb ai/a			PRE	A								
14	HARMONY SG	50	SG	0.00551	lb ai/a			PRE	A								
14	VALOR SX	51	WG	0.05443	lb ai/a			PRE	A								
14	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C								
14	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C								
14	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C								
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C								
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-8"W	C								

Preemergence Broadleaf Herbicides in Soybean - 3.

Trial ID: 09-50W-MN100 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										ABUTH	ABUTH	ABUTH	ABUTH
Crop Code													
Rating Date										07-20-09	08-05-09	08-19-09	09-16-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										-4 DA-C	12 DA-C	28 DA-C	54 DA-C
Trt-Eval Interval										-2 DA-B	14 DA-B	28 DA-B	56 DA-B
15	ENVIVE	41.3	WG			5	oz/a	PRE	A	99 a	98 a	98 a	99 a
15	CLASSIC	25	WG	0.02856	lb ai/a			PRE	A				
15	HARMONY SG	50	SG	0.00918	lb ai/a			PRE	A				
15	VALOR SX	51	WG	0.09072	lb ai/a			PRE	A				
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	4-8"W	C				
15	CLASSIC	25	WG	0.00504	lb ai/a			4-8"W	C				
15	HARMONY SG	50	SG	0.00162	lb ai/a			4-8"W	C				
15	ASSURE II	0.88	EC	0.0413	lb ai/a	6	fl oz/a	4-8"W	C				
15	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	4-8"W	C				
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	4-8"W	C				
LSD (P=.05)										16.4	2.4	2.3	3.2
Replicate F										1.248	1.082	2.587	1.547
Replicate Prob(F)										0.3097	0.3670	0.0656	0.2165
Treatment F										60.169	874.227	950.775	495.518
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (AJM03A4), Dow, DuPont.
2. Ratings: CI at 7, 14 + 28 da B; WC at 0, 14, 28 + 56 da B, prior to C, and 28 da C.
3. Yield.
4. Planting was delayed due to wet field conditions.
   GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
5. Ratings at 28 DA-B were on 8-19-09. Ratings at 28 DA-C were on 8-21-09.
   Ratings at 28 DA-B and 28 DA-C were also 7 DA-D.
   Ratings at 56 DA-B and 54 DA-C were also 35 DA-D.
6. Harvested 11-7-09, (2) 30 inch rows by 24 ft.

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Compare several competitive residual herbicides applied preemergence for weed management in Liberty Link soybean.

Crop 1: GLXMA Soybean **Variety:** SO80122 **Description:** LL
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 5 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** PIERRON
CEC: 7 **Fert. Level:** P1:93 LB/A, K:448 LB/A

Application Description

	A	B	C
Application Date:	06-30-09	07-17-09	07-23-09
Time of Day:	20:00	6:15	9:00
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	2-4"W-1	2-4"W-2
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	NVH	DKP	DKP
Air Temperature, Unit:	72 F	66 F	70 F
% Relative Humidity:	80	82	92
Wind Velocity, Unit:	4 MPH	8 MPH	3 MPH
Wind Direction:	N	N	NW
Dew Presence (Y/N):	N	N	N
Soil Moisture:	NORMAL	NORMAL	NORMAL
% Cloud Cover:	25	20	50
	06-30-09	07-17-09	07-23-09
Crop stage at application:	NA	V1	V2
Height Min, Max (inch):		3 6	6 8

Pest Stage At Each Application

Application Date:	06-30-09	07-17-09	07-23-09
Weed Code:	SETFA	SETFA	SETFA
Stage Majority (leaves):	NA	4	4
Stage Min, Max:		2 6	2 6
Height Majority:		4 IN	4 IN
Height Min, Max:		1 5	1 5
Density, Unit:		6 FT2	6 FT2
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	2	4
Stage Min, Max:		COTY 2	2 4
Height Majority:		4 IN	4 IN
Height Min, Max:		1 5	1 9
Density, Unit:		0.2 FT2	0.5 FT2
Weed Code:	AMBEL	AMBEL	AMBEL
Stage Majority (leaves):	NA	2	4
Stage Min, Max:		COTY 4	2 6
Height Majority:		2 IN	3 IN
Height Min, Max:		1 4	1 5
Density, Unit:		1.5 FT2	2 FT2
Weed Code:	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	COTY	2
Stage Min, Max:		COTY 2	2 6
Height Majority:		1 IN	2 IN
Height Min, Max:		0.25 1.5	1 6
Density, Unit:		3 FT2	1 FT2
Weed Code:	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	1	2
Stage Min, Max:		COTY 2	2 4
Height Majority:		2 IN	2 IN
Height Min, Max:		1 3	1 4
Density, Unit:		2 FT2	1.5 FT2

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-07-09 Moisture Percent	GLXMA 11-07-09 Yield bu/A	GLXMA 07-22-09 Injury Percent 5 DA-B -1 DA-C	GLXMA 07-24-09 Injury Percent 1 DA-C 7 DA-B	GLXMA 07-30-09 Injury Percent 13 DA-B 7 DA-C	GLXMA 08-06-09 Injury Percent 20 DA-B 14 DA-C	GLXMA 08-20-09 Injury Percent 34 DA-B 28 DA-C
Pest Code																
Crop Code																
Rating Date																
Rating Data Type																
Rating Unit																
Rating Timing																
Trt-Eval Interval																
1	NONTREATED									11.7 a	31 e	0 c	0 d	0 d	0 d	0 a
2	CANOPY EX	29.5	WG			1.5	oz/a	PRE	A	11.7 a	47 abc	0 c	0 d	8 b	0 d	0 a
2	CLASSIC	25	WG	0.0212	lb ai/a			PRE	A							
2	EXPRESS	50	SG	0.00636	lb ai/a			PRE	A							
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
2	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
2	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
3	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	11.7 a	45 cd	5 b	3 c	17 a	10 a	0 a
3	CLASSIC	25	WG	0.02	lb ai/a			PRE	A							
3	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A							
3	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A							
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
3	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
3	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
4	CANOPY	75	WG	0.188	lb ai/a	4	oz/a	PRE	A	11.6 a	46 a-d	0 c	0 d	15 a	6 b	0 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
4	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
4	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	11.7 a	45 cd	20 a	28 a	10 b	3 c	0 a
5	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-1	B							
5	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-1	B							
5	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-1	B							
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B							
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	11.7 a	43 d	19 a	24 b	5 c	3 c	0 a
6	CLASSIC	25	WG	0.0078	lb ai/a	0.5	oz/a	2-4"W-1	B							
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B							
7	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	11.7 a	48 a	0 c	0 d	0 d	0 d	0 a
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
8	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	11.7 a	45 a-d	0 c	0 d	0 d	0 d	0 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
9	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	11.8 a	48 ab	0 c	0 d	0 d	0 d	0 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
10	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	11.8 a	45 bcd	0 c	0 d	0 d	0 d	0 a
10	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A							
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
11	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	11.5 a	46 a-d	4 b	3 c	0 d	0 d	0 a
11	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A							
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
12	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	11.6 a	46 a-d	0 c	0 d	0 d	0 d	0 a
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	11.6 a	46 a-d	3 b	3 c	0 d	0 d	0 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
14	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	11.7 a	44 cd	0 c	0 d	0 d	0 d	0 a
14	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code																
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										11-07-09	11-07-09	07-22-09	07-24-09	07-30-09	08-06-09	08-20-09
Rating Data Type										Moisture	Yield	Injury	Injury	Injury	Injury	Injury
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent	Percent
Rating Timing												5 DA-B	1 DA-C	13 DA-B	20 DA-B	34 DA-B
Trt-Eval Interval												-1 DA-C	7 DA-B	7 DA-C	14 DA-C	28 DA-C
LSD (P=.05)										0.35	3.4	1.7	2.5	1.9	1.3	0.0
Replicate F										2.387	0.681	1.547	1.326	0.000	2.872	0.000
Replicate Prob(F)										0.1118	0.5149	0.2318	0.2829	1.0000	0.0746	1.0000
Treatment F										0.472	12.316	137.663	113.706	86.607	42.782	0.000
Treatment Prob(F)										0.9214	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA 07-22-09 Control Percent 5 DA-B -1 DA-C		SETFA 07-30-09 Control Percent 13 DA-B 7 DA-C		SETFA 08-06-09 Control Percent 20 DA-B 14 DA-C		SETFA 08-20-09 Control Percent 34 DA-B 28 DA-C	
1	NONTREATED									0	h	0	b	0	e	0	h
2	CANOPY EX	29.5	WG			1.5	oz/a	PRE	A	57	fg	99	a	98	a-d	95	c-f
2	CLASSIC	25	WG	0.0212	lb ai/a			PRE	A								
2	EXPRESS	50	SG	0.00636	lb ai/a			PRE	A								
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C								
2	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C								
2	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C								
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
3	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	97	a	99	a	96	d	93	ef
3	CLASSIC	25	WG	0.02	lb ai/a			PRE	A								
3	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A								
3	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A								
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C								
3	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C								
3	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C								
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
4	CANOPY	75	WG	0.188	lb ai/a	4	oz/a	PRE	A	47	g	99	a	98	a-d	88	g
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C								
4	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C								
4	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C								
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	70	de	99	a	97	a-d	92	f
5	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-1	B								
5	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-1	B								
5	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-1	B								
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B								
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	70	de	99	a	97	cd	93	def
6	CLASSIC	25	WG	0.0078	lb ai/a	0.5	oz/a	2-4"W-1	B								
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B								
7	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	87	abc	99	a	97	bcd	94	def
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
8	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	83	bc	99	a	99	a	98	ab
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
9	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	60	ef	99	a	98	a-d	97	abc
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
10	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	78	cd	99	a	97	a-d	95	c-f
10	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A								
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
11	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	90	abc	99	a	98	abc	95	b-e
11	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A								
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
12	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	94	ab	99	a	99	a	96	a-d
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	98	a	99	a	99	a	99	a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								
14	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	98	a	99	a	98	ab	98	ab
14	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C								
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C								

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										SETFA	SETFA	SETFA	SETFA
Crop Code													
Rating Date										07-22-09	07-30-09	08-06-09	08-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										5 DA-B	13 DA-B	20 DA-B	34 DA-B
Trt-Eval Interval										-1 DA-C	7 DA-C	14 DA-C	28 DA-C
LSD (P=.05)										11.9	0.4	1.4	3.0
Replicate F										0.006	2.167	0.926	1.323
Replicate Prob(F)										0.9939	0.1348	0.4088	0.2838
Treatment F										42.645	47731.380	2948.560	598.332
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
	Pest Code									AMBTR		AMBTR		AMBTR		AMBTR
	Crop Code															
	Rating Date									07-22-09		07-30-09		08-06-09		08-20-09
	Rating Data Type									Control		Control		Control		Control
	Rating Unit									Percent		Percent		Percent		Percent
	Rating Timing									5 DA-B		13 DA-B		20 DA-B		34 DA-B
	Trt-Eval Interval									-1 DA-C		7 DA-C		14 DA-C		28 DA-C
1	NONTREATED									0	g	0	d	0	b	0 b
2	CANOPY EX	29.5	WG			1.5	oz/a	PRE	A	70	bcd	98	bc	99	a	97 a
2	CLASSIC	25	WG	0.0212	lb ai/a			PRE	A							
2	EXPRESS	50	SG	0.00636	lb ai/a			PRE	A							
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
2	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
2	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
3	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	86	ab	99	ab	98	a	97 a
3	CLASSIC	25	WG	0.02	lb ai/a			PRE	A							
3	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A							
3	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A							
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
3	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
3	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
4	CANOPY	75	WG	0.188	lb ai/a	4	oz/a	PRE	A	67	cd	99	ab	97	a	95 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
4	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
4	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	96	a	99	a	98	a	98 a
5	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-1	B							
5	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-1	B							
5	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-1	B							
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B							
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	96	a	99	ab	97	a	95 a
6	CLASSIC	25	WG	0.0078	lb ai/a	0.5	oz/a	2-4"W-1	B							
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B							
7	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	95	a	99	a	98	a	98 a
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
8	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	10	g	98	c	97	a	98 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
9	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	30	f	98	c	98	a	97 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
10	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	40	f	99	ab	99	a	96 a
10	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A							
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
11	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	79	abc	99	ab	98	a	96 a
11	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A							
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
12	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	47	ef	98	bc	98	a	98 a
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	60	de	98	bc	99	a	98 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
14	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	37	f	98	bc	98	a	97 a
14	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
	Pest Code									AMBTR	AMBTR	AMBTR	AMBTR
	Crop Code												
	Rating Date									07-22-09	07-30-09	08-06-09	08-20-09
	Rating Data Type									Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing									5 DA-B	13 DA-B	20 DA-B	34 DA-B
	Trt-Eval Interval									-1 DA-C	7 DA-C	14 DA-C	28 DA-C
	LSD (P=.05)									17.9	0.9	1.7	4.4
	Replicate F									1.786	8.215	6.605	4.942
	Replicate Prob(F)									0.1901	0.0017	0.0048	0.0152
	Treatment F									26.858	6946.405	2022.305	294.067
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBEL 07-22-09 Control Percent 5 DA-B -1 DA-C	AMBEL 07-30-09 Control Percent 13 DA-B 7 DA-C	AMBEL 08-06-09 Control Percent 20 DA-B 14 DA-C	AMBEL 08-20-09 Control Percent 34 DA-B 28 DA-C
1	NONTREATED									0 f	0 c	0 c	0 d
2	CANOPY EX	29.5	WG			1.5	oz/a	PRE	A	80 c	99 a	99 a	96 bc
2	CLASSIC	25	WG	0.0212	lb ai/a			PRE	A				
2	EXPRESS	50	SG	0.00636	lb ai/a			PRE	A				
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C				
2	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C				
2	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C				
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
3	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	97 ab	99 a	99 a	99 a
3	CLASSIC	25	WG	0.02	lb ai/a			PRE	A				
3	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A				
3	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A				
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C				
3	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C				
3	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C				
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
4	CANOPY	75	WG	0.188	lb ai/a	4	oz/a	PRE	A	83 c	99 a	99 a	98 ab
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C				
4	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C				
4	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C				
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	97 ab	99 b	98 a	99 a
5	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-1	B				
5	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-1	B				
5	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-1	B				
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	98 a	99 a	99 a	99 a
6	CLASSIC	25	WG	0.0078	lb ai/a	0.5	oz/a	2-4"W-1	B				
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B				
7	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	97 ab	99 a	97 b	96 bc
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
8	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	58 d	99 a	99 a	98 ab
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
9	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	43 e	99 a	99 a	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
10	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	87 bc	99 a	98 a	96 c
10	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
11	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	95 ab	99 a	99 a	99 a
11	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A				
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
12	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	60 d	99 a	98 a	99 a
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	88 abc	99 a	99 a	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
14	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	83 c	99 a	99 a	98 ab
14	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMBEL	AMBEL	AMBEL	AMBEL
Crop Code													
Rating Date										07-22-09	07-30-09	08-06-09	08-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										5 DA-B	13 DA-B	20 DA-B	34 DA-B
Trt-Eval Interval										-1 DA-C	7 DA-C	14 DA-C	28 DA-C
LSD (P=.05)										10.8	0.3	1.3	2.6
Replicate F										0.807	1.000	2.396	2.291
Replicate Prob(F)										0.4572	0.3816	0.1109	0.1213
Treatment F										56.012	88164.314	3437.623	839.869
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
	Pest Code									AMATA		AMATA		AMATA		AMATA
	Crop Code															
	Rating Date									07-22-09		07-30-09		08-06-09		08-20-09
	Rating Data Type									Control		Control		Control		Control
	Rating Unit									Percent		Percent		Percent		Percent
	Rating Timing									5 DA-B		13 DA-B		20 DA-B		34 DA-B
	Trt-Eval Interval									-1 DA-C		7 DA-C		14 DA-C		28 DA-C
1	NONTREATED									0	d	0	d	0	f	0 f
2	CANOPY EX	29.5	WG			1.5	oz/a	PRE	A	0	d	97	c	89	e	53 e
2	CLASSIC	25	WG	0.0212	lb ai/a			PRE	A							
2	EXPRESS	50	SG	0.00636	lb ai/a			PRE	A							
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
2	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
2	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
3	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	99	a	99	a	99	a	99 a
3	CLASSIC	25	WG	0.02	lb ai/a			PRE	A							
3	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A							
3	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A							
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
3	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
3	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
4	CANOPY	75	WG	0.188	lb ai/a	4	oz/a	PRE	A	87	b	99	a	97	a-d	91 cd
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C							
4	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C							
4	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C							
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	98	a	99	ab	96	cd	90 d
5	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-1	B							
5	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-1	B							
5	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-1	B							
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B							
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	96	a	99	a	97	bcd	94 a-d
6	CLASSIC	25	WG	0.0078	lb ai/a	0.5	oz/a	2-4"W-1	B							
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B							
7	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	96	a	99	a	97	a-d	98 ab
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
8	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	98	a	99	a	98	abc	98 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
9	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	99	a	99	a	99	a	98 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
10	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	98	a	99	a	98	ab	98 a
10	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A							
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
11	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	98	a	99	a	98	ab	97 abc
11	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A							
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
12	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	63	c	98	b	95	d	92 bcd
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	99	a	99	a	99	a	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							
14	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	98	a	99	a	99	ab	97 abc
14	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C							
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C							

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date										07-22-09	07-30-09	08-06-09	08-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										5 DA-B	13 DA-B	20 DA-B	34 DA-B
Trt-Eval Interval										-1 DA-C	7 DA-C	14 DA-C	28 DA-C
LSD (P=.05)										4.7	0.9	2.2	6.2
Replicate F										0.526	0.347	1.349	1.889
Replicate Prob(F)										0.5970	0.7103	0.2772	0.1714
Treatment F										487.024	7605.921	1152.004	164.712
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 07-22-09 Control Percent 5 DA-B -1 DA-C	ABUTH 07-30-09 Control Percent 13 DA-B 7 DA-C	ABUTH 08-06-09 Control Percent 20 DA-B 14 DA-C	ABUTH 08-20-09 Control Percent 34 DA-B 28 DA-C
1	NONTREATED									0 g	0 c	0 c	0 d
2	CANOPY EX	29.5	WG			1.5	oz/a	PRE	A	70 d	99 a	97 b	98 abc
2	CLASSIC	25	WG	0.0212	lb ai/a			PRE	A				
2	EXPRESS	50	SG	0.00636	lb ai/a			PRE	A				
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C				
2	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C				
2	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C				
2	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
3	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	94 a	99 a	99 a	98 abc
3	CLASSIC	25	WG	0.02	lb ai/a			PRE	A				
3	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A				
3	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A				
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C				
3	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C				
3	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C				
3	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
4	CANOPY	75	WG	0.188	lb ai/a	4	oz/a	PRE	A	90 ab	99 a	98 ab	98 abc
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-2	C				
4	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-2	C				
4	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-2	C				
4	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	93 a	99 ab	97 b	97 abc
5	SYNCHRONY XP	28.4	WG			0.375	oz/a	2-4"W-1	B				
5	CLASSIC	25	WG	0.00504	lb ai/a			2-4"W-1	B				
5	HARMONY SG	50	SG	0.00162	lb ai/a			2-4"W-1	B				
5	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B				
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-1	B	92 a	99 a	98 ab	96 c
6	CLASSIC	25	WG	0.0078	lb ai/a	0.5	oz/a	2-4"W-1	B				
6	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-1	B				
7	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	78 cd	98 b	98 ab	98 abc
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
7	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
8	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5	fl oz/a	PRE	A	82 bc	99 a	98 ab	98 ab
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
8	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
9	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A	57 e	99 ab	97 b	98 ab
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
9	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
10	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	PRE	A	88 ab	99 a	98 ab	97 abc
10	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	PRE	A				
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
10	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
11	SPARTAN 4F	4	SC	0.15	lb ai/a	4.8	fl oz/a	PRE	A	90 ab	99 a	98 ab	98 abc
11	CLASSIC	25	WG	0.01875	lb ai/a	1.2	oz/a	PRE	A				
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
11	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
12	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	88 ab	99 a	98 ab	99 a
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
12	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	25 f	99 ab	97 b	96 bc
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
13	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				
14	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A	86 abc	99 ab	98 ab	98 abc
14	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W-2	C				
14	LIQUID AMS	100	SL	5	% v/v	5	% v/v	2-4"W-2	C				

Residual Herbicides in Liberty Link Soybean.

Trial ID: 09-2A-MW70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										ABUTH	ABUTH	ABUTH	ABUTH
Crop Code													
Rating Date										07-22-09	07-30-09	08-06-09	08-20-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										5 DA-B	13 DA-B	20 DA-B	34 DA-B
Trt-Eval Interval										-1 DA-C	7 DA-C	14 DA-C	28 DA-C
LSD (P=.05)										9.9	0.6	1.5	2.2
Replicate F										6.805	0.582	2.335	3.065
Replicate Prob(F)										0.0044	0.5658	0.1168	0.0638
Treatment F										69.724	17063.121	2484.594	1203.031
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: DuPont (09-294), FMC, BASF, Syngenta.
2. Ratings: CI at 7 + 14 da B; CI/WC at 0, 7, 14 + 28 da C.
3. Yield.
4. Harvested 11-7-09, (2) 30 inch rows by 25 ft.

Control of Volunteer Liberty Link Corn in Liberty Link Soybean.

Trial ID: 09-T4-N60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-27-09

Objectives: Identify effective tank-mixtures for control of volunteer Liberty Link corn in Liberty Link soybean.

Crop 1: GLXMA Soybean **Variety:** SO80122 **Description:** LL
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** ZEAMX Zea mays L. corn, volunteer
Pest Description: Liberty Link corn
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 3 Type: W **Code:** IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1: 118 LB/A, K: 466 LB/A

Application Description

	A
Application Date:	07-23-09
Time of Day:	8:30
Application Method:	Spray
Application Timing:	12-18"CN
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	70 F
% Relative Humidity:	92
Wind Velocity, Unit:	3 MPH
Wind Direction:	W
Dew Presence (Y/N):	Y
Soil Moisture:	NORMAL
% Cloud Cover:	10
	07-23-09
Crop stage at application:	V3-V4
Height Min, Max (inch):	5 7

Pest Stage At Each Application

Application Date:	07-23-09
Weed Code:	ZEAMX
Stage Majority (leaves):	4
Stage Min, Max:	4 4
Height Majority:	12 IN
Height Min, Max:	10 16
Density, Unit:	1 FT2
Weed Code:	AMATA
Stage Majority (leaves):	7
Stage Min, Max:	4 12
Height Majority:	6 IN
Height Min, Max:	1.5 10
Density, Unit:	6 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	4
Stage Min, Max:	2 6
Height Majority:	5 IN
Height Min, Max:	1.5 6
Density, Unit:	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Control of Volunteer Liberty Link Corn in Liberty Link Soybean.

Trial ID: 09-T4-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 07-30-09 Injury Percent 7 DA-A	GLXMA 08-06-09 Injury Percent 14 DA-A	GLXMA 08-20-09 Injury Percent 28 DA-A	ZEAMX 07-30-09 Control Percent 7 DA-A	ZEAMX 08-06-09 Control Percent 14 DA-A	ZEAMX 08-20-09 Control Percent 28 DA-A
1	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	8 de	1 b	0 b	7 f	2 b	5 bc
1	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
1	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
1	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	21 c	1 b	0 b	18 e	2 b	2 cd
2	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
2	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
2	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN	A						
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	23 bc	1 b	0 b	23 d	3 b	3 cd
3	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
3	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
3	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	10 d	0 b	0 b	10 f	3 b	8 b
4	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
4	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
5	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	4 f	0 b	0 b	72 a	99 a	99 a
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
5	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
6	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	6 ef	0 b	0 b	69 ab	99 a	99 a
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
6	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN	A						
7	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	5 f	0 b	0 b	70 a	99 a	99 a
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
7	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
8	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	3 f	0 b	0 b	72 a	99 a	99 a
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A	3 f	0 b	0 b	0 g	0 b	0 d
9	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	24 b	7 a	4 a	52 c	99 a	99 a
10	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
10	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
10	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A						
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
10	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	30 a	5 a	4 a	64 b	99 a	99 a
11	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
11	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
11	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
11	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
12	NONTREATED									0 g	0 b	0 b	0 g	0 b	0 d
LSD (P=.05)										2.7	3.2	0.8	4.9	3.4	4.2
Replicate F										2.399	1.306	2.200	0.334	3.244	1.322
Replicate Prob(F)										0.1142	0.2911	0.1346	0.7198	0.0583	0.2869
Treatment F										126.328	4.885	42.250	340.375	1880.571	1232.853
Treatment Prob(F)										0.0001	0.0008	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Control of Volunteer Liberty Link Corn in Liberty Link Soybean.

Trial ID: 09-T4-N60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										AMATA	AMATA	AMATA	IPOHE	IPOHE	IPOHE
Crop Code															
Rating Date										07-30-09	08-06-09	08-20-09	07-30-09	08-06-09	08-20-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A	7 DA-A	14 DA-A	28 DA-A
1	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	95 a	92 a	83 ab	96 ab	93 a	87 a
1	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
1	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
1	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	96 a	93 a	81 ab	97 a	97 a	88 a
2	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
2	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
2	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN	A						
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	97 a	91 a	85 a	97 a	95 a	91 a
3	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
3	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
3	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	8 b	2 b	0 c	55 c	43 b	37 b
4	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
4	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
5	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	96 a	90 a	82 ab	97 a	92 a	92 a
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
5	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
6	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	94 a	88 a	63 b	92 b	94 a	87 a
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
6	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN	A						
7	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	97 a	91 a	82 ab	96 ab	95 a	90 a
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
7	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
8	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	0 c	0 b	0 c	0 d	0 c	0 c
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A	98 a	96 a	93 a	96 ab	95 a	89 a
9	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	96 a	92 a	81 ab	93 ab	91 a	86 a
10	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
10	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
10	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A						
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
10	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	97 a	97 a	91 a	97 a	97 a	92 a
11	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
11	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
11	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
11	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
12	NONTREATED									0 c	0 b	0 c	0 d	0 c	0 c
LSD (P=.05)										7.8	9.7	20.8	4.1	8.8	14.6
Replicate F										0.619	0.815	0.022	0.737	0.779	2.080
Replicate Prob(F)										0.5476	0.4554	0.9787	0.4899	0.4713	0.1488
Treatment F										251.707	155.797	28.461	716.981	158.452	51.778
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Control of Volunteer Liberty Link Corn in Liberty Link Soybean.

Trial ID: 09-T4-N60 Location: Belleville Res. Center

Trial Comments

1. Protocol: DuPont (USA-09-115).
2. Ratings: CI/WC at 7, 14, and 28 DAT.
3. Volunteer corn was P33K44 planted 7-2-09.
4. Not harvested.

Cheminova Experimental Premix Herbicide Formulations in Soybean.

Trial ID: 09-2A-E135 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Compare premix formulation of clomazone and metribuzin (ME) when applied preemergence to soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** CYPES	Cyperus esculentus L.	nutsedge, yellow
Pest 2 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common
Pest 3 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 5 Type: W	**Code:** GGGAN		grasses, annual

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** PIERRON
CEC: 7 **Fert. Level:** P1:93 LB/A, K:448 LB/A

Application Description

	A
Application Date:	07-01-09
Time of Day:	7:00
Application Method:	Spray
Application Timing:	PRE
Application Placement:	BROSOI
Applied By:	DKP
Air Temperature, Unit:	70 F
% Relative Humidity:	92
Wind Velocity, Unit:	1 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
% Cloud Cover:	20
	07-01-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	07-01-09
Weed Code:	CYPES
Stage Majority (leaves):	NA
Weed Code:	XANST
Stage Majority (leaves):	NA
Weed Code:	AMBEL
Stage Majority (leaves):	NA
Weed Code:	AMATA
Stage Majority (leaves):	NA
Weed Code:	GGGAN
Stage Majority (leaves):	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Cheminova Experimental Premix Herbicide Formulations in Soybean.

Trial ID: 09-2A-E135 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code												CYPES	CYPES	CYPES	XANST	XANST	XANST
Crop Code										GLXMA	GLXMA						
Rating Date										07-15-09	07-29-09	07-22-09	08-05-09	08-19-09	07-22-09	08-05-09	08-19-09
Rating Data Type										Injury	Injury	Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing																	
Trt-Eval Interval										14 DA-A	28 DA-A	21 DA-A	35 DA-A	49 DA-A	21 DA-A	35 DA-A	49 DA-A
1	CHA-016	3	ME	0.38	lb ai/a	16.2	floz/a	PRE	A	3 de	0 b	35 h	38 fg	43 efg	33 j	59 e	53 de
2	CHA-016	3	ME	0.50	lb ai/a	21.3	floz/a	PRE	A	6 abc	1 ab	40 gh	44 efg	43 efg	41 ij	36 f	30 f
3	CHA-016	3	ME	0.75	lb ai/a	32	floz/a	PRE	A	5 b-e	0 b	48 fg	49 cde	48 cde	48 hi	61 e	51 e
4	CHA-019	4.5	ME	0.75	lb ai/a	21.3	floz/a	PRE	A	4 cde	0 b	5 i	38 fg	35 fg	64 ef	81 cd	69 c
5	CHA-019	4.5	ME	0.94	lb ai/a	26.7	floz/a	PRE	A	6 abc	3 a	55 def	45 def	46 de	63 ef	86 bc	69 c
6	CHA-019	4.5	ME	1.13	lb ai/a	32	floz/a	PRE	A	7 ab	3 a	70 abc	53 cd	55 bcd	79 cd	92 ab	88 ab
7	CHA-019	4.5	ME	1.5	lb ai/a	42.7	floz/a	PRE	A	8 a	2 ab	75 ab	49 cde	60 b	93 ab	97 a	96 a
8	CHA-019	4.5	ME	2.26	lb ai/a	64	floz/a	PRE	A	5 b-e	1 ab	81 a	68 a	70 a	97 a	97 a	95 a
9	CHA-021	4	ME	0.52	lb ai/a	16.6	floz/a	PRE	A	3 de	0 b	48 fg	0 h	0 h	50 ghi	74 d	63 cde
10	CHA-021	4	ME	0.68	lb ai/a	21.4	floz/a	PRE	A	5 b-e	0 b	74 ab	51 cde	48 cde	58 fgh	64 e	55 de
11	CHA-021	4	ME	1.0	lb ai/a	32	floz/a	PRE	A	3 ef	0 b	75 ab	55 c	54 bcd	71 de	91 ab	83 b
12	CHA-021	4	ME	2.0	lb ai/a	64	floz/a	PRE	A	4 b-e	1 ab	75 ab	64 ab	61 ab	93 ab	97 a	97 a
13	CHA-016	3	ME	0.51	lb ai/a	21.8	floz/a	PRE	A	2 ef	0 b	60 cde	45 def	50 cde	50 ghi	79 cd	61 cde
13	METRIBUZIN	4	AS	0.17	lb ai/a	5.44	fl oz/a	PRE	A								
14	CHA-016	3	ME	0.75	lb ai/a	32	floz/a	PRE	A	3 de	0 b	65 bcd	56 bc	55 bcd	80 cd	96 a	90 ab
14	METRIBUZIN	4	AS	0.25	lb ai/a	8	floz/a	PRE	A								
15	CHA-016	3	ME	0.75	lb ai/a	32	fl oz/a	PRE	A	3 de	0 b	75 ab	54 c	56 bc	83 bc	94 a	90 ab
15	METRIBUZIN	4	AS	0.38	lb ai/a	12.2	floz/a	PRE	A								
16	METRIBUZIN	4	AS	0.38	lb ai/a	12.2	floz/a	PRE	A	4 cde	0 b	66 bcd	49 cde	44 ef	60 fg	77 d	64 cd
17	CHA-016	3	ME	0.50	lb ai/a	21.3	floz/a	PRE	A	5 a-d	0 b	50 efg	36 g	34 g	45 i	81 cd	69 c
17	DAWN	2	AS	0.25	lb ai/a	16	floz/a	PRE	A								
18	NONTREATED									0 f	0 b	0 i	0 h	0 h	0 k	0 g	0 g
19	NONTREATED									0 f	0 b	0 i	0 h	0 h	0 k	0 g	0 g
LSD (P=.05)										2.6	2.3	11.6	7.9	9.2	10.6	7.7	12.0
Replicate F										2.591	3.240	0.477	0.243	0.452	3.126	1.144	1.130
Replicate Prob(F)										0.0630	0.0299	0.6995	0.8659	0.7168	0.0332	0.3396	0.3451
Treatment F										5.053	1.122	40.896	53.163	40.160	54.456	121.632	46.524
Treatment Prob(F)										0.0001	0.3607	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Cheminova Experimental Premix Herbicide Formulations in Soybean.

Trial ID: 09-2A-E135 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBEL 07-22-09 Control Percent 21 DA-A	AMBEL 08-05-09 Control Percent 35 DA-A	AMBEL 08-19-09 Control Percent 49 DA-A	AMATA 07-22-09 Control Percent 21 DA-A	AMATA 08-05-09 Control Percent 35 DA-A	AMATA 08-19-09 Control Percent 49 DA-A	GGGAN 07-22-09 Control Percent 21 DA-A	GGGAN 08-05-09 Control Percent 35 DA-A	GGGAN 08-19-09 Control Percent 49 DA-A
1	CHA-016	3	ME	0.38	lb ai/a	16.2	floz/a	PRE	A	38 f	59 g	45 h	45 e	50 g	39 h	95 c	76 d	70 e
2	CHA-016	3	ME	0.50	lb ai/a	21.3	floz/a	PRE	A	58 e	75 f	61 g	65 d	69 f	63 g	97 b	96 ab	94 c
3	CHA-016	3	ME	0.75	lb ai/a	32	floz/a	PRE	A	71 d	81 e	66 fg	79 c	70 f	63 g	99 a	98 a	97 b
4	CHA-019	4.5	ME	0.75	lb ai/a	21.3	floz/a	PRE	A	93 ab	93 cd	83 cd	98 a	94 bc	80 d	98 ab	98 a	97 ab
5	CHA-019	4.5	ME	0.94	lb ai/a	26.7	floz/a	PRE	A	96 a	94 bc	86 c	99 a	96 ab	91 abc	99 a	98 a	98 ab
6	CHA-019	4.5	ME	1.13	lb ai/a	32	floz/a	PRE	A	99 a	96 abc	90 abc	99 a	95 ab	90 bc	99 a	99 a	99 ab
7	CHA-019	4.5	ME	1.5	lb ai/a	42.7	floz/a	PRE	A	99 a	98 ab	95 ab	99 a	98 a	96 ab	99 a	99 a	99 ab
8	CHA-019	4.5	ME	2.26	lb ai/a	64	floz/a	PRE	A	99 a	98 ab	97 a	99 a	98 a	97 a	99 a	99 a	99 a
9	CHA-021	4	ME	0.52	lb ai/a	16.6	floz/a	PRE	A	79 cd	75 f	64 fg	95 ab	81 e	73 ef	99 a	97 a	97 ab
10	CHA-021	4	ME	0.68	lb ai/a	21.4	floz/a	PRE	A	73 d	82 e	76 de	97 ab	86 d	66 fg	99 a	94 bc	99 ab
11	CHA-021	4	ME	1.0	lb ai/a	32	floz/a	PRE	A	96 a	93 cd	87 bc	99 a	91 c	79 de	99 a	99 a	98 ab
12	CHA-021	4	ME	2.0	lb ai/a	64	floz/a	PRE	A	99 a	99 a	97 a	99 a	99 a	92 abc	99 a	99 a	99 a
13	CHA-016	3	ME	0.51	lb ai/a	21.8	floz/a	PRE	A	84 bc	89 d	70 ef	97 ab	94 bc	89 c	99 a	91 c	90 d
13	METRIBUZIN	4	AS	0.17	lb ai/a	5.44	fl oz/a	PRE	A									
14	CHA-016	3	ME	0.75	lb ai/a	32	floz/a	PRE	A	97 a	93 cd	89 bc	99 a	97 ab	93 abc	99 a	99 a	99 a
14	METRIBUZIN	4	AS	0.25	lb ai/a	8	floz/a	PRE	A									
15	CHA-016	3	ME	0.75	lb ai/a	32	fl oz/a	PRE	A	98 a	95 bc	90 abc	99 a	97 ab	95 abc	99 a	99 a	98 ab
15	METRIBUZIN	4	AS	0.38	lb ai/a	12.2	floz/a	PRE	A									
16	METRIBUZIN	4	AS	0.38	lb ai/a	12.2	floz/a	PRE	A	77 cd	71 f	50 h	99 a	80 e	73 ef	98 ab	53 e	55 f
17	CHA-016	3	ME	0.50	lb ai/a	21.3	floz/a	PRE	A	73 d	71 f	45 h	89 b	68 f	61 g	99 a	94 bc	94 c
17	DAWN	2	AS	0.25	lb ai/a	16	floz/a	PRE	A									
18	NONTREATED									0 g	0 h	0 i	0 f	0 h	0 i	0 d	0 f	0 g
19	NONTREATED									0 g	0 h	0 i	0 f	0 h	0 i	0 d	0 f	0 g
LSD (P=.05)										10.9	4.0	8.3	9.0	4.0	6.8	1.7	3.0	2.2
Replicate F										0.928	2.651	0.702	0.417	0.586	1.250	1.330	1.311	0.897
Replicate Prob(F)										0.4335	0.0579	0.5549	0.7412	0.6271	0.3007	0.2741	0.2802	0.4487
Treatment F										66.314	437.519	100.471	100.998	469.610	147.047	2542.921	907.930	1567.781
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Cheminova (HGLXMACLOM0901).
2. Ratings: CI at 14 + 28 DAT; WC at 21, 35 + 49 DAT.
3. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
   Crop injury was necrosis, malformation and stunt.
4. Stand reduction due to standing water was observed and recorded by plot.

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Identify any positive or negative interactions when tank-mixing other broadleaf herbicides with glyphosate to achieve consistent and broad-spectrum weed control.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida L. ragweed, giant
Pest 2 Type: W **Code:** IPOSS morningglory, species
Pest 3 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.7 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 90 LB/A, K: 409 LB/A

Application Description

	A	B	C	D
Application Date:	06-30-09	07-22-09	07-27-09	07-27-09
Time of Day:	16:00	9:15	16:30	17:15
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	MPOST	LPOST	4"W
Application Placement:	BROSOI	BROSOI	BROSOI	BROSOI
Applied By:	DKP	DKP	DKP	DKP
Air Temperature, Unit:	72 F	73 F	84 F	84 F
% Relative Humidity:	80	92	78	78
Wind Velocity, Unit:	3 MPH	6 MPH	4 MPH	4 MPH
Wind Direction:	NW	N	S	S
Dew Presence (Y/N):	N	N	N	N
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL
% Cloud Cover:	15	85	10	10
	06-30-09	07-22-09	07-27-09	07-27-09
Crop stage at application:	NA	V1	V4	V4
Height Min, Max (inch):		2 3	4 6	4 6

Pest Stage At Each Application

Application Date:	06-30-09	07-22-09	07-27-09	07-27-09
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	5	8	4
Stage Min, Max:		2 8	4 10	2 6
Height Majority:		5 IN	9 IN	4 IN
Height Min, Max:		3 10	4 14	3 5
Density, Unit:		1 FT2	1 FT2	0.2 FT2
Weed Code:	IPOSS	IPOSS	IPOSS	IPOSS
Stage Majority (leaves):	NA	6	8	2
Stage Min, Max:		2 8	4 12	2 4
Height Majority:		5 IN	7 IN	3 IN
Height Min, Max:		1 7	2 9	1 4
Density, Unit:		2.5 FT2	2.5 FT2	0.01 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	4	8	4
Stage Min, Max:		2 6	4 10	2 4
Height Majority:		4 IN	7 IN	4 IN
Height Min, Max:		1 6	5 10	1 5
Density, Unit:		0.5 FT2	1 FT2	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-08-09 Moisture Percent	GLXMA 11-08-09 Yield bu/A	GLXMA Injury Percent 7 DAT	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.9 a	43 ab	0 i	0 i	0 f
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	11.9 a	37 b-i	0 i	0 i	0 f
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B	11.9 a	39 a-h	0 i	0 i	0 f
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	12.0 a	41 a-f	0 i	0 i	0 f
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	11.9 a	43 a	0 i	0 i	0 f
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.9 a	34 hi	24 c	12 c	4 ab
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.7 a	38 a-i	28 b	14 ab	5 a
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.8 a	37 c-i	16 ef	8 de	0 f
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.9 a	40 a-g	18 de	9 d	1 ef
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.8 a	42 abc	0 i	0 i	0 f
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.7 a	34 hi	16 ef	7 ef	2 de
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.8 a	36 f-i	19 d	9 d	1 ef
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.8 a	34 i	14 g	6 fg	3 cd
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.8 a	36 f-i	8 h	5 gh	0 f
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.8 a	40 a-g	0 i	0 i	0 f
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B					
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B					
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B					
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.7 a	40 a-f	0 i	0 i	0 f
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C	11.8 a	41 a-e	0 i	0 i	0 f
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C	11.8 a	39 a-i	0 i	0 i	0 f
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-08-09 Moisture Percent	GLXMA 11-08-09 Yield bu/A	GLXMA Injury Percent 7 DAT	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.9 a	37 c-i	24 c	12 c	0 f
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C					
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.8 a	36 d-i	32 a	15 a	4 bc
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C					
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.7 a	38 a-i	14 fg	7 ef	0 f
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C					
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.8 a	36 e-i	18 d	12 c	0 f
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C					
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.8 a	38 a-i	0 i	0 i	0 f
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C					
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.8 a	37 c-i	14 g	7 ef	0 f
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C					
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.8 a	38 b-i	24 c	13 bc	1 ef
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C					
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.9 a	35 ghi	16 ef	9 d	0 f
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C					
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.8 a	37 c-i	7 h	4 h	0 f
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C					
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.8 a	40 a-g	0 i	0 i	0 f
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C					
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C					
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C					
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	11.8 a	42 a-d	0 i	0 i	0 f
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D					
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D					
30	NONTREATED									11.8 a	28 j	0 i	0 i	0 f
LSD (P=.05)										0.27	5.4	1.8	1.5	1.2
Replicate F										0.578	26.247	0.595	0.808	3.545
Replicate Prob(F)										0.5640	0.0001	0.5546	0.4506	0.0353
Treatment F										0.445	2.800	259.537	101.222	10.555
Treatment Prob(F)										0.9902	0.0004	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 21 DA-A -1 DA-B	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	IPOSS Control Percent 21 DA-A -1 DA-B	IPOSS Control Percent 14 DAT	IPOSS Control Percent 28 DAT	IPOSS Control Percent 56 DAT
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		95 cde	94 a-f	92 b-f		69 k	62 l	65 j
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		95 cde	93 c-h	88 ef		78 ij	75 h-k	72 ij
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B		96 a-d	96 a-e	93 a-f		87 efg	85 c-g	85 c-f
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		95 cde	95 a-e	95 abc		92 bcd	90 a-f	90 a-d
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		97 a-d	97 abc	96 ab		96 ab	95 a	95 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 a-d	94 a-f	93 a-e		89 cde	83 d-h	80 e-i
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	96 a-e	95 abc		93 abc	82 e-h	86 b-f
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 a-d	97 abc	93 a-f		97 a	94 ab	93 abc
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		98 a-d	97 abc	96 abc		96 ab	92 a-e	88 a-e
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 a-d	98 ab	97 ab		77 j	73 ijk	80 e-i
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 a-d	96 a-e	97 ab		96 ab	95 ab	94 ab
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 a-d	94 a-g	93 a-f		95 ab	92 a-d	92 abc
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		93 ef	89 gh	87 f		85 fgh	80 g-j	78 f-i
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 a-d	91 e-h	88 def		72 k	70 kl	73 hij
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		98 abc	97 a-d	97 ab		77 j	73 ijk	75 ghi
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B								
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B								
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		92 fg	92 d-h	94 abc		72 k	72 jk	73 hij
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C		96 b-e	95 a-e	96 abc		84 gh	84 d-h	80 e-i
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C		96 a-d	96 a-e	96 ab		86 e-h	83 d-h	82 e-h
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 21 DA-A -1 DA-B	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	IPOSS Control Percent 21 DA-A -1 DA-B	IPOSS Control Percent 14 DAT	IPOSS Control Percent 28 DAT	IPOSS Control Percent 56 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		97 a-d	96 a-e	95 abc		89 def	86 b-g	83 d-g
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C								
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		97 a-d	96 a-e	96 abc		87 efg	83 d-h	80 e-i
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C								
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		95 de	96 a-e	96 abc		94 ab	91 a-e	84 c-f
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C								
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		98 a-d	98 ab	97 ab		96 ab	94 abc	93 abc
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C								
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		90 fgh	90 fgh	94 a-d		72 k	73 ijk	74 ghi
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C								
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		90 fgh	89 gh	93 a-f		89 def	82 e-h	80 e-i
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C								
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		89 gh	88 h	90 c-f		87 efg	78 g-k	72 ij
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C								
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		88 h	89 gh	94 abc		90 cde	82 f-i	79 f-i
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C								
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		92 fg	93 b-h	95 abc		68 k	69 kl	74 ghi
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C								
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		89 gh	90 fgh	95 abc		82 hi	82 f-i	84 c-f
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C								
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C								
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C								
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	94 a	99 ab	99 a	99 a	99 a	96 ab	87 a-g	95 a
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D								
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D								
30	NONTREATED									0 b	0 i	0 i	0 g	0 b	0 l	0 m	0 k
LSD (P=.05)										5.7	3.3	5.3	6.1	1.4	4.3	9.6	8.6
Replicate F										1.000	0.391	0.851	1.626	1.000	2.996	0.381	0.193
Replicate Prob(F)										0.5000	0.6783	0.4322	0.2056	0.5000	0.0578	0.6850	0.8254
Treatment F										5005.563	227.446	87.368	65.561	87616.009	144.317	26.188	30.930
Treatment Prob(F)										0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA Control Percent 21 DA-A -1 DA-B	AMATA Control Percent 14 DAT	AMATA Control Percent 28 DAT	AMATA Control Percent 56 DAT
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 bcd	92 de	92 d
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		99 a	98 abc	98 ab
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B		99 a	99 a	98 ab
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	98 ab
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		99 a	99 a	99 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	98 abc	98 ab
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	98 ab
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	98 ab
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 ab	93 cde	94 bcd
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	98 ab	96 a-d
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		98 ab	94 b-e	95 a-d
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 de	90 e	93 cd
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 bcd	95 a-d	92 d
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		98 ab	97 a-d	96 a-d
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B				
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B				
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		97 a-d	96 a-d	96 a-d
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C		98 abc	98 abc	98 ab
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C		96 cde	96 a-d	95 a-d
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date													
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										21 DA-A			
Trt-Eval Interval										-1 DA-B	14 DAT	28 DAT	56 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		98 ab	98 ab	97 abc
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C				
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	98 ab
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C				
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		97 a-d	96 a-d	94 bcd
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C				
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		98 abc	98 abc	98 ab
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C				
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		95 e	95 a-d	95 a-d
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C				
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		98 a-d	97 a-d	92 d
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C				
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		97 a-d	97 a-d	96 a-d
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C				
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		97 bcd	97 a-d	95 a-d
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C				
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		96 cde	96 a-d	97 abc
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C				
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		98 abc	98 abc	98 ab
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C				
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C				
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C				
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	92 a	99 ab	98 ab	98 ab
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D				
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D				
30	NONTREATED									0 b	0 f	0 f	0 e
LSD (P=.05)										20.7	1.9	4.7	4.4
Replicate F										1.000	3.415	1.102	1.320
Replicate Prob(F)										0.5000	0.0396	0.3391	0.2751
Treatment F										368.889	683.578	115.650	128.793
Treatment Prob(F)										0.0027	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/UIUC/WIU/ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT (rate all plots at 28 days after the LPOST timing);
   late-season rating of all plots at 56 DAT or at crop harvest.
   Evaluate the PRE/POST treatment prior to the POST application and again based on DAT from the respective POST timing in that treatment.
3. MPOST = 3-5"W; LPOST = 6-10"W.

Cooperative POST Soybean Glyphosate Tank-Mix - Site 1.

Trial ID: 09-51E-S150 Location: Belleville Res. Center

4. Take weed counts in nontreated at the "B" application timing (No./0.5 m2).
5. Yield.
6. DAT = Days after various POST applications. For treatments 4 and 5 ratings are after the last application.
   Ratings at 21 DA-A were on 7-21-09.
   Ratings at 7 days after the MPOST, LPOST and 4"W applications were on 7-29-09, 8-3-09, and 8-3-09, respectively.
   Ratings at 14 days after the MPOST, LPOST and 4"W applications were on 8-5-09, 8-10-09, and 8-10-09, respectively.
   Ratings at 28 days after the MPOST, LPOST and 4"W applications were on 8-19-09, 8-24-09, and 8-24-09, respectively.
   Ratings at 56 days after the MPOST, LPOST and 4"W applications were on 9-16-09, 9-21-09, and 9-21-09, respectively.
7. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
8. Weed counts per 0.5 square meter in the nontreated plots on 7-21-09 were:
   Plot 130- 6 AMBTR, 4 IPOSS, 6 ABUTH, 2 AMATA, 2 SETFA
   Plot 211- 1 AMBTR, 3 IPOSS
   Plot 306- 10 AMBTR, 5 IPOSS, 4 AMATA
9. Harvested 11-8-09, (2) 30 inch rows by 24 ft.

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Identify any positive or negative interactions when tank-mixing other broadleaf herbicides with glyphosate to achieve consistent and broad-spectrum weed control.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 2 Type: W	**Code:** IPOSS		morningglory, species
Pest 3 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: Soybean: N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A

% OM: 2 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1 88 LB/A, K 445 LB/A

Application Description

	A	B	C	D
Application Date:	06-30-09	07-20-09	07-27-09	07-27-09
Time of Day:	20:25	8:30	15:15	16:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	MPOST	LPOST	4"W
Application Placement:	BROSOI	BROSOI	BROSOI	BROSOI
Applied By:	DKP	DKP	DKP	DKP
Air Temperature, Unit:	72 F	68 F	84 F	84 F
% Relative Humidity:	80	92	78	78
Wind Velocity, Unit:	3 MPH	3 MPH	4 MPH	4 MPH
Wind Direction:	NW	SE	S	S
Dew Presence (Y/N):	N	N	N	N
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL
% Cloud Cover:	15	10	10	10
	06-30-09	07-20-09	07-27-09	07-27-09
Crop stage at application:	NA	V1	V4	V4
Height Min, Max (inch):		2 3	4 6	4 6

Pest Stage At Each Application

Application Date:	06-30-09	07-20-09	07-27-09	07-27-09
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	4	6	3
Stage Min, Max:		2 6	3 8	2 6
Height Majority:		5 IN	5 IN	3.5 IN
Height Min, Max:		2 7	2.5 10	1.5 5
Density, Unit:		1 FT2	1 FT2	0.7 FT2
Weed Code:	IPOSS	IPOSS	IPOSS	IPOSS
Stage Majority (leaves):	NA	4	7	3
Stage Min, Max:		2 6	3 10	2 5
Height Majority:		3 IN	4 IN	2.5 IN
Height Min, Max:		1 4	1.5 7	1.5 4
Density, Unit:		2 FT2	1.5 FT2	0.6 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	2	5	NA
Stage Min, Max:		2 4	3 8	
Height Majority:		2 IN	4.5 IN	
Height Min, Max:		1 4	2 6	
Density, Unit:		0.1 FT2	0.01 FT2	
Weed Code:	ABUTH	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	2	3	NA
Stage Min, Max:		COTY 6	1 5	
Height Majority:		3 IN	2.5 IN	
Height Min, Max:		0.5 5	1 4	
Density, Unit:		2 FT2	1.5 FT2	

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-08-09 Moisture Percent	GLXMA 11-08-09 Yield bu/A	GLXMA Injury Percent 7 DAT	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.4 abc	38 a-g	0 h	0 g	0 c
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	12.7 b-e	41 a-e	0 h	0 g	0 c
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B	13.0 a-e	34 d-g	0 h	0 g	0 c
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.1 a-e	39 a-g	0 h	0 g	0 c
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	12.1 e	46 ab	0 h	0 g	0 c
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.5 ab	39 a-g	26 b	13 b	2 b
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.7 a	30 fg	30 a	15 a	4 a
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.0 a-e	33 efg	17 d	8 d	0 c
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.1 a-d	34 d-g	20 c	10 c	3 b
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	12.4 de	43 a-d	0 h	0 g	0 c
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.1 a-d	36 b-g	19 cd	8 d	0 c
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.5 ab	29 g	24 b	12 b	2 b
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	12.5 cde	39 a-g	18 d	8 d	3 b
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.4 abc	37 a-g	7 g	1 g	0 c
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13.3 a-d	43 a-d	0 h	0 g	0 c
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B					
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B					
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B					
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B					
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.0 a-e	37 a-g	0 h	0 g	0 c
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C	12.9 a-e	43 a-d	0 h	0 g	0 c
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C	13.1 a-d	41 a-e	0 h	0 g	0 c
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-08-09 Moisture Percent	GLXMA 11-08-09 Yield bu/A	GLXMA Injury Percent 7 DAT	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.8 a	35 c-g	25 b	13 b	2 b
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C					
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.4 abc	39 a-g	31 a	16 a	4 a
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C					
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	12.5 cde	47 a	13 f	5 e	0 c
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C					
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.4 abc	30 fg	15 e	10 c	0 c
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C					
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.1 a-e	40 a-f	0 h	0 g	0 c
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C					
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.3 abc	35 c-g	14 ef	7 d	0 c
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C					
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.3 a-d	38 a-g	19 cd	12 b	0 c
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C					
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.2 a-d	38 a-g	15 e	7 d	0 c
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C					
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	13.2 a-d	39 a-g	6 g	3 f	0 c
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C					
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	12.6 b-e	45 abc	0 h	0 g	0 c
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C					
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C					
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C					
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C					
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	13.5 abc	40 a-f	0 h	0 g	0 c
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D					
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D					
30	NONTREATED									12.9 a-e	18 h	0 h	0 g	0 c
LSD (P=.05)										0.97	10.4	1.9	1.6	1.6
Replicate F										57.695	25.200	1.361	1.987	2.218
Replicate Prob(F)										0.0001	0.0001	0.2649	0.1467	0.1183
Treatment F										1.354	2.527	253.059	102.513	5.233
Treatment Prob(F)										0.1647	0.0015	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 20 DA-A 0 DA-B	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	IPOSS Control Percent 20 DA-A 0 DA-B	IPOSS Control Percent 14 DAT	IPOSS Control Percent 28 DAT	IPOSS Control Percent 56 DAT
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 a-d	93 b-g	86 a-e		95 ab	94 ab	87 a-e
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		96 a-d	94 a-g	87 a-e		97 ab	95 a	93 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B		96 a-d	94 a-f	85 b-e		97 ab	96 a	91 a
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		95 bcd	95 a-e	93 ab		97 ab	97 a	93 a
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		96 a-d	96 abc	90 a-d		97 ab	97 a	92 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 abc	95 a-d	89 a-d		97 ab	96 a	88 a-d
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 abc	94 a-g	82 c-f		97 ab	96 a	91 a
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		95 bcd	93 b-g	78 ef		96 ab	96 a	94 a
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 a-d	96 ab	88 a-d		98 a	97 a	93 a
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		95 bcd	94 a-f	87 a-e		96 ab	97 a	93 a
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		93 de	88 hij	78 ef		96 ab	95 a	90 ab
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		95 bcd	90 f-i	74 f		97 ab	96 a	93 a
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 a-d	92 c-h	84 b-e		96 ab	93 ab	92 a
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		95 a-d	94 a-g	86 a-e		97 ab	96 a	93 a
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		97 ab	93 b-g	91 abc		96 ab	94 a	89 abc
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B								
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B								
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		89 fg	84 k	81 def		78 g	78 ef	80 fg
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C		90 f	90 ghi	91 abc		80 g	78 ef	77 g
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C		93 de	91 e-h	88 a-d		91 cd	89 a-d	87 a-f
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR Control Percent 20 DA-A 0 DA-B	AMBTR Control Percent 14 DAT	AMBTR Control Percent 28 DAT	AMBTR Control Percent 56 DAT	IPOSS Control Percent 20 DA-A 0 DA-B	IPOSS Control Percent 14 DAT	IPOSS Control Percent 28 DAT	IPOSS Control Percent 56 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		94 bcd	94 a-g	92 ab		84 f	81 de	81 efg
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C								
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		95 bcd	94 a-g	91 ab		89 de	83 cde	82 d-g
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C								
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		96 a-d	94 a-f	90 a-d		94 bc	91 abc	89 a-d
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C								
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		98 a	98 a	95 a		96 ab	95 a	93 a
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C								
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		85 h	86 ijk	92 ab		87 def	82 de	83 b-g
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C								
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		86 gh	84 jk	85 b-e		86 ef	81 de	83 c-g
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C								
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		91 ef	91 d-h	90 a-d		91 cd	85 b-e	83 b-g
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C								
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		91 ef	90 f-i	92 ab		91 cd	82 cde	79 g
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C								
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		87 gh	88 hij	93 ab		79 g	70 f	78 g
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C								
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		90 f	90 e-i	92 ab		78 g	70 f	81 efg
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C								
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C								
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C								
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	86 a	94 cd	93 b-g	91 abc	96 a	94 bc	93 ab	90 ab
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D								
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D								
30	NONTREATED									0 b	0 i	0 l	0 g	0 b	0 h	0 g	0 h
LSD (P=.05)										2.9	2.7	4.3	9.6	2.9	3.8	8.7	7.0
Replicate F										1.000	3.559	7.580	12.303	1.000	2.746	8.062	1.529
Replicate Prob(F)										0.5000	0.0351	0.0012	0.0001	0.5000	0.0728	0.0008	0.2256
Treatment F										16770.252	329.573	128.641	24.468	20880.252	179.294	35.355	45.966
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA Control Percent 20 DA-A 0 DA-B	AMATA Control Percent 14 DAT	AMATA Control Percent 28 DAT	AMATA Control Percent 56 DAT	ABUTH Control Percent 20 DA-A 0 DA-B	ABUTH Control Percent 14 DAT	ABUTH Control Percent 28 DAT	ABUTH Control Percent 56 DAT
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	97 c	97 b		97 bcd	96 a-e	95 a-e
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		99 a	99 ab	98 ab		97 a-d	96 b-e	96 a-e
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B		99 a	99 a	99 a		97 a-d	96 cde	96 a-e
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a		97 bcd	96 cde	96 a-e
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C								
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		99 a	99 a	99 a		97 bcd	96 cde	95 a-e
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C								
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a		96 cd	95 e	94 e
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B								
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a		97 bcd	96 a-e	96 a-e
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a		98 abc	98 ab	97 abc
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B								
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a		97 a-d	97 a-d	94 de
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B								
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	98 ab		98 abc	98 a	96 a-e
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B								
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a		97 a-d	97 abc	97 ab
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B								
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		98 ab	98 abc	98 ab		98 abc	96 a-e	97 a-d
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B								
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	98 abc	97 b		98 ab	96 a-e	94 e
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B								
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	98 abc	98 ab		98 a	97 a-d	97 abc
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B								
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		99 a	99 a	99 a		98 abc	97 a-d	96 a-e
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B								
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B								
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B								
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B								
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		97 a-d	96 cde	95 cde
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C		99 a	99 a	99 a		96 d	96 b-e	96 a-e
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C		99 a	99 a	99 a		97 a-d	97 a-d	97 abc
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA Control Percent 20 DA-A 0 DA-B	AMATA Control Percent 14 DAT	AMATA Control Percent 28 DAT	AMATA Control Percent 56 DAT	ABUTH Control Percent 20 DA-A 0 DA-B	ABUTH Control Percent 14 DAT	ABUTH Control Percent 28 DAT	ABUTH Control Percent 56 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		97 a-d	97 a-d	97 abc
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C								
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		98 a	97 abc	97 ab
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C								
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		97 a-d	96 cde	96 a-e
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C								
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		97 bcd	97 a-e	95 b-e
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C								
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		98 b	98 bc	98 ab		98 a	97 abc	98 a
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C								
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		98 ab	96 b-e	96 a-e
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C								
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		98 abc	96 a-e	97 a-d
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C								
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		98 ab	98 ab	97 ab
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C								
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		97 a-d	97 a-d	96 a-e
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C								
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		99 a	99 a	99 a		98 ab	96 a-e	97 a-d
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C								
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C								
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C								
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C								
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	99 a	98 ab	98 abc	98 ab	95 a	96 cd	95 de	96 a-e
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D								
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D								
30	NONTREATED									0 b	0 c	0 d	0 c	0 b	0 e	0 f	0 f
LSD (P=.05)										0.0	0.7	1.2	1.7	5.0	1.5	2.0	2.5
Replicate F										0.000	0.732	0.528	0.286	1.000	1.654	1.500	7.597
Replicate Prob(F)										1.0000	0.4853	0.5925	0.7523	0.5000	0.2006	0.2320	0.0012
Treatment F										0.000	4962.339	1856.930	929.601	6768.751	1060.063	641.544	392.890
Treatment Prob(F)										1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/UIUC/WIU/ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT (rate all plots at 28 days after the LPOST timing);
   late-season rating of all plots at 56 DAT or at crop harvest.
   Evaluate the PRE/POST treatment prior to the POST application and again based on DAT from the respective POST timing in that treatment.
3. MPOST = 3-5"W; LPOST = 6-10"W.

Cooperative POST Soybean Glyphosate Tank-Mix - Site 2.

Trial ID: 09-10B-E180 Location: Belleville Res. Center

4. Take weed counts in nontreated at the "B" application timing (No./0.5 m2).
5. Yield.
6. DAT = Days after various POST applications. For treatments 4 and 5 ratings are after the last application.
   Ratings at 20 DA-A were on 7-20-09.
   Ratings at 7 days after the MPOST, LPOST and 4"W applications were on 7-27-09, 8-3-09, and 8-3-09, respectively.
   Ratings at 14 days after the MPOST, LPOST and 4"W applications were on 8-3-09, 8-10-09, and 8-10-09, respectively.
   Ratings at 28 days after the MPOST, LPOST and 4"W applications were on 8-17-09, 8-24-09, and 8-24-09, respectively.
   Ratings at 56 days after the MPOST, LPOST and 4"W applications were on 9-14-09, 9-21-09, and 9-21-09, respectively.
7. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
8. Weed Counts per 0.5 square meter in the nontreated plots on 7-20-09 were;
   Plot 130- 4 AMBTR, 14 IPOSS, 2 ABUTH, 2 SETFA, 4 CYPES
   Plot 205- 1 AMBTR, 8 IPOSS, 4 ABUTH, 3 AMATA, 2 CYPES
   Plot 313- 8 AMBTR, 8 IPOSS, 10 ABUTH, 1 PANDI, 2 SETFA
9. Harvested 11-8-09, (2) 30 inch rows by 21 ft.

Cooperative POST Soybean Glyphosate Tank-Mix - Clinton.

Trial ID: 09-Clinton-TM Location: Huey, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Huey IL 62252 USA
Trial Status: FINAL **Initiation Date:** 06-17-09

Objectives: Identify any positive or negative interactions when tank-mixing other broadleaf herbicides with glyphosate to achieve consistent and broad-spectrum weed control.

Crop 1: GLXMA Soybean **Variety:** RR
Planting Method: SEEDED **Planting Date:** 06-12-09
LB/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 15 IN

Pest 1 Type: W **Code:** MOLVE Mollugo verticillata L. carpetweed
Pest 2 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: PPO-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Texture: SILT LOAM

Application Description

	A	B	C	D
Application Date:	06-17-09	07-03-09	07-08-09	07-08-09
Time of Day:	5:15 PM	11:00 AM	9:00 AM	10:00 AM
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	MPOST	LPOST	4"W
Application Placement:	BROSOI	BROSOI	BROSOI	BROSOI
Applied By:	DP	DP	DP	DP
Air Temperature, Unit:	93 F	81 F	81 F	81 F
% Relative Humidity:	72	43	42	42
Wind Velocity, Unit:	6 MPH	4 MPH	1 MPH	1 MPH
Wind Direction:	N	NW	N	N
Dew Presence (Y/N):	N	N	Y	N
Soil Temperature, Unit:	80 F	78 F	80 F	80 F
Soil Moisture:	ABONOR	NORMAL	ABONOR	ABONOR
% Cloud Cover:	10	20	0	0
	06-17-09	07-03-09	07-08-09	07-08-09
Crop stage at application:	VE	V3	V4	V4
Height Min, Max (inch):	0 0.25	6 8	8 10	8 10

Pest Stage At Each Application

Application Date:	06-17-09		07-03-09		07-08-09		07-08-09	
Weed Code:	MOLVE		MOLVE		MOLVE		MOLVE	
Stage Majority (leaves):	NA		8		10		6	
Stage Min, Max:			2	12	4	14	2	10
Height Majority:			0.75	IN DIA	1	IN DIA	0.75	IN DIA
Height Min, Max:			0.25	1.25	0.5	2	0.25	1
Density, Unit:			10	FT2	10	FT2	2	FT2
Weed Code:	AMATA		AMATA		AMATA		AMATA	
Stage Majority (leaves):	NA		8		14		8	
Stage Min, Max:			4	12	6	22	2	10
Height Majority:			4	IN	9	IN	4	IN
Height Min, Max:			2	10	4	18	2	6
Density, Unit:			1	FT2	1	FT2	0.5	FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Cooperative POST Soybean Glyphosate Tank-Mix - Clinton.

Trial ID: 09-Clinton-TM Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA Injury Percent 7 DAT	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT	AMATA-HR Control Percent 14 DAT	AMATA-HR Control Percent 28 DAT	AMATA-HR Control Percent 56 DAT	AMATA-HR Control Percent 07-03-09 16 DA-A 0 DA-B
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	0 j	0 h	0 d	96 b-f	98 ab	98 ab	
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	0 j	0 h	0 d	98 a-d	99 a	99 a	
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B	0 j	0 h	0 d	99 ab	99 a	99 a	
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	0 j	0 h	0 d	99 a	99 a	99 a	
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	0 j	0 h	0 d	99 a	99 a	99 a	
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	25 c	10 c	0 d	97 a-f	99 ab	99 a	
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	36 a	15 b	4 b	96 c-g	98 abc	98 ab	
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	14 ef	5 ef	0 d	91 h	98 bc	98 ab	
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11 fg	5 ef	0 d	92 h	97 c	98 b	
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	0 j	0 h	0 d	96 b-f	99 ab	98 ab	
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	5 i	2 gh	0 d	95 fg	98 bc	98 ab	
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	13 ef	4 fg	0 d	96 d-g	98 bc	98 ab	
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	6 hi	3 fg	0 d	96 c-g	99 ab	99 a	
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	6 hi	3 fg	0 d	96 b-f	99 ab	99 a	
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	0 j	0 h	0 d	94 gh	99 ab	99 a	
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B							
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B							
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B							
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B							
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	0 j	0 h	0 d	98 a-d	99 a	99 a	
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C	0 j	0 h	0 d	98 a-d	99 a	99 a	
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C	0 j	0 h	0 d	98 abc	99 a	99 a	
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							

Cooperative POST Soybean Glyphosate Tank-Mix - Clinton.

Trial ID: 09-Clinton-TM Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA Injury Percent 7 DAT	GLXMA Injury Percent 14 DAT	GLXMA Injury Percent 28 DAT	AMATA-HR Control Percent 14 DAT	AMATA-HR Control Percent 28 DAT	AMATA-HR Control Percent 56 DAT	AMATA-HR Control Percent 07-03-09 16 DA-A 0 DA-B
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	29 b	18 a	3 c	96 b-f	99 ab	99 a	
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C							
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	32 b	19 a	6 a	96 c-g	98 ab	99 a	
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C							
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	19 d	8 cd	0 d	92 h	99 a	99 a	
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C							
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	22 d	7 de	0 d	96 b-f	99 ab	99 a	
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C							
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	0 j	0 h	0 d	98 a-d	99 a	99 a	
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C							
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	7 hi	4 fg	0 d	95 efg	99 ab	99 a	
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C							
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	14 e	7 de	0 d	96 d-g	99 a	99 a	
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C							
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11 fg	3 fg	0 d	95 d-g	99 a	99 a	
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C							
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	9 gh	0 h	0 d	97 a-f	99 ab	99 a	
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C							
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	0 j	0 h	0 d	97 a-e	98 ab	99 a	
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C							
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C							
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C							
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C							
29	SEQUENCE	5.25	SL	2.3	lb ai/a	3.5	pt/a	PRE	A	0 j	0 h	0 d	99 a	99 a	99 a	94 a
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D							
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D							
30	NONTREATED									0 j	0 h	0 d	0 i	0 d	0 c	0 b
LSD (P=.05)										2.7	2.3	0.9	2.5	1.3	1.0	2.9
Replicate F										3.132	0.459	2.362	1.245	3.222	2.576	1.000
Replicate Prob(F)										0.0511	0.6342	0.1033	0.2955	0.0471	0.0848	0.5000
Treatment F										128.779	46.811	18.980	392.345	1492.535	2434.141	19740.252
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Cooperative POST Soybean Glyphosate Tank-Mix - Clinton.

Trial ID: 09-Clinton-TM Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	MOLVE Control Percent 14 DAT	MOLVE Control Percent 28 DAT	MOLVE Control Percent 56 DAT	MOLVE 07-03-09 Control Percent 16 DA-A 0 DA-B
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	98 b-e	99 ab	99 a	
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	98 b-e	99 a	99 a	
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B	98 a-d	99 a	99 a	
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	99 ab	99 a	99 a	
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	99 a	99 a	99 a	
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	98 b-e	98 abc	99 a	
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	96 fg	99 ab	99 a	
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	97 d-g	99 a	99 a	
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	96 fg	98 abc	99 a	
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	96 g	99 ab	99 a	
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	96 fg	98 c	99 a	
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	98 b-e	98 bc	99 a	
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	96 g	99 a	99 a	
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	96 g	98 bc	99 a	
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	95 h	98 abc	99 a	
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B				
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B				
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	98 b-e	99 ab	99 a	
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C	98 abc	98 abc	99 a	
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C	98 abc	99 a	99 a	
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				

Cooperative POST Soybean Glyphosate Tank-Mix - Clinton.

Trial ID: 09-Clinton-TM Location: Huey, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	MOLVE Control Percent 14 DAT	MOLVE Control Percent 28 DAT	MOLVE Control Percent 56 DAT	MOLVE Control Percent 07-03-09 16 DA-A 0 DA-B
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	98 a-d	99 a	99 a	
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C				
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	97 d-g	99 a	99 a	
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C				
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	97 d-g	99 a	99 a	
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C				
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	98 abc	99 a	99 a	
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C				
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	97 c-f	99 a	99 a	
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C				
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	97 efg	99 ab	99 a	
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C				
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	97 d-g	99 ab	99 a	
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C				
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	98 b-e	99 a	99 a	
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C				
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	98 abc	99 a	99 a	
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C				
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	97 efg	99 a	99 a	
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C				
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C				
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C				
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
29	SEQUENCE	5.25	SL	2.3	lb ai/a	3.5	pt/a	PRE	A	99 ab	99 a	99 a	91 a
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D				
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D				
30	NONTREATED									0 i	0 d	0 b	0 b
LSD (P=.05)										1.3	1.0	0.0	3.8
Replicate F										1.873	1.831	0.000	1.000
Replicate Prob(F)										0.1629	0.1695	1.0000	0.5000
Treatment F										1442.248	2818.283	0.000	10725.144
Treatment Prob(F)										0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/UIUC/WIU/ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT (rate all plots at 28 days after the LPOST timing);
   late-season rating of all plots at 56 DAT or at crop harvest.
   Evaluate the PRE/POST treatment prior to the POST application and again based on DAT from the respective POST timing in that treatment.
3. MPOST = 3-5"W; LPOST = 6-10"W.

4. Take weed counts in nontreated at the "B" application timing (No./0.5 m2).
5. Yield.
6. 7/3- Weed counts in nontreated. Plot 130: 42 Molve 5 Amata, Plot 202: 48 Molve 5 Amata, Plot 323: 64 Molve 6 Amata
7. Crop was canopied prior to the 28 dat rating.
8. AMATA-HR = Herbicide-resistant waterhemp (PPO).
9. Not harvested.

Postemergence Comparison of Rhythm and Flexstar Herbicides.

Trial ID: 09-2A-ME60 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Determine if Rhythm when applied postemergence id equal or better than Flexstar for broadleaf weed control and selectivity on soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common
Pest 2 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common
Pest 3 Type: W	**Code:** XANST	Xanthium strumarium L.	cocklebur, common
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus	velvetleaf
Pest 5 Type: W	**Code:** SETFA	Setaria faberi Herrm.	foxtail, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** PIERRON
CEC: 7 **Fert. Level:** P1:93 LB/A, K:448 LB/A

Application Description

	A
Application Date:	07-17-09
Time of Day:	6:30
Application Method:	Spray
Application Timing:	2-4"W
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	66 F
% Relative Humidity:	82
Wind Velocity, Unit:	8 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	20
	07-17-09
Crop stage at application:	V1
Height Min, Max (inch):	3 6

Pest Stage At Each Application

Application Date:	07-17-09
Weed Code:	AMBEL
Stage Majority (leaves):	2
Stage Min, Max:	2 4
Height Majority:	3 IN
Height Min, Max:	1 4
Density, Unit:	1 FT2
Weed Code:	AMATA
Stage Majority (leaves):	2
Stage Min, Max:	COTY 4
Height Majority:	2 IN
Height Min, Max:	0.5 3
Density, Unit:	0.3 FT2
Weed Code:	XANST
Stage Majority (leaves):	2
Stage Min, Max:	COTY 2
Height Majority:	2 IN
Height Min, Max:	1 4
Density, Unit:	0.1 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	1
Stage Min, Max:	COTY 3
Height Majority:	2 IN
Height Min, Max:	0.5 2
Density, Unit:	0.2 FT2
Weed Code:	SETFA
Stage Majority (leaves):	3
Stage Min, Max:	1 5
Height Majority:	3 IN
Height Min, Max:	0.5 5
Density, Unit:	5 FT2

Postemergence Comparison of Rhythm and Flexstar Herbicides.

Trial ID: 09-2A-ME60 Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Postemergence Comparison of Rhythm and Flexstar Herbicides.

Trial ID: 09-2A-ME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 07-31-09 Injury Percent 14 DA-A	GLXMA 08-07-09 Injury Percent 21 DA-A	GLXMA 08-21-09 Injury Percent 35 DA-A	AMBEL 07-31-09 Control Percent 14 DA-A	AMBEL 08-07-09 Control Percent 21 DA-A	AMBEL 08-21-09 Control Percent 35 DA-A
1	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	2-4"W	A	12 cd	3 b	0 a	99 a	99 a	99 a
1	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
1	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
2	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	2-4"W	A	14 bc	5 a	0 a	99 ab	99 a	98 ab
2	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
2	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
3	RHYTHM	1.88	ME	0.59	lb ai/a	40	fl oz/a	2-4"W	A	16 a	5 a	0 a	99 a	99 a	99 a
3	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
3	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
4	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	2-4"W	A	11 de	3 b	0 a	99 a	99 a	99 a
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	2-4"W	A						
4	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
5	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	2-4"W	A	13 bcd	4 b	0 a	99 a	99 a	99 a
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	2-4"W	A						
5	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
6	DAWN	2	AS	0.375	lb ai/a	24	fl oz/a	2-4"W	A	9 e	3 b	0 a	98 b	99 a	98 ab
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W	A						
7	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	2-4"W	A	12 cd	5 a	0 a	99 a	99 a	98 ab
7	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
7	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	2-4"W	A	15 ab	5 a	0 a	99 a	99 a	74 b
8	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
8	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
9	NONTREATED									0 f	0 c	0 a	0 c	0 b	0 c
LSD (P=.05)										2.4	0.8	0.0	0.5	0.5	24.0
Replicate F										0.709	1.257	0.000	0.542	1.509	1.101
Replicate Prob(F)										0.5560	0.3113	1.0000	0.6579	0.2375	0.3682
Treatment F										33.063	30.086	0.000	31816.122	35372.550	15.921
Treatment Prob(F)										0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Postemergence Comparison of Rhythm and Flexstar Herbicides.

Trial ID: 09-2A-ME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										AMATA	AMATA	AMATA	XANST	XANST	XANST
Crop Code															
Rating Date										07-31-09	08-07-09	08-21-09	07-31-09	08-07-09	08-21-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										14 DA-A	21 DA-A	35 DA-A	14 DA-A	21 DA-A	35 DA-A
1	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	2-4"W	A	99 a	98 a	98 ab	99 a	99 a	99 a
1	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
1	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
2	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	2-4"W	A	99 a	99 a	99 a	99 a	99 a	99 a
2	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
2	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
3	RHYTHM	1.88	ME	0.59	lb ai/a	40	fl oz/a	2-4"W	A	99 a	99 a	98 ab	99 ab	99 a	99 a
3	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
3	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
4	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	2-4"W	A	99 a	99 a	97 ab	99 a	99 a	99 a
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	2-4"W	A						
4	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
5	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	2-4"W	A	99 a	99 a	99 a	99 a	99 a	99 a
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	2-4"W	A						
5	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
6	DAWN	2	AS	0.375	lb ai/a	24	fl oz/a	2-4"W	A	99 a	98 a	98 ab	98 b	97 b	90 b
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W	A						
7	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	2-4"W	A	99 a	98 a	96 b	99 a	99 a	99 a
7	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
7	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	2-4"W	A	99 a	99 a	98 ab	99 a	99 a	99 a
8	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
8	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
9	NONTREATED									0 b	0 b	0 c	0 c	0 c	0 c
LSD (P=.05)										0.6	1.3	2.8	0.7	0.0	4.7
Replicate F										0.710	0.421	1.300	0.914	0.000	0.612
Replicate Prob(F)										0.5557	0.7396	0.2973	0.4488	1.0000	0.6137
Treatment F										30294.874	5454.404	1177.962	17833.230	0.000	418.880
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Postemergence Comparison of Rhythm and Flexstar Herbicides.

Trial ID: 09-2A-ME60 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 07-31-09 Control Percent 14 DA-A	ABUTH 08-07-09 Control Percent 21 DA-A	ABUTH 08-21-09 Control Percent 35 DA-A	SETFA 07-31-09 Control Percent 14 DA-A	SETFA 08-07-09 Control Percent 21 DA-A	SETFA 08-21-09 Control Percent 35 DA-A
1	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	2-4"W	A	97 a	96 a	92 a	68 cd	76 c	81 ab
1	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
1	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
2	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	2-4"W	A	98 a	96 a	94 a	71 bc	83 b	86 ab
2	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
2	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
3	RHYTHM	1.88	ME	0.59	lb ai/a	40	fl oz/a	2-4"W	A	98 a	98 a	93 a	75 bc	86 b	85 ab
3	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
3	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
4	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	2-4"W	A	99 a	98 a	95 a	99 a	99 a	94 a
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	2-4"W	A						
4	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
5	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	2-4"W	A	99 a	98 a	97 a	99 a	98 a	95 a
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	2-4"W	A						
5	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
6	DAWN	2	AS	0.375	lb ai/a	24	fl oz/a	2-4"W	A	97 a	93 b	85 b	34 e	53 e	59 c
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"W	A						
7	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	2-4"W	A	99 a	97 a	94 a	60 d	69 d	68 bc
7	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
7	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	2-4"W	A	98 a	98 a	96 a	79 b	88 b	89 a
8	MSO (DESTINY)	100	SL	1	% v/v	1	% v/v	2-4"W	A						
8	LIQUID AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	A						
9	NONTREATED									0 b	0 c	0 c	0 f	0 f	0 d
LSD (P=.05)										2.6	2.9	6.3	8.1	6.2	19.6
Replicate F										4.406	7.785	7.480	2.684	0.973	0.339
Replicate Prob(F)										0.0132	0.0008	0.0011	0.0693	0.4216	0.7973
Treatment F										1384.720	1029.000	206.701	128.585	208.280	19.648
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Cheminova (HGLXMAFOMME0901).
2. Ratings: CI/WC at 14, 21 + 35 DAT.
3. Apply Select (6 floz/A) + COC (1 %v/v) to treatments 1-3 and 6-8 to manage the grass weeds in the trial, as needed, was applied 7-27-09.
4. Not harvested.

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Evaluate a dry formulation of glyphosate and its adjuvant system for crop response and weed control.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN			grasses, annual
Pest 2 Type: W	**Code:** CYPES	Cyperus esculentus L.		nutsedge, yellow
Pest 3 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus		velvetleaf
Pest 4 Type: W	**Code:** XANST	Xanthium strumarium L.		cocklebur, common
Pest 5 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.		ragweed, common
Pest 6 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.		morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 26 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. TRAZW	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** WINFIELD
CEC: 7 **Fert. Level:** P1 93 LB/A, K 429 LB/A

Application Description	A
Application Date:	08-03-09
Time of Day:	9:45
Application Method:	Spray
Application Timing:	8"W
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	75 F
% Relative Humidity:	92
Wind Velocity, Unit:	5 MPH
Wind Direction:	S
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	35
	08-03-09
Crop stage at application:	V4-V5
Height Min, Max (inch):	8 10

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	08-03-09
Weed Code:	GGGAN
Stage Majority (leaves):	6
Stage Min, Max:	3 8
Height Majority:	8 IN
Height Min, Max:	4 10
Density, Unit:	0.1 FT2
Weed Code:	CYPES
Stage Majority (leaves):	6
Stage Min, Max:	3 8
Height Majority:	8 IN
Height Min, Max:	6 14
Density, Unit:	0.8 FT2
Weed Code:	ABUTH
Stage Majority (leaves):	2
Stage Min, Max:	1 3
Height Majority:	3 IN
Height Min, Max:	1 4
Density, Unit:	3 FT2
Weed Code:	XANST
Stage Majority (leaves):	5
Stage Min, Max:	2 8
Height Majority:	7 IN
Height Min, Max:	3 10
Density, Unit:	0.3 FT2
Weed Code:	AMBEL
Stage Majority (leaves):	6
Stage Min, Max:	4 8
Height Majority:	6 IN
Height Min, Max:	2 8
Density, Unit:	0.5 FT2
Weed Code:	IPOHE
Stage Majority (leaves):	7
Stage Min, Max:	4 13
Height Majority:	6 IN
Height Min, Max:	4 9
Density, Unit:	0.01 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 08-17-09 Injury Percent 14 DA-A	GLXMA 08-31-09 Injury Percent 28 DA-A	GGGAN 08-17-09 Control Percent 14 DA-A	GGGAN 08-31-09 Control Percent 28 DA-A	CYPES 08-17-09 Control Percent 14 DA-A	CYPES 08-31-09 Control Percent 28 DA-A
1	DEIONIZED WATER									0 a	0 a	99 ab	99 a	35 abc	68 ab
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8"W	A						
1	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
2	DEIONIZED WATER									0 a	0 a	99 ab	99 a	38 a	70 a
2	GLY	95	SG	0.8	lb ai/a	13.5	oz/a	8"W	A						
2	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
3	DEIONIZED WATER									0 a	0 a	99 ab	99 ab	38 a	60 bcd
3	ROUNDUP POWERMAX	4.5	SL	0.49	lb ae/a	14	fl oz/a	8"W	A						
3	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
3	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
4	DEIONIZED WATER									0 a	0 a	99 a	99 a	38 a	70 a
4	GLY	95	SG	0.53	lb ai/a	8.9	oz/a	8"W	A						
4	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
5	DEIONIZED WATER									0 a	0 a	99 ab	99 ab	27 de	55 cde
5	ROUNDUP POWERMAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	8"W	A						
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
5	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
6	DEIONIZED WATER									0 a	0 a	98 bc	98 bc	30 cde	63 abc
6	BUCCANEER PLUS	3	SL	0.28	lb ae/a	12	fl oz/a	8"W	A						
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
6	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
7	DEIONIZED WATER									0 a	0 a	98 abc	98 ab	25 e	60 bcd
7	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
7	N GO	100	SL	0.5	% v/v	0.5	% v/v	8"W	A						
8	DEIONIZED WATER									0 a	0 a	99 a	99 a	32 bcd	62 a-d
8	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
8	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
9	HARD WATER (1000 PPM)									0 a	0 a	99 a	99 a	37 ab	65 ab
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8"W	A						
9	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
10	HARD WATER (1000 PPM)									0 a	0 a	99 a	99 a	37 ab	67 ab
10	GLY	95	SG	0.8	lb ai/a	13.5	oz/a	8"W	A						
10	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
11	HARD WATER (1000 PPM)									0 a	0 a	99 a	99 a	33 abc	62 a-d
11	ROUNDUP POWERMAX	4.5	SL	0.49	lb ae/a	14	fl oz/a	8"W	A						
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
11	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
12	HARD WATER (1000 PPM)									0 a	0 a	99 ab	98 ab	32 bcd	60 bcd
12	GLY	95	SG	0.53	lb ai/a	8.9	oz/a	8"W	A						
12	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
13	HARD WATER (1000 PPM)									0 a	0 a	99 a	99 a	27 de	53 de
13	ROUNDUP POWERMAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	8"W	A						
13	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
13	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
14	HARD WATER (1000 PPM)									0 a	0 a	98 c	97 c	27 de	55 cde
14	BUCCANEER PLUS	3	SL	0.28	lb ae/a	12	fl oz/a	8"W	A						
14	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
14	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
15	HARD WATER (1000 PPM)									0 a	0 a	99 ab	99 ab	25 e	50 e
15	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
15	N GO	100	SL	0.5	% v/v	0.5	% v/v	8"W	A						
16	HARD WATER (1000 PPM)									0 a	0 a	99 ab	99 ab	32 bcd	67 ab
16	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
16	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
17	NONTREATED									0 a	0 a	0 d	0 d	0 f	0 f

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code												GGGAN	GGGAN	CYPES	CYPES
Crop Code										GLXMA	GLXMA				
Rating Date										08-17-09	08-31-09	08-17-09	08-31-09	08-17-09	08-31-09
Rating Data Type										Injury	Injury	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
LSD (P=.05)										0.0	0.0	0.8	0.8	6.2	8.8
Replicate F										0.000	0.000	2.235	1.505	3.598	4.236
Replicate Prob(F)										1.0000	1.0000	0.1235	0.2373	0.0389	0.0233
Treatment F										0.000	0.000	7833.498	6942.406	17.703	27.753
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ABUTH 08-17-09 Control Percent 14 DA-A	ABUTH 08-31-09 Control Percent 28 DA-A	XANST 08-17-09 Control Percent 14 DA-A	XANST 08-31-09 Control Percent 28 DA-A	AMBEL 08-17-09 Control Percent 14 DA-A	AMBEL 08-31-09 Control Percent 28 DA-A
1	DEIONIZED WATER									78 ab	72 de	99 a	99 a	98 ab	99 a
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8"W	A						
1	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
2	DEIONIZED WATER									82 a	87 ab	99 a	99 a	99 a	99 a
2	GLY	95	SG	0.8	lb ai/a	13.5	oz/a	8"W	A						
2	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
3	DEIONIZED WATER									66 de	63 f	99 a	99 a	96 ab	98 ab
3	ROUNDUP POWERMAX	4.5	SL	0.49	lb ae/a	14	fl oz/a	8"W	A						
3	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
3	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
4	DEIONIZED WATER									75 bc	78 cd	99 a	99 a	99 a	99 a
4	GLY	95	SG	0.53	lb ai/a	8.9	oz/a	8"W	A						
4	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
5	DEIONIZED WATER									44 hi	45 g	99 a	99 a	81 de	89 de
5	ROUNDUP POWERMAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	8"W	A						
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
5	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
6	DEIONIZED WATER									48 h	47 g	99 a	99 a	91 bc	96 abc
6	BUCCANEER PLUS	3	SL	0.28	lb ae/a	12	fl oz/a	8"W	A						
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
6	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
7	DEIONIZED WATER									43 hi	43 g	98 b	98 b	83 de	90 de
7	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
7	N GO	100	SL	0.5	% v/v	0.5	% v/v	8"W	A						
8	DEIONIZED WATER									58 fg	62 f	99 a	99 a	85 cd	93 bcd
8	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
8	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
9	HARD WATER (1000 PPM)									72 cd	78 cd	99 a	99 a	96 ab	98 ab
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8"W	A						
9	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
10	HARD WATER (1000 PPM)									83 a	94 a	99 a	99 a	99 a	99 a
10	GLY	95	SG	0.8	lb ai/a	13.5	oz/a	8"W	A						
10	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
11	HARD WATER (1000 PPM)									64 ef	61 f	99 a	99 a	98 ab	99 a
11	ROUNDUP POWERMAX	4.5	SL	0.49	lb ae/a	14	fl oz/a	8"W	A						
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
11	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
12	HARD WATER (1000 PPM)									74 bc	85 bc	99 a	99 a	98 ab	98 a
12	GLY	95	SG	0.53	lb ai/a	8.9	oz/a	8"W	A						
12	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
13	HARD WATER (1000 PPM)									42 i	43 g	99 a	99 a	80 de	92 cd
13	ROUNDUP POWERMAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	8"W	A						
13	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
13	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
14	HARD WATER (1000 PPM)									40 i	48 g	96 c	98 c	70 f	87 e
14	BUCCANEER PLUS	3	SL	0.28	lb ae/a	12	fl oz/a	8"W	A						
14	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A						
14	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A						
15	HARD WATER (1000 PPM)									45 hi	45 g	98 b	98 bc	77 ef	87 e
15	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
15	N GO	100	SL	0.5	% v/v	0.5	% v/v	8"W	A						
16	HARD WATER (1000 PPM)									57 g	66 ef	99 a	99 a	94 ab	96 ab
16	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A						
16	N GO	100	SL	1	% v/v	1	% v/v	8"W	A						
17	NONTREATED									0 j	0 h	0 d	0 d	0 g	0 f

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										ABUTH	ABUTH	XANST	XANST	AMBEL	AMBEL
Crop Code															
Rating Date										08-17-09	08-31-09	08-17-09	08-31-09	08-17-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
LSD (P=.05)										6.0	7.5	1.2	0.7	7.4	4.4
Replicate F										0.172	2.919	0.653	1.134	5.900	2.930
Replicate Prob(F)										0.8429	0.0685	0.5272	0.3344	0.0066	0.0679
Treatment F										103.285	76.104	3579.633	11074.096	86.234	231.414
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
	Pest Code									IPOHE		IPOHE	
	Crop Code												
	Rating Date									08-17-09		08-31-09	
	Rating Data Type									Control		Control	
	Rating Unit									Percent		Percent	
	Rating Timing												
	Trt-Eval Interval									14 DA-A		28 DA-A	
1	DEIONIZED WATER									55	bcd	65	a-d
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8"W	A				
1	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
2	DEIONIZED WATER									68	a	74	a
2	GLY	95	SG	0.8	lb ai/a	13.5	oz/a	8"W	A				
2	N GO	100	SL	1	% v/v	1	% v/v	8"W	A				
3	DEIONIZED WATER									50	c-g	60	c-g
3	ROUNDUP POWERMAX	4.5	SL	0.49	lb ae/a	14	fl oz/a	8"W	A				
3	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A				
3	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
4	DEIONIZED WATER									60	b	66	abc
4	GLY	95	SG	0.53	lb ai/a	8.9	oz/a	8"W	A				
4	N GO	100	SL	1	% v/v	1	% v/v	8"W	A				
5	DEIONIZED WATER									43	gh	50	h
5	ROUNDUP POWERMAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	8"W	A				
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A				
5	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
6	DEIONIZED WATER									45	fgh	53	fgh
6	BUCCANEER PLUS	3	SL	0.28	lb ae/a	12	fl oz/a	8"W	A				
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A				
6	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
7	DEIONIZED WATER									47	e-h	55	e-h
7	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A				
7	N GO	100	SL	0.5	% v/v	0.5	% v/v	8"W	A				
8	DEIONIZED WATER									48	d-g	56	d-h
8	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A				
8	N GO	100	SL	1	% v/v	1	% v/v	8"W	A				
9	HARD WATER (1000 PPM)									57	bc	68	abc
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8"W	A				
9	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
10	HARD WATER (1000 PPM)									57	bc	72	ab
10	GLY	95	SG	0.8	lb ai/a	13.5	oz/a	8"W	A				
10	N GO	100	SL	1	% v/v	1	% v/v	8"W	A				
11	HARD WATER (1000 PPM)									52	c-f	62	c-f
11	ROUNDUP POWERMAX	4.5	SL	0.49	lb ae/a	14	fl oz/a	8"W	A				
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A				
11	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
12	HARD WATER (1000 PPM)									53	b-e	63	b-e
12	GLY	95	SG	0.53	lb ai/a	8.9	oz/a	8"W	A				
12	N GO	100	SL	1	% v/v	1	% v/v	8"W	A				
13	HARD WATER (1000 PPM)									48	d-g	50	h
13	ROUNDUP POWERMAX	4.5	SL	0.28	lb ae/a	8	fl oz/a	8"W	A				
13	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A				
13	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
14	HARD WATER (1000 PPM)									40	h	52	gh
14	BUCCANEER PLUS	3	SL	0.28	lb ae/a	12	fl oz/a	8"W	A				
14	NIS	100	SL	0.25	% v/v	0.25	% v/v	8"W	A				
14	LIQUID AMS	100	SL	1	% v/v	1	% v/v	8"W	A				
15	HARD WATER (1000 PPM)									40	h	55	e-h
15	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A				
15	N GO	100	SL	0.5	% v/v	0.5	% v/v	8"W	A				
16	HARD WATER (1000 PPM)									47	e-h	65	a-d
16	GLY	95	SG	0.3	lb ai/a	5.05	oz/a	8"W	A				
16	N GO	100	SL	1	% v/v	1	% v/v	8"W	A				
17	NONTREATED									0	i	0	i

Gly-N-Go Study.

Trial ID: 09-5B Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Code										IPOHE	IPOHE
Crop Code											
Rating Date										08-17-09	08-31-09
Rating Data Type										Control	Control
Rating Unit										Percent	Percent
Rating Timing											
Trt-Eval Interval										14 DA-A	28 DA-A
LSD (P=.05)										6.9	9.6
Replicate F										0.339	0.078
Replicate Prob(F)										0.7149	0.9251
Treatment F										35.325	24.146
Treatment Prob(F)										0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: MEY.
2. Ratings: CI/WC at 14 + 28 DAT.
3. Mixing instructions: Use DI water and hard water, see treatment list
4. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
5. Not harvested.

Liberty Link versus Roundup Ready Soybean Yield.

Trial ID: 09-T4-S240 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-27-09

Objectives: Determine the yield of Liberty Link and Roundup Ready soybean within the associated herbicide programs used for each trait.

Crop 1: GLXMA Soybean **Variety:** See treatment list
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 30 FT **Site Type:** FIELD
Plot Length, Unit: 54 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Non-Randomized

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1: 118 LB/A, K: 466 LB/A

Application Description

	A	B	C
Application Date:	06-27-09	07-22-09	08-12-09
Time of Day:	5:00	8:00	9:00
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	2-4"W	2-4"RG
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	NVH	NVH	DKP
Air Temperature, Unit:	94 F	78 F	70 F
% Relative Humidity:	58	80	92
Wind Velocity, Unit:	1 MPH	5 MPH	1 MPH
Wind Direction:	W	N	S
Dew Presence (Y/N):	N	N	Y
Soil Moisture:	NORMAL	NORMAL	NORMAL
% Cloud Cover:	0	100	5
	06-27-09	07-22-09	08-12-09
Crop stage at application:	NA	V2-V3	R2
Height Min, Max (inch):		2 4	26 32

Pest Stage At Each Application

Application Date:	06-27-09	07-22-09	08-12-09
Weed Code:	NA	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	10 FT	10 FT	10 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Liberty Link versus Roundup Ready Soybean Yield.

Trial ID: 09-T4-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Code											
Crop Code										GLXMA	GLXMA
Rating Date										11-03-09	11-03-09
Rating Data Type										Moisture	Yield
Rating Unit										Percent	bu/A
Rating Timing											
Trt-Eval Interval											
1	SO80122 LL									13.6 a	42 c
1	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W	B		
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"RG	C		
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
2	SO70146 LL									12.5 bc	50 a
2	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W	B		
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"RG	C		
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
3	SO7014 LL									12.8 b	44 b
3	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W	B		
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"RG	C		
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
4	AG4005 RR									12.1 c	50 a
4	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B		
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"RG	C		
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
LSD (P=.05)										0.49	1.6
Treatment F										15.159	51.186
Treatment Prob(F)										0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (MRB).
2. Ratings: None.
3. Yield, (harvest rows 4+5 and rows 8+9).
4. Mixing and spraying instructions:
   Mix size should fit a 2.5 gallon can or (3) 3 liter bottles.
   If using (3) 3 liter bottles must adjust mix amounts for 0.02 gallons overage per bottle.
   Spray the center 8 rows of the 12 row plots. Make (2) passes with a 10 ft boom.
5. Harvested 11-3-09, (4) 30 inch rows by 51 ft.

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 06-03-09

Objectives: Factorial analysis of irrigation (2), seeding rate (2) and treatments (6) for soybean health and yield.

Crop 1: GLXMA Soybean **Variety:** P94Y70 **Description:** RR
Planting Method: SEEDED **Planting Date:** 06-03-09
Rate, Unit: 000 See trt **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 15 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: See treatment list.

Texture: SILT LOAM

Application Description	A	B	C	D
Application Date:	08-04-09	08-10-09	08-17-09	09-07-09
Time of Day:	14:00	14:00	10:00	9:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	R2	R3	R5	R6
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NRJ	DKT	DKT	DKT
Air Temperature, Unit:	89 F	91 F	82 F	83 F
% Relative Humidity:	55	58	64	62
Wind Velocity, Unit:	3 MPH	5 MPH	5 MPH	1 MPH
Wind Direction:	E	SW	SSW	W
Dew Presence (Y/N):	N	N	N	Y
Soil Temperature, Unit:	80 F	80 F	78 F	78 F
Soil Moisture:	NORMAL	NORMAL	NORMAL	ABONOR
% Cloud Cover:	95	60	40	70
	08-04-09	08-10-09	08-17-09	09-07-09
Crop stage at application:	R2	R3	R5	R6
Height Min, Max (inch):	32 38	35 42	40 47	36 48

Pest Stage At Each Application				
Application Date:	08-04-09	08-10-09	08-17-09	09-07-09
Weed Code:	NA	NA	NA	NA

Application Equipment				
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-04-09 Moisture Percent	GLXMA 11-04-09 Protein Percent	GLXMA 11-04-09 Oil Percent	GLXMA 11-04-09 Fiber Percent	GLXMA 11-04-09 Seed wt. g/200	GLXMA 11-04-09 Yield bu/A	GLXMA 09-25-09 LAI R6.5 18 DA-D	GLXMA 09-25-09 SEL R6.5 18 DA-D
1	125,000									12.1 b	34.9 d-h	19.2 f-i	4.7 bc	33.4 h	63 c-g	3.98	0.43
1	IRRIGATED																
1	NONTREATED																
2	250,000									21.9 a	35.1 b-f	19.1 hij	4.7 bc	34.2 e-h	59 fg	27.02	26.04
2	IRRIGATED																
2	NONTREATED																
3	250,000									12.2 b	34.9 d-h	19.4 b-f	4.7 c	34.3 d-h	57 g	2.15	0.40
3	IRRIGATED																
3	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
3	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
3	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
3	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
4	125,000									12.1 b	34.3 i	19.6 a	4.7 ab	33.6 gh	64 b-g	2.75	0.13
4	IRRIGATED																
4	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
4	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
4	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
4	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
5	125,000									11.9 b	35.4 a-d	19.1 g-j	4.7 bc	35.4 a-f	60 efg	3.45	0.32
5	IRRIGATED																
5	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
5	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
5	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
6	250,000									12.3 b	35.6 a	18.9 j	4.7 c	35.8 a-d	63 c-g	4.26	0.93
6	IRRIGATED																
6	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
6	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
6	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
7	125,000									11.9 b	34.3 i	19.6 ab	4.7 bc	33.6 gh	59 efg	2.79	0.23
7	IRRIGATED																
7	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
7	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
7	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
7	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
7	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
7	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
7	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
7	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								
8	250,000									12.2 b	35.0 c-h	19.5 a-d	4.7 bc	34.4 c-h	64 a-g	3.74	0.20
8	IRRIGATED																
8	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
8	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
8	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
8	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
8	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
8	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
8	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
8	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-04-09 Moisture Percent	GLXMA 11-04-09 Protein Percent	GLXMA 11-04-09 Oil Percent	GLXMA 11-04-09 Fiber Percent	GLXMA 11-04-09 Seed wt. g/200	GLXMA 11-04-09 Yield bu/A	GLXMA 09-25-09 LAI R6.5 18 DA-D	GLXMA 09-25-09 SEL R6.5 18 DA-D
9	250,000 IRRIGATED									12.2 b	35.3 a-e	19.1 g-j	4.7 c	34.3 d-h	66 a-f	4.16	0.66
9	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
9	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
9	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
9	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
9	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
9	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
9	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
9	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
9	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
10	125,000 IRRIGATED									12.1 b	35.3 a-e	19.1 ij	4.7 bc	35.6 a-e	71 ab	4.95	0.15
10	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
10	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
10	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
10	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
10	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
10	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
10	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
10	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
10	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
11	125,000 IRRIGATED									12.1 b	34.7 f-i	19.3 c-g	4.7 ab	35.9 abc	68 a-d	4.36	0.12
11	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
11	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
11	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
11	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
11	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
11	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
11	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
11	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
11	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
11	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								
11	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
11	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
11	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
11	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
12	250,000 IRRIGATED									12.2 b	34.8 e-h	19.5 a-e	4.7 bc	36.3 ab	62 d-g	4.00	0.24
12	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
12	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
12	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
12	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
12	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
12	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
12	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
12	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
12	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
12	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
12	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								
12	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
12	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
12	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
12	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
12	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
12	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
13	250,000 NOT IRRIGATED NONTREATED									11.5 b	35.4 a-d	19.1 ghi	4.7 bc	34.3 d-h	67 a-e	3.96	0.07
14	125,000 NOT IRRIGATED NONTREATED									11.6 b	35.1 b-f	19.1 g-j	4.7 ab	33.1 h	68 a-d	4.25	0.11

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-04-09 Moisture Percent	GLXMA 11-04-09 Protein Percent	GLXMA 11-04-09 Oil Percent	GLXMA 11-04-09 Fiber Percent	GLXMA 11-04-09 Seed wt. g/200	GLXMA 11-04-09 Yield bu/A	GLXMA 09-25-09 LAI R6.5 18 DA-D	GLXMA 09-25-09 SEL R6.5 18 DA-D
15	125,000									11.6 b	34.6 hi	19.6 abc	4.7 ab	33.5 h	61 d-g	2.65	0.05
15	NOT IRRIGATED																
15	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
15	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
15	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
15	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
16	250,000									11.8 b	34.7 f-i	19.6 a	4.7 bc	34.0 fgh	64 b-g	3.84	0.18
16	NOT IRRIGATED																
16	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
16	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
16	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
16	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
17	250,000									11.9 b	35.5 ab	19.0 ij	4.7 bc	35.6 a-f	65 a-f	3.74	0.12
17	NOT IRRIGATED																
17	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
17	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
17	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
17	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
17	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
17	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
18	125,000									11.7 b	35.5 ab	19.1 ij	4.7 bc	35.5 a-f	66 a-f	3.82	0.68
18	NOT IRRIGATED																
18	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
18	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
18	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
18	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
18	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
18	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
19	250,000									11.8 b	34.9 d-h	19.3 d-h	4.7 bc	34.0 fgh	63 c-g	4.01	0.26
19	NOT IRRIGATED																
19	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
19	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
19	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
19	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
19	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
19	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
19	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
19	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								
20	125,000									11.7 b	34.8 f-i	19.4 a-f	4.8 a	35.1 b-g	57 g	4.00	0.17
20	NOT IRRIGATED																
20	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
20	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
20	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
20	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
20	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
20	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
20	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
20	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								
21	125,000									11.9 b	35.1 b-g	19.0 ij	4.7 ab	35.7 a-e	72 a	4.05	0.25
21	NOT IRRIGATED																
21	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
21	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
21	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
21	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
21	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
21	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
21	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
21	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
21	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-04-09 Moisture Percent	GLXMA 11-04-09 Protein Percent	GLXMA 11-04-09 Oil Percent	GLXMA 11-04-09 Fiber Percent	GLXMA 11-04-09 Seed wt. g/200	GLXMA 11-04-09 Yield bu/A	GLXMA 09-25-09 LAI R6.5 18 DA-D	GLXMA 09-25-09 SEL R6.5 18 DA-D
22	250,000									11.9 b	35.4 abc	19.1 g-j	4.7 bc	36.9 a	66 a-f	3.74	0.16
22	NOT IRRIGATED																
22	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
22	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
22	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
22	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
22	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
22	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
22	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
22	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
22	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
23	250,000									12.1 b	34.7 ghi	19.5 a-d	4.7 bc	36.0 ab	70 abc	4.24	0.32
23	NOT IRRIGATED																
23	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
23	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
23	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
23	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
23	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
23	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
23	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
23	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
23	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
23	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
23	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								
23	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
23	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
23	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
23	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
23	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
23	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
24	125,000									12.0 b	35.1 b-g	19.2 e-i	4.7 ab	35.9 a-d	63 b-g	3.70	0.14
24	NOT IRRIGATED																
24	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A								
24	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A								
24	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A								
24	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A								
24	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B								
24	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B								
24	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B								
24	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C								
24	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C								
24	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C								
24	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C								
24	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C								
24	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C								
24	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C								
24	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D								
24	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D								
24	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D								
LSD (P=.05)										5.79	0.47	0.24	0.05	1.59	7.8	.	.
Replicate F										0.961	2.444	0.145	1.752	2.667	0.342		
Replicate Prob(F)										0.4164	0.0713	0.9326	0.1644	0.0545	0.7952		
Treatment F										1.002	4.833	7.056	1.138	3.666	2.193		
Treatment Prob(F)										0.4754	0.0001	0.0001	0.3303	0.0001	0.0065		

Means followed by same letter do not significantly differ (P=.05, LSD)

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 09-30-09 LAI	GLXMA 09-30-09 SEL	GLXMA 10-02-09 Greenness	GLXMA 10-14-09 Height	GLXMA 10-14-09 Plants	GLXMA 10-15-09 Leaf Retain	GLXMA 10-15-09 Harvestable
	Pest Code															
	Crop Code															
	Rating Date									09-30-09	09-30-09	10-02-09	10-14-09	10-14-09	10-15-09	10-15-09
	Rating Data Type									LAI	SEL	Greenness	Height	Plants	Leaf Retain	Harvestable
	Rating Unit											1-9	cm	000/A	1-9	1-9
	Rating Timing									R7	R7	R7.5				
	Trt-Eval Interval									23 DA-D	23 DA-D	25 DA-D				
1	125,000									1.96 b	0.29 b	2.3 b	110 a-e	98.3 c-g	1.6 b	8.1 b
1	IRRIGATED															
1	NONTREATED															
2	250,000									8.73 a	7.25 a	9.1 a	109 a-f	206.3 a	10.8 a	14.9 a
2	IRRIGATED															
2	NONTREATED															
3	250,000									2.79 b	0.20 b	2.4 b	112 a	156.7 b	2.4 b	5.9 b
3	IRRIGATED															
3	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
3	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
3	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
3	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
4	125,000									2.72 b	0.33 b	1.6 b	107 b-h	100.9 c-g	1.8 b	7.3 b
4	IRRIGATED															
4	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
4	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
4	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
4	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
5	125,000									3.75 b	0.12 b	4.3 b	107 a-h	86.3 efg	4.0 b	6.8 b
5	IRRIGATED															
5	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
5	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
5	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
5	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
6	250,000									3.24 b	0.29 b	3.3 b	111 ab	124.8 b-e	4.4 b	6.4 b
6	IRRIGATED															
6	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
6	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
6	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
6	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
7	125,000									2.11 b	0.17 b	2.6 b	110 abc	85.0 efg	2.1 b	7.3 b
7	IRRIGATED															
7	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
7	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
7	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
7	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
7	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
7	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
7	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
7	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							
8	250,000									2.78 b	0.21 b	2.8 b	110 a-d	128.8 bcd	2.5 b	7.0 b
8	IRRIGATED															
8	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
8	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
8	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
8	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
8	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
8	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
8	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
8	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 09-30-09 LAI	GLXMA 09-30-09 SEL	GLXMA 10-02-09 Greenness 1-9	GLXMA 10-14-09 Height cm	GLXMA 10-14-09 Plants 000/A	GLXMA 10-15-09 Leaf Retain 1-9	GLXMA 10-15-09 Harvestable 1-9
	Pest Code															
	Crop Code															
	Rating Date									09-30-09	09-30-09	10-02-09	10-14-09	10-14-09	10-15-09	10-15-09
	Rating Data Type									LAI	SEL	Greenness	Height	Plants	Leaf Retain	Harvestable
	Rating Unit											1-9	cm	000/A	1-9	1-9
	Rating Timing									R7	R7	R7.5				
	Trt-Eval Interval									23 DA-D	23 DA-D	25 DA-D				
9	250,000									3.70 b	0.33 b	4.9 ab	112 a	123.5 b-f	4.5 b	6.8 b
9	IRRIGATED															
9	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
9	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
9	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
9	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
9	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
9	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
9	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
9	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
9	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
10	125,000									3.58 b	0.26 b	3.8 b	110 a-e	83.7 fg	4.3 b	6.8 b
10	IRRIGATED															
10	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
10	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
10	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
10	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
10	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
10	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
10	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
10	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
10	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
11	125,000									3.34 b	0.26 b	3.8 b	112 ab	85.0 efg	3.9 b	6.1 b
11	IRRIGATED															
11	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
11	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
11	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
11	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
11	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
11	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
11	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
11	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
11	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
11	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							
11	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
11	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
11	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
11	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
11	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
12	250,000									2.64 b	0.17 b	4.0 b	111 ab	144.8 b	4.4 b	5.9 b
12	IRRIGATED															
12	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
12	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
12	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
12	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
12	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
12	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
12	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
12	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
12	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
12	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
12	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							
12	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
12	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
12	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
12	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
12	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
12	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
13	250,000									2.66 b	0.13 b	3.6 b	105 e-h	154.1 b	2.6 b	7.5 b
13	NOT IRRIGATED															
13	NONTREATED															
14	125,000									2.80 b	0.21 b	4.0 b	104 gh	86.3 efg	2.5 b	8.3 b
14	NOT IRRIGATED															
14	NONTREATED															

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 09-30-09 LAI R7 23 DA-D	GLXMA 09-30-09 SEL R7 23 DA-D	GLXMA 10-02-09 Greenness 1-9 R7.5 25 DA-D	GLXMA 10-14-09 Height cm	GLXMA 10-14-09 Plants 000/A	GLXMA 10-15-09 Leaf Retain 1-9	GLXMA 10-15-09 Harvestable 1-9
15	125,000									3.18 b	0.46 b	3.3 b	102 h	77.0 g	2.4 b	7.9 b
15	NOT IRRIGATED															
15	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
15	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
15	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
15	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
16	250,000									1.98 b	0.18 b	2.9 b	105 d-h	128.8 bcd	2.5 b	7.0 b
16	NOT IRRIGATED															
16	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
16	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
16	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
16	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
17	250,000									3.36 b	0.24 b	3.9 b	106 c-h	123.5 b-f	3.8 b	6.8 b
17	NOT IRRIGATED															
17	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
17	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
17	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
17	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
17	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
17	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
18	125,000									3.67 b	0.26 b	4.9 ab	104 fgh	99.6 c-g	4.4 b	6.4 b
18	NOT IRRIGATED															
18	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
18	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
18	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
18	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
18	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
18	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
19	250,000									2.77 b	0.27 b	4.5 b	108 a-g	135.5 bc	3.9 b	6.1 b
19	NOT IRRIGATED															
19	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
19	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
19	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
19	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
19	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
19	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
19	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
19	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							
20	125,000									3.08 b	0.26 b	4.8 b	104 gh	94.3 d-g	2.9 b	7.3 b
20	NOT IRRIGATED															
20	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
20	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
20	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
20	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
20	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
20	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
20	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
20	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							
21	125,000									3.97 b	0.33 b	4.8 b	103 h	86.3 efg	5.0 b	6.4 b
21	NOT IRRIGATED															
21	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
21	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
21	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
21	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
21	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
21	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
21	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
21	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
21	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 09-30-09 LAI	GLXMA 09-30-09 SEL	GLXMA 10-02-09 Greenness	GLXMA 10-14-09 Height	GLXMA 10-14-09 Plants	GLXMA 10-15-09 Leaf Retain	GLXMA 10-15-09 Harvestable
	Pest Code															
	Crop Code															
	Rating Date									09-30-09	09-30-09	10-02-09	10-14-09	10-14-09	10-15-09	10-15-09
	Rating Data Type									LAI	SEL	Greenness	Height	Plants	Leaf Retain	Harvestable
	Rating Unit											1-9	cm	000/A	1-9	1-9
	Rating Timing									R7	R7	R7.5				
	Trt-Eval Interval									23 DA-D	23 DA-D	25 DA-D				
22	250,000									3.53 b	0.27 b	4.5 b	108 a-g	146.1 b	4.4 b	6.4 b
22	NOT IRRIGATED															
22	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
22	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
22	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
22	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
22	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
22	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
22	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
22	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
22	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
23	250,000									3.17 b	0.38 b	3.9 b	106 c-h	148.7 b	3.8 b	6.1 b
23	NOT IRRIGATED															
23	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
23	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
23	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
23	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
23	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
23	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
23	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
23	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
23	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
23	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
23	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							
23	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
23	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
23	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
23	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
23	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
23	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
24	125,000									3.82 b	0.30 b	4.0 b	106 c-h	77.0 g	4.4 b	6.3 b
24	NOT IRRIGATED															
24	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R2	A							
24	UREA	46	GR	100	lb/a	46	lb ai/a	R2	A							
24	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R2	A							
24	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R2	A							
24	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R3	B							
24	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R3	B							
24	NIS	100	SL	0.25	% v/v	0.25	% v/v	R3	B							
24	NITAMIN	3	SL	2.5	gal/a	7.5	lb ai/a	R5	C							
24	UREA	46	GR	100	lb/a	46	lb ai/a	R5	C							
24	MAX-IN FOR BEANS	10	L	2	qt/a	5	lb ai/a	R5	C							
24	RADIATE	0.0868	L	2	fl oz/a	0.00136	lb ai/a	R5	C							
24	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R5	C							
24	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R5	C							
24	NIS	100	SL	0.25	% v/v	0.25	% v/v	R5	C							
24	HEADLINE	2.09	L	6	fl oz/a	0.098	lb ai/a	R6	D							
24	WARRIOR	1	L	3.2	fl oz/a	0.025	lb ai/a	R6	D							
24	NIS	100	SL	0.25	% v/v	0.25	% v/v	R6	D							
	LSD (P=.05)									4.189	4.102	4.26	5.1	40.64	5.34	4.91
	Replicate F									0.686	0.992	1.036	3.988	1.815	0.677	1.025
	Replicate Prob(F)									0.5636	0.4018	0.3823	0.0111	0.1526	0.5690	0.3871
	Treatment F									0.757	0.973	0.895	3.063	5.241	0.916	1.048
	Treatment Prob(F)									0.7693	0.5093	0.6035	0.0002	0.0001	0.5786	0.4225

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: ISA/UIUC-Davis/WIU.
2. Ratings:
3. Yield.
4. Manage weeds as needed.

High Yield Soybean -ISA.

Trial ID: 09-BullTest Location: Carbondale, IL

Project ID:

Sponsor Contact:

Blanket POST application of Sequence (3 pt/A) + AMS (5%) was applied at V2.
Urea applications were made by hand as a separate application
on the same day as the liquid application, per application timing.

5. LAI - Leaf Area Index, SEL - Standard Error of LAI.
   LAI taken with Li-Cor LAI-2000 Plant Canopy Analyzer.
   R6.5, R7, and R7.5 = Reproductive stage of soybean 6.5, 7, and 7.5, respectively.
   Greenness = Soybean leaf greenness, 1 = brown and all leaves dropped, 5 = yellow, 9 = deep green.
   Height = Soybean plant height to the base of the highest pod, measured 5 random plants per plot.
   Plants = Soybean plants that survived to produce pods. 000/A = Thousands per acre.
   Leaf Retain = Lack of leaf drop, 1 = all leaves dropped, 9 = all leaves retained.
   Harvestable = Harvesting difficulty due to lodging, 1 = plants on soil surface, 5 = plants within 12 inches of soil surface, 9 = no lodging.
6. Harvested 11-4-09, (4) 15 inch rows by 27 ft.

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-27-09

Objectives: Determine if crop management factors such as weed removal timing and disease/insect management influence the optimal seeding rate.

Crop 1: GLXMA Soybean **Variety:** AG 3905 **Description:** RR
Planting Method: See treatment list **Planting Date:** 06-27-09
Depth, Unit: 1.5 IN
Row Spacing, Unit: 15 IN

Pest 1 Type: W **Code:** GGGAN grasses, annual
Pest 2 Type: W **Code:** IPOSS morningglory, species
Pest 3 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 32 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. NONE	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1: 118 LB/A, K: 466 LB/A

Application Description

	A	B	C	D	E	F	G	H
Application Date:	06-27-09	07-21-09	08-03-09	08-14-09	08-19-09	07-27-09	08-11-09	08-24-09
Time of Day:	18:00	10:00	8:45	10:00	10:30	17:00	12:45	10:00
Application Method:	Spray	Spray	Spray	Spray	Spray	Spray	Spray	Spray
Application Timing:	PRE	4-6"W	8-12"W	>18"W	R2-3	IF-NEED		
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	DKP	NVH	DKP	DKP	DKP	NVH	DKP	NVH
Air Temperature, Unit:	94 F	76 F	70 F	82 F	82 F	84 F	78 F	76 F
% Relative Humidity:	58	88	92	70	92	78	92	76
Wind Velocity, Unit:	5 MPH	6 MPH	7 MPH	1 MPH	8 MPH	3 MPH	3 MPH	3 MPH
Wind Direction:	SW	SE	S	W	SE	S	NW	SE
Dew Presence (Y/N):	N	N	Y	Y	N	N	N	N
Soil Moisture:	NORMAL	NORMAL	ABONOR	NORMAL	ABONOR	NORMAL	NORMAL	NORMAL
% Cloud Cover:	20	80	60	0	85	10	75	5
	06-27-09	07-21-09	08-03-09	08-14-09	08-19-09	07-27-09	08-11-09	08-24-09
Crop stage at application:	NA	V3	V6	R1	R2-R3	V5	R1	R4
Height Min, Max (inch):		4 6	9 12	13 18	13 22	8 10	12 16	34 40

Pest Stage At Each Application

	A	B	C	D	E	F	G	H
Application Date:	06-27-09	07-21-09	08-03-09	08-14-09	08-19-09	07-27-09	08-11-09	08-24-09
Weed Code:	GGGAN	GGGAN	GGGAN	GGGAN	GGGAN	GGGAN	GGGAN	GGGAN
Stage Majority (leaves):		4	5	8	NA	4	NA	NA
Stage Min, Max:		1 7	3 8	5 9		3 10		
Height Majority:		4 IN	8 IN	20 IN		3 IN		
Height Min, Max:		1 8	4 11	12 25		1.5 5		
Density, Unit:		1 FT2	1 FT2	1 FT2		0.01 FT2		
Weed Code:	IPOSS	IPOSS	IPOSS	IPOSS	IPOSS	IPOSS	IPOSS	IPOSS
Stage Majority (leaves):		4	6	16	NA	2	3	20
Stage Min, Max:		1 7	2 9	8 25		1 3	1 4	12 35
Height Majority:		4 IN	7 IN	16 IN		1.5 IN	3 IN	16 IN
Height Min, Max:		1 6	2 9	8 20		1 2	1 4	12 30
Density, Unit:		0.3 FT2	0.3 FT2	1 FT2		0.01 FT2	0.5 FT2	0.3 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):		4	8	20	NA	5	3	16
Stage Min, Max:		3 7	6 12	12 24		3 7	2 4	8 30
Height Majority:		4 IN	8 IN	24 IN		2 IN	3 IN	30 IN
Height Min, Max:		1 5	4 14	10 34		1.5 3	2 5	10 40
Density, Unit:		8 FT2	14 FT2	4 FT2		0.01 FT2	0.7 FT2	1 FT2

Application Equipment

	A	B	C	D	E	F	G	H
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code									
Pest Code														GGGAN		IPOHE		AMATA
Crop Code											GLXMA		GLXMA					
Rating Date											11-04-09		11-04-09	07-20-09		07-20-09		07-20-09
Rating Data Type											Moisture		Yield	Control		Control		Control
Rating Unit											Percent		bu/A	Percent		Percent		Percent
Rating Timing																		
Trt-Eval Interval														-1 DA-B		-1 DA-B		-1 DA-B
1	50,000 SEEDS/A									11.9	d-h	47	h-k	97	a	98	abc	98 ab
1	WEED FREE																	
1	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A									
1	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A									
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F									
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F									
1	HANDWEED																	
2	50,000 SEEDS/A									11.9	e-h	46	ijk					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B									
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B									
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G									
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G									
3	50,000 SEEDS/A									11.8	gh	37	mno					
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C									
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C									
4	50,000 SEEDS/A									11.8	h	34	op					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D									
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D									
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H									
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H									
5	50,000 SEEDS/A									12.3	a	27	q	0	c	0	d	0 c
5	NONTREATED																	
6	100,000 SEEDS/A									11.9	e-h	50	f-i	95	b	98	ab	97 b
6	WEED FREE																	
6	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A									
6	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A									
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F									
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F									
6	HANDWEED																	
7	100,000 SEEDS/A									11.9	e-h	46	ijk					
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B									
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B									
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G									
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G									
8	100,000 SEEDS/A									12.0	c-h	40	lmn					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C									
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C									
9	100,000 SEEDS/A									11.9	fgh	35	nop					
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D									
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D									
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H									
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H									
10	100,000 SEEDS/A									12.0	b-g	34	op	0	c	0	d	0 c
10	NONTREATED																	
11	150,000 SEEDS/A									12.0	c-h	53	d-g	97	ab	99	a	98 a
11	WEED FREE																	
11	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A									
11	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A									
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F									
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F									
11	HANDWEED																	
12	150,000 SEEDS/A									12.2	a-d	51	e-i					
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B									
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B									
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G									
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G									
13	150,000 SEEDS/A									11.9	d-h	52	e-h					
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C									
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C									

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-04-09 Moisture Percent	GLXMA 11-04-09 Yield bu/A	GGGAN 07-20-09 Control Percent	IPOHE 07-20-09 Control Percent	AMATA 07-20-09 Control Percent
	Pest Code											GGGAN	IPOHE	AMATA
	Crop Code									GLXMA	GLXMA			
	Rating Date									11-04-09	11-04-09	07-20-09	07-20-09	07-20-09
	Rating Data Type									Moisture	Yield	Control	Control	Control
	Rating Unit									Percent	bu/A	Percent	Percent	Percent
	Rating Timing													
	Trt-Eval Interval											-1 DA-B	-1 DA-B	-1 DA-B
14	150,000 SEEDS/A									12.0 c-h	48 ghi			
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D					
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H					
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H					
15	150,000 SEEDS/A									12.1 a-e	40 lmn	0 c	0 d	0 c
15	NONTREATED													
16	50,000 SEEDS/A									12.0 b-g	57 b-e	97 ab	98 abc	98 ab
16	WEED FREE													
16	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A					
16	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A					
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F					
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F					
16	HANDWEED													
16	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E					
16	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E					
16	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E					
17	50,000 SEEDS/A									12.1 a-f	54 c-f			
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B					
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B					
17	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E					
17	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E					
17	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E					
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G					
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G					
18	50,000 SEEDS/A									12.1 a-e	42 klm			
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C					
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C					
18	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E					
18	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E					
18	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E					
19	50,000 SEEDS/A									11.8 gh	36 mno			
19	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D					
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D					
19	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E					
19	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E					
19	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E					
19	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H					
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H					
20	50,000 SEEDS/A									12.2 a-e	30 pq	0 c	0 d	0 c
20	NONTREATED													
20	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E					
20	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E					
20	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E					
21	100,000 SEEDS/A									12.1 a-g	57 a-d	96 ab	97 c	98 ab
21	WEED FREE													
21	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A					
21	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A					
21	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F					
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F					
21	HANDWEED													
21	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E					
21	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E					
21	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E					
22	100,000 SEEDS/A									12.1 a-g	56 cde			
22	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B					
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B					
22	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E					
22	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E					
22	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E					
22	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G					
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G					

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-04-09 Moisture Percent		GLXMA 11-04-09 Yield bu/A		GGGAN 07-20-09 Control Percent		IPOHE 07-20-09 Control Percent		AMATA 07-20-09 Control Percent	
	Pest Code													GGGAN		IPOHE		AMATA	
	Crop Code									GLXMA		GLXMA							
	Rating Date									11-04-09		11-04-09		07-20-09		07-20-09		07-20-09	
	Rating Data Type									Moisture		Yield		Control		Control		Control	
	Rating Unit									Percent		bu/A		Percent		Percent		Percent	
	Rating Timing																		
	Trt-Eval Interval													-1 DA-B		-1 DA-B		-1 DA-B	
23	100,000 SEEDS/A									11.9	d-h	50	f-i						
23	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C										
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C										
23	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
23	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
23	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
24	100,000 SEEDS/A									12.0	c-h	43	jkl						
24	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D										
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D										
24	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
24	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
24	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
24	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H										
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H										
25	100,000 SEEDS/A									12.3	ab	34	op	0	c	0	d	0	c
25	NONTREATED																		
25	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
25	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
25	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
26	150,000 SEEDS/A									12.1	a-g	62	ab	96	ab	98	bc	98	a
26	WEED FREE																		
26	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A										
26	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A										
26	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F										
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F										
26	HANDWEED																		
26	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
26	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
26	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
27	150,000 SEEDS/A									12.1	a-e	62	a						
27	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B										
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B										
27	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
27	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
27	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
27	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G										
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G										
28	150,000 SEEDS/A									12.1	a-g	59	abc						
28	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C										
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C										
28	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
28	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
28	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
29	150,000 SEEDS/A									12.1	a-g	57	a-d						
29	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D										
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D										
29	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
29	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
29	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
29	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H										
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H										
30	150,000 SEEDS/A									12.2	abc	48	hij	0	c	0	d	0	c
30	NONTREATED																		
30	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E										
30	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E										
30	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E										
	LSD (P=.05)									0.25		5.2		2.2		0.8		0.8	
	Replicate F									3.726		8.222		3.691		1.045		3.152	
	Replicate Prob(F)									0.0143		0.0001		0.0214		0.3857		0.0378	
	Treatment F									2.282		28.161		4469.323		30774.769		32268.652	
	Treatment Prob(F)									0.0017		0.0001		0.0001		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
	Pest Code									SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
	Crop Code															
	Rating Date									10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09
	Rating Data Type									Plants	Plants	Plants	Plants	Plants	Plants	Biomass-ODW
	Rating Unit									0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	g/0.5 m2
	Rating Timing															
	Trt-Eval Interval									EOS	EOS	EOS	EOS	EOS	EOS	EOS
1	50,000 SEEDS/A															
1	WEED FREE															
1	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A							
1	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A							
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F							
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F							
1	HANDWEED															
2	50,000 SEEDS/A															
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B							
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G							
3	50,000 SEEDS/A															
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C							
4	50,000 SEEDS/A															
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D							
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H							
5	50,000 SEEDS/A									10.0 a	22.4 a	1.3 a	7.6 a	7.5 a	1.3 a	105 a
5	NONTREATED															
6	100,000 SEEDS/A															
6	WEED FREE															
6	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A							
6	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A							
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F							
6	HANDWEED															
7	100,000 SEEDS/A															
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B							
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G							
8	100,000 SEEDS/A															
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C							
9	100,000 SEEDS/A															
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D							
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H							
10	100,000 SEEDS/A									2.6 a	29.5 a	0.5 a	10.5 a	2.1 a	0.0 a	94 a
10	NONTREATED															
11	150,000 SEEDS/A															
11	WEED FREE															
11	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A							
11	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A							
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F							
11	HANDWEED															
12	150,000 SEEDS/A															
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B							
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G							
13	150,000 SEEDS/A															
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C							

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
	Pest Code									SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
	Crop Code															
	Rating Date									10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09
	Rating Data Type									Plants	Plants	Plants	Plants	Plants	Plants	Biomass-ODW
	Rating Unit									0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	g/0.5 m2
	Rating Timing															
	Trt-Eval Interval									EOS	EOS	EOS	EOS	EOS	EOS	EOS
14	150,000 SEEDS/A															
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D							
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H							
15	150,000 SEEDS/A									0.9 a	16.4 a	1.9 a	4.1 a	1.4 a	0.5 a	87 a
15	NONTREATED															
16	50,000 SEEDS/A															
16	WEED FREE															
16	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A							
16	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A							
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F							
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F							
16	HANDWEED															
16	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
16	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
16	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
17	50,000 SEEDS/A															
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B							
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B							
17	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
17	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
17	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G							
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G							
18	50,000 SEEDS/A															
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C							
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C							
18	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
18	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
18	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
19	50,000 SEEDS/A															
19	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D							
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D							
19	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
19	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
19	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
19	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H							
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H							
20	50,000 SEEDS/A															
20	NONTREATED															
20	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
20	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
20	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
21	100,000 SEEDS/A															
21	WEED FREE															
21	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A							
21	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A							
21	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F							
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F							
21	HANDWEED															
21	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
21	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
21	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
22	100,000 SEEDS/A															
22	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B							
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B							
22	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
22	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
22	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
22	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G							
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G							

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
	Pest Code									SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
	Crop Code															
	Rating Date									10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09
	Rating Data Type									Plants	Plants	Plants	Plants	Plants	Plants	Biomass-ODW
	Rating Unit									0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	g/0.5 m2
	Rating Timing															
	Trt-Eval Interval									EOS	EOS	EOS	EOS	EOS	EOS	EOS
23	100,000 SEEDS/A															
23	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C							
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C							
23	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
23	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
23	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
24	100,000 SEEDS/A															
24	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D							
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D							
24	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
24	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
24	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
24	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H							
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H							
25	100,000 SEEDS/A															
25	NONTREATED															
25	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
25	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
25	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
26	150,000 SEEDS/A															
26	WEED FREE															
26	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A							
26	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A							
26	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	IF-NEED	F							
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	IF-NEED	F							
26	HANDWEED															
26	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
26	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
26	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
27	150,000 SEEDS/A															
27	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"W	B							
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"W	B							
27	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
27	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
27	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
27	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-1	G							
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-1	G							
28	150,000 SEEDS/A															
28	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-12"W	C							
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	8-12"W	C							
28	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
28	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
28	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
29	150,000 SEEDS/A															
29	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	>18"W	D							
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	>18"W	D							
29	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
29	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
29	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
29	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-3"RG-2	H							
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	2-3"RG-2	H							
30	150,000 SEEDS/A															
30	NONTREATED															
30	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R2-R3	E							
30	WARRIOR	1	CS	0.02	lb ai/a	2.56	fl oz/a	R2-R3	E							
30	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	R2-R3	E							
	LSD (P=.05)									16.75	22.09	1.51	14.89	16.06	2.18	37.1
	Replicate F									0.801	1.021	0.615	0.557	0.830	2.579	1.513
	Replicate Prob(F)									0.5371	0.4470	0.6302	0.6623	0.5240	0.1492	0.3042
	Treatment F									1.001	1.060	2.505	0.551	0.518	1.000	0.711
	Treatment Prob(F)									0.4215	0.4035	0.1619	0.6031	0.6202	0.4219	0.5284

Influence of Weed Management on Optimal Soybean Seed Rates.

Trial ID: 09-T2-S240 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
Pest Code										SETFA	AMATA	IPOSS	PANDI	DIGSA	ABUTH	TTTTT
Crop Code																
Rating Date										10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09	10-01-09
Rating Data Type										Plants	Plants	Plants	Plants	Plants	Plants	Biomass-ODW
Rating Unit										0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	0.5 m2	g/0.5 m2
Rating Timing																
Trt-Eval Interval										EOS	EOS	EOS	EOS	EOS	EOS	EOS

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: ISA.
2. Ratings: WC at B timing and 21 da D.
3. Yield.
4. Consider weed counts or biomass per plot for data collection.
5. Blanket POST application of Roundup PowerMax (22 floz/A) + N-Pak AMS (5 %v/v), as needed, at 2-3 inch weed regrowth to maintain weed-free following the initial herbicide application, for all treatments except the nontreated weedy checks. The 2-3 inch weed regrowth application were required following the 4-6"W (B) and >18"W (D) timings and were added to the treament list and site description as 2-3"RG-1 (G) and 2-3"RG-2 (H), respectively.
6. EOS = End of season. Plants 0.5 m2 = Plants per 0.5 square meter. g/0.5 m2 = Grams per 0.5 square meter. TTTTT = Weeds generally, all species combined. Biomass-ODW = Oven dry weight of harvested plants.
7. Harvested 11-4-09, (4) 15 inch rows by 29 ft.

Corn Fungicide Studies

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 06-01-09

Objectives: Determine the efficacy of Nutrapathic products for enhanced corn growth and yield.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-01-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

	Prior Crops	Year
1.	GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 138 LB/A, K2O 0 LB/A

% OM: 1.8 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** STOY
CEC: 8.2 **Fert. Level:** P1: 61 LB/A, K: 282 LB/A

Application Description

	A
Application Date:	06-05-09
Time of Day:	18:45
Application Method:	Spray
Application Timing:	PRE
Application Placement:	BROSOI
Applied By:	NVH
Air Temperature, Unit:	77 F
% Relative Humidity:	43
Wind Velocity, Unit:	3 MPH
Wind Direction:	N
Dew Presence (Y/N):	N
Soil Temperature, Unit:	78 F
Soil Moisture:	NORMAL
% Cloud Cover:	0
	06-05-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	06-05-09
Weed Code:	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	10 FT
Spray Volume, Unit:	20 GPA

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 11-09-09 Moisture Percent	ZEAMD 11-09-09 Test wt. lb/bu	ZEAMD 11-09-09 Yield bu/A	ZEAMD 06-17-09 Plants 000/A 12 DA-A	ZEAMD 06-19-09 Vigor 0-9 14 DA-A	ZEAMD 06-26-09 Height Inch 5 Plants 21 DA-A	ZEAMD 06-26-09 Height Inch Overall 21 DA-A
1	NONTREATED									16.1 a	54.5 a	172 a	26.8 b	7.8 a	45.5 a	49.8 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	15.9 a	55.0 a	183 a	27.4 b	8.0 a	48.4 a	51.8 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	16.2 a	54.5 a	170 a	28.8 a	7.8 a	49.7 a	54.8 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	16.2 a	54.5 a	168 a	27.5 ab	8.0 a	46.3 a	50.0 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A							
LSD (P=.05)										0.42	1.11	17.5	1.28	0.46	6.30	6.54
Replicate F										0.735	0.100	4.227	1.260	3.000	3.457	1.508
Replicate Prob(F)										0.5569	0.9581	0.0402	0.3450	0.0877	0.0646	0.2778
Treatment F										0.816	0.501	1.514	4.382	1.000	0.944	1.269
Treatment Prob(F)										0.5167	0.6907	0.2764	0.0367	0.4363	0.4592	0.3423

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 08-13-09 SPAD At VT	SOIL 06-02-09 CEC meq/100g -3 DA-A	SOIL 11-16-09 CEC meq/100g 164 DA-A	SOIL 06-02-09 pH -3 DA-A	SOIL 11-16-09 pH 164 DA-A
1	NONTREATED									59.9 a	11.27 a	8.06 a	6.1 a	6.8 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	61.2 a	10.90 a	8.52 a	6.1 a	6.8 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	62.0 a	11.20 a	8.05 a	6.2 a	6.9 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	60.6 a	10.92 a	8.25 a	6.3 a	6.8 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A					
LSD (P=.05)										2.79	0.556	1.036	0.23	0.16
Replicate F										0.476	3.089	0.663	15.967	19.138
Replicate Prob(F)										0.7067	0.0825	0.5951	0.0006	0.0003
Treatment F										1.046	1.189	0.462	1.352	1.394
Treatment Prob(F)										0.4183	0.3678	0.7155	0.3180	0.3066

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-02-09 OM Percent -3 DA-A	SOIL 11-16-09 OM Percent 164 DA-A	SOIL 06-02-09 Est N Relea lb N/A -3 DA-A	SOIL 11-16-09 Est N Relea lb N/A 164 DA-A	SOIL 06-02-09 S* mg/kg -3 DA-A	SOIL 11-16-09 S* mg/kg 164 DA-A
	Pest Code														
	Crop Code														
	Rating Date														
	Rating Data Type														
	Rating Unit														
	Rating Timing														
	Trt-Eval Interval														
1	NONTREATED									3.06 a	2.05 a	80.5 a	61.0 a	7.8 a	8.3 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	3.08 a	2.17 a	80.5 a	63.5 a	7.5 a	8.3 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	3.11 a	1.93 a	81.0 a	59.0 a	7.3 a	9.0 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	3.15 a	2.05 a	81.3 a	61.0 a	7.5 a	9.0 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
	LSD (P=.05)									0.136	0.260	1.56	5.19	0.84	0.88
	Replicate F									5.691	0.430	5.672	0.515	1.200	0.818
	Replicate Prob(F)									0.0183	0.7366	0.0184	0.6824	0.3641	0.5157
	Treatment F									0.749	1.366	0.591	1.290	0.600	2.455
	Treatment Prob(F)									0.5498	0.3144	0.6361	0.3359	0.6310	0.1298

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-02-09 P* mg/kg -3 DA-A	SOIL 11-16-09 P* mg/kg 164 DA-A	SOIL 06-02-09 Bray II P mg/kg -3 DA-A	SOIL 11-16-09 Bray II P mg/kg 164 DA-A	SOIL 06-02-09 Ca mg/kg -3 DA-A	SOIL 11-16-09 Ca mg/kg 164 DA-A
	Pest Code														
	Crop Code														
	Rating Date														
	Rating Data Type														
	Rating Unit														
	Rating Timing														
	Trt-Eval Interval														
1	NONTREATED									33.8 a	27.5 a	116 a	105 a	1584 a	1317 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	30.8 a	29.0 a	117 a	114 a	1537 a	1409 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	36.8 a	29.8 a	116 a	106 a	1595 a	1337 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	35.5 a	30.5 a	130 a	105 a	1595 a	1356 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
	LSD (P=.05)									7.24	5.07	18.0	17.6	135.9	156.6
	Replicate F									5.473	10.342	10.332	7.560	6.827	1.058
	Replicate Prob(F)									0.0204	0.0028	0.0028	0.0079	0.0107	0.4138
	Treatment F									1.320	0.652	1.403	0.606	0.419	0.655
	Treatment Prob(F)									0.3273	0.6014	0.3043	0.6275	0.7436	0.5998

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-02-09 Mg mg/kg -3 DA-A	SOIL 11-16-09 Mg mg/kg 164 DA-A	SOIL 06-02-09 K mg/kg -3 DA-A	SOIL 11-16-09 K mg/kg 164 DA-A	SOIL 06-02-09 Na mg/kg -3 DA-A	SOIL 11-16-09 Na mg/kg 164 DA-A
1	NONTREATED									57.5 a	45.3 a	228 a	128 a	18.0 a	16.5 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	57.3 a	48.5 a	226 a	133 a	20.3 a	17.5 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	57.5 a	45.8 a	271 a	126 a	18.5 a	18.8 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	57.3 a	45.8 a	248 a	126 a	19.0 a	17.5 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										7.02	5.90	64.9	28.1	3.88	2.75
Replicate F										4.472	0.751	0.719	2.239	0.604	0.134
Replicate Prob(F)										0.0349	0.5487	0.5654	0.1530	0.6286	0.9372
Treatment F										0.004	0.641	1.081	0.127	0.633	1.151
Treatment Prob(F)										0.9996	0.6076	0.4054	0.9414	0.6124	0.3806

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-02-09 Ca§ Percent -3 DA-A	SOIL 11-16-09 Ca§ Percent 164 DA-A	SOIL 06-02-09 Mg§ Percent -3 DA-A	SOIL 11-16-09 Mg§ Percent 164 DA-A	SOIL 06-02-09 K§ Percent -3 DA-A	SOIL 11-16-09 K§ Percent 164 DA-A
1	NONTREATED									70.29 a	81.63 a	4.24 a	4.68 a	5.19 a	4.06 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	70.70 a	82.77 a	4.37 a	4.76 a	5.30 a	3.96 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	71.22 a	83.08 a	4.28 a	4.74 a	6.21 a	4.03 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	73.07 a	82.15 a	4.37 a	4.62 a	5.83 a	3.92 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										4.303	2.281	0.388	0.497	1.454	0.543
Replicate F										18.398	15.295	3.836	0.429	0.645	3.764
Replicate Prob(F)										0.0004	0.0007	0.0508	0.7372	0.6056	0.0531
Treatment F										0.834	0.819	0.294	0.166	1.098	0.142
Treatment Prob(F)										0.5082	0.5153	0.8290	0.9167	0.3990	0.9323

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-02-09 Na§ Percent -3 DA-A	SOIL 11-16-09 Na§ Percent 164 DA-A	SOIL 06-02-09 OtherBases§ Percent -3 DA-A	SOIL 11-16-09 OtherBases§ Percent 164 DA-A	SOIL 06-02-09 H§ Percent -3 DA-A	SOIL 11-16-09 H§ Percent 164 DA-A
1	NONTREATED									0.70 a	0.89 a	5.33 a	4.65 a	14.25 a	4.13 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.81 a	0.91 a	5.30 a	4.60 a	13.50 a	3.00 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.72 a	1.02 a	5.23 a	4.53 a	12.38 a	2.63 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.76 a	0.93 a	5.10 a	4.65 a	10.88 a	3.75 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										0.147	0.203	0.246	0.161	3.918	2.262
Replicate F										0.527	0.407	20.650	19.090	18.063	15.938
Replicate Prob(F)										0.6750	0.7517	0.0002	0.0003	0.0004	0.0006
Treatment F										1.153	0.770	1.730	1.384	1.438	0.938
Treatment Prob(F)										0.3798	0.5390	0.2302	0.3093	0.2952	0.4620

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-02-09 B* mg/kg -3 DA-A	SOIL 11-16-09 B* mg/kg 164 DA-A	SOIL 06-02-09 Fe* mg/kg -3 DA-A	SOIL 11-16-09 Fe* mg/kg 164 DA-A	SOIL 06-02-09 Mn* mg/kg -3 DA-A	SOIL 11-16-09 Mn* mg/kg 164 DA-A
1	NONTREATED									0.38 a	0.28 a	209 a	185 a	210 a	189 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.42 a	0.31 a	204 a	205 a	213 a	195 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.36 a	0.29 a	215 a	194 a	207 a	187 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.41 a	0.32 a	225 a	195 a	210 a	184 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										0.063	0.051	29.3	25.6	25.6	15.3
Replicate F										7.195	5.413	0.880	2.391	6.208	9.720
Replicate Prob(F)										0.0092	0.0210	0.4870	0.1362	0.0142	0.0035
Treatment F										2.168	1.382	1.009	1.101	0.111	0.968
Treatment Prob(F)										0.1617	0.3098	0.4327	0.3978	0.9517	0.4493

Means followed by same letter do not significantly differ (P=.05, LSD)

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code															
Crop Code										SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Rating Date										06-02-09	11-16-09	06-02-09	11-16-09	06-02-09	11-16-09
Rating Data Type										Cu*	Cu*	Zn*	Zn*	Al*	Al*
Rating Unit										mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Rating Timing															
Trt-Eval Interval										-3 DA-A	164 DA-A	-3 DA-A	164 DA-A	-3 DA-A	164 DA-A
1	NONTREATED									1.37 a	1.19 a	1.03 a	1.02 a	612 a	607 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	1.42 a	1.27 a	1.00 a	1.05 a	618 a	626 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	1.41 a	3.26 a	1.03 a	1.00 a	622 a	622 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	1.53 a	1.18 a	1.03 a	0.99 a	615 a	598 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										0.211	3.235	0.132	0.130	34.8	38.5
Replicate F										0.809	1.084	7.747	3.420	27.799	10.684
Replicate Prob(F)										0.5199	0.4041	0.0073	0.0662	0.0001	0.0025
Treatment F										1.131	1.022	0.157	0.496	0.153	1.130
Treatment Prob(F)										0.3873	0.4275	0.9222	0.6938	0.9250	0.3877

Means followed by same letter do not significantly differ (P=.05, LSD)

Nutrapathic Product Evaluation in Corn - ARC.

Trial ID: 09-ARC-5-M50 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code															
Crop Code										SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Rating Date										06-02-09	11-16-09	06-02-09	11-16-09	06-02-09	11-16-09
Rating Data Type										Nitrogen	Nitrogen	NO3-N	NO3-N	NH4-N	NH4-N
Rating Unit										Percent	Percent	ppm	ppm	ppm	ppm
Rating Timing															
Trt-Eval Interval										-3 DA-A	164 DA-A	-3 DA-A	164 DA-A	-3 DA-A	164 DA-A
1	NONTREATED									0.140 a	0.140 a	63.15 a	4.45 a	6.00 a	2.53 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.143 a	0.138 a	63.58 a	4.13 a	5.58 a	2.18 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.148 a	0.130 a	56.15 a	3.58 a	4.90 a	2.23 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	0.143 a	0.135 a	55.70 a	3.70 a	5.25 a	2.15 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										0.0137	0.0193	27.769	2.570	2.555	0.553
Replicate F										1.686	0.158	0.569	0.329	2.984	0.605
Replicate Prob(F)										0.2389	0.9220	0.6491	0.8048	0.0887	0.6282
Treatment F										0.543	0.502	0.246	0.249	0.345	1.009
Treatment Prob(F)										0.6649	0.6901	0.8625	0.8597	0.7940	0.4326

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Nutrapathic.
2. Ratings: Corn stand counts 7-14 DAP, corn vigor 14-21 DAP, corn height 21 DAP,
   leaf greenness at tasseling (VT growth stage) - measure ear leaf with SPAD meter (10 per plot).
3. Yield, moisture, and test weight.
4. Blanket PRE application of Lumax (2.5 qt/A) plus Aatrex 90 (1 qt/A) to entire area on 6-2-09.
5. Take soil samples in each plot prior to application and again at harvest (minimum 60 g or 1 cup).
   Soil samples must be stored dry (air dry) or frozen, prefer to be dried right away.
   Submit soil samples to Brookside Labs for S001 (standard soil test), S110 (available N [NH4-N+NO3-N]) and S112 (total N).
6. Corn height; 5 Plants is average height of 5 random plants per plot, Overall is looking across the top of the plants.
   Corn vigor scale is 0-9, 0 = dead, 9 = very vigorous. Plants 000/A = Thousands per acre. At VT = At corn tasseling stage.
   SPAD = Minolta chlorophyll meter (model SPAD 502) reading on on the V12 leaf.
7. Soil test data; * Mehlich III extractable elements.
   § This value represents the percent of a given element found on the soils total exchange capacity.
   Values should add to 100 for a given sample.
   Note: For a listing of methods and references please refer to the website for Brookside Laboratories Inc (www.blinc.com).
8. Harvested 11-9-09, (2) 30 inch rows by 27 ft.

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-26-09

Objectives: Determine the efficacy of Nutrapathic products for enhanced corn growth and yield.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-69 **Description:** RR2(VT3)
Planting Method: SEEDED **Planting Date:** 06-26-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Code: NA

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1 78 LB/A, K 423 LB/A

Application Description

	A
Application Date:	06-27-09
Time of Day:	8:30
Application Method:	Spray
Application Timing:	PRE
Application Placement:	BROSOI
Applied By:	DKP
Air Temperature, Unit:	78 F
% Relative Humidity:	92
Wind Velocity, Unit:	1 MPH
Wind Direction:	NE
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	10
	06-27-09
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	06-27-09
Weed Code:	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	10 FT
Spray Volume, Unit:	20 GPA

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-16-09 Moisture Percent	ZEAMD 12-16-09 Test wt. lb/bu	ZEAMD 12-16-09 Yield bu/A
1	NONTREATED									21.5 a	49.6 a	165 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	21.9 a	49.4 a	138 b
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	21.6 a	50.0 a	171 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	22.1 a	50.1 a	159 ab
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A			
LSD (P=.05)										0.56	1.12	23.8
Replicate F										7.409	7.402	0.831
Replicate Prob(F)										0.0084	0.0084	0.5097
Treatment F										1.967	1.044	3.879
Treatment Prob(F)										0.1896	0.4192	0.0495

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 07-06-09 Plants 000/A 9 DA-A	ZEAMD 07-17-09 Vigor 1-10 20 DA-A	ZEAMD 07-17-09 Height Inch 5 Plants 20 DA-A	ZEAMD 07-17-09 Height Inch Overall 20 DA-A	ZEAMD 09-06-09 SPAD 71 DA-A
1	NONTREATED									30.5 a	8.8 a	32.9 a	33.0 a	51.6 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	30.1 a	8.8 a	33.3 a	32.8 a	50.7 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	30.8 a	9.0 a	33.3 a	32.8 a	50.2 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	30.9 a	9.0 a	32.9 a	32.3 a	51.2 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A					
LSD (P=.05)										1.91	0.46	1.12	1.69	1.54
Replicate F										0.659	3.000	0.309	2.441	1.145
Replicate Prob(F)										0.5978	0.0877	0.8184	0.1312	0.3824
Treatment F										0.307	1.000	0.445	0.354	1.575
Treatment Prob(F)										0.8196	0.4363	0.7270	0.7875	0.2624

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 CEC meq/100g -1 DA-A	SOIL 12-01-09 CEC meq/100g 157 DA-A	SOIL 06-26-09 pH -1 DA-A	SOIL 12-01-09 pH 157 DA-A	SOIL 06-26-09 OM Percent -1 DA-A	SOIL 12-01-09 OM Percent 157 DA-A
1	NONTREATED									14.74 a	7.86 a	6.0 a	7.0 a	3.10 a	1.96 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	13.99 a	7.34 a	6.2 a	7.1 a	3.09 a	1.98 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	14.00 a	7.66 a	6.2 a	7.1 a	3.09 a	1.93 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	14.91 a	8.33 a	6.1 a	7.1 a	3.05 a	1.99 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										2.567	2.265	0.50	0.19	0.219	0.124
Replicate F										0.319	0.649	1.547	4.805	5.453	11.720
Replicate Prob(F)										0.8119	0.6032	0.2686	0.0290	0.0206	0.0018
Treatment F										0.366	0.345	0.367	0.361	0.135	0.498
Treatment Prob(F)										0.7795	0.7938	0.7784	0.7824	0.9365	0.6927

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 Est N Relea lb N/A -1 DA-A	SOIL 12-01-09 Est N Relea lb N/A 157 DA-A	SOIL 06-26-09 S* mg/kg -1 DA-A	SOIL 12-01-09 S* mg/kg 157 DA-A	SOIL 06-26-09 P* mg/kg -1 DA-A	SOIL 12-01-09 P* mg/kg 157 DA-A
1	NONTREATED									80.5 a	59.3 a	7.3 ab	7.5 a	47.3 b	39.8 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	81.0 a	59.8 a	6.8 b	7.5 a	48.5 ab	41.5 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	80.8 a	58.5 a	7.5 ab	8.3 a	48.5 ab	37.3 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	79.8 a	59.8 a	7.8 a	7.3 a	52.8 a	43.3 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										3.04	2.45	0.85	2.01	4.96	7.16
Replicate F										6.277	10.567	0.805	1.526	14.740	4.630
Replicate Prob(F)										0.0138	0.0026	0.5221	0.2734	0.0008	0.0319
Treatment F										0.323	0.596	2.561	0.474	2.410	1.307
Treatment Prob(F)										0.8088	0.6331	0.1200	0.7082	0.1342	0.3309

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 Bray II P mg/kg -1 DA-A	SOIL 12-01-09 Bray II P mg/kg 157 DA-A	SOIL 06-26-09 Mg mg/kg -1 DA-A	SOIL 12-01-09 Mg mg/kg 157 DA-A	SOIL 06-26-09 Ca mg/kg -1 DA-A	SOIL 12-01-09 Ca mg/kg 157 DA-A
1	NONTREATED									99 ab	73 a	127.0 b	90.5 a	1857 a	1254 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	103 a	76 a	127.5 ab	84.8 a	1855 a	1170 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	87 b	70 a	130.8 ab	89.0 a	1874 a	1224 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	102 a	68 a	137.5 a	98.5 a	2008 a	1334 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										13.4	14.3	10.05	26.53	161.0	366.0
Replicate F										15.423	2.360	10.711	0.808	3.924	0.606
Replicate Prob(F)										0.0007	0.1394	0.0025	0.5207	0.0481	0.6278
Treatment F										2.828	0.612	2.372	0.481	2.123	0.362
Treatment Prob(F)										0.0990	0.6242	0.1382	0.7038	0.1674	0.7824

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 K mg/kg -1 DA-A	SOIL 12-01-09 K mg/kg 157 DA-A	SOIL 06-26-09 Na mg/kg -1 DA-A	SOIL 12-01-09 Na mg/kg 157 DA-A	SOIL 06-26-09 Ca§ Percent -1 DA-A	SOIL 12-01-09 Ca§ Percent 157 DA-A
1	NONTREATED									258 b	134 a	17.3 a	17.0 a	63.70 a	79.92 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	274 ab	142 a	17.5 a	15.8 a	66.74 a	79.49 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	268 ab	122 a	19.3 a	20.8 a	67.45 a	80.00 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	300 a	150 a	20.5 a	15.0 a	67.38 a	80.01 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										40.3	30.6	3.47	10.63	10.349	1.017
Replicate F										7.373	1.855	3.781	0.969	1.791	10.915
Replicate Prob(F)										0.0085	0.2076	0.0526	0.4490	0.2188	0.0024
Treatment F										2.017	1.572	2.006	0.591	0.302	0.604
Treatment Prob(F)										0.1821	0.2631	0.1837	0.6363	0.8234	0.6287

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 Mg§ Percent -1 DA-A	SOIL 12-01-09 Mg§ Percent 157 DA-A	SOIL 06-26-09 K§ Percent -1 DA-A	SOIL 12-01-09 K§ Percent 157 DA-A	SOIL 06-26-09 Na§ Percent -1 DA-A	SOIL 12-01-09 Na§ Percent 157 DA-A
1	NONTREATED									7.24 a	9.53 a	4.55 a	4.47 ab	0.51 a	0.95 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	7.65 a	9.77 a	5.06 a	5.04 a	0.55 a	0.96 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	7.81 a	9.69 a	4.93 a	4.09 b	0.61 a	1.16 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	7.70 a	9.90 a	5.14 a	4.63 ab	0.60 a	0.79 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										1.287	0.636	0.903	0.735	0.178	0.594
Replicate F										1.327	20.233	5.290	4.189	1.172	0.349
Replicate Prob(F)										0.3253	0.0002	0.0224	0.0411	0.3734	0.7909
Treatment F										0.387	0.586	0.864	2.885	0.712	0.666
Treatment Prob(F)										0.7653	0.6391	0.4944	0.0950	0.5692	0.5938

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 OtherBases§ Percent -1 DA-A	SOIL 12-01-09 OtherBases§ Percent 157 DA-A	SOIL 06-26-09 H§ Percent -1 DA-A	SOIL 12-01-09 H§ Percent 157 DA-A	SOIL 06-26-09 B* mg/kg -1 DA-A	SOIL 12-01-09 B* mg/kg 157 DA-A
1	NONTREATED									5.63 a	4.40 a	18.38 a	0.75 a	0.38 a	0.27 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	5.38 a	4.35 a	14.63 a	0.38 a	0.41 a	0.26 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	5.33 a	4.33 a	13.88 a	0.75 a	0.46 a	0.23 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	5.30 a	4.33 a	13.88 a	0.38 a	0.42 a	0.31 a
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A						
LSD (P=.05)										0.772	0.188	11.720	0.894	0.113	0.133
Replicate F										1.642	4.801	1.512	5.400	1.295	0.812
Replicate Prob(F)										0.2478	0.0290	0.2768	0.0211	0.3344	0.5189
Treatment F										0.382	0.360	0.346	0.600	0.924	0.607
Treatment Prob(F)										0.7684	0.7834	0.7932	0.6310	0.4677	0.6269

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 Fe* mg/kg -1 DA-A	SOIL 12-01-09 Fe* mg/kg 157 DA-A	SOIL 06-26-09 Mn* mg/kg -1 DA-A	SOIL 12-01-09 Mn* mg/kg 157 DA-A	SOIL 06-26-09 Cu* mg/kg -1 DA-A	SOIL 12-01-09 Cu* mg/kg 157 DA-A
1	NONTREATED									178 a	153 a	64 a	51 a	2.12 a	1.68 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A	187 a	156 a	67 a	56 a	2.21 a	1.63 a
3	SOIL RESTORE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A	168 a	138 a	65 a	50 a	2.14 a	1.71 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A	179 a	150 a	71 a	59 a	2.30 a	1.77 a
4	SOIL RESTORE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A						
LSD (P=.05)										20.4	25.2	7.9	9.0	0.222	0.395
Replicate F										22.453	9.423	0.452	1.127	1.455	0.365
Replicate Prob(F)										0.0002	0.0039	0.7221	0.3886	0.2907	0.7800
Treatment F										1.535	1.059	1.575	2.179	1.305	0.227
Treatment Prob(F)										0.2714	0.4136	0.2622	0.1602	0.3315	0.8754

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOIL 06-26-09 Zn* mg/kg -1 DA-A	SOIL 12-01-09 Zn* mg/kg 157 DA-A	SOIL 06-26-09 Al* mg/kg -1 DA-A	SOIL 12-01-09 Al* mg/kg 157 DA-A	SOIL 06-26-09 Nitrogen Percent -1 DA-A	SOIL 12-01-09 Nitrogen Percent 157 DA-A
1	NONTREATED									2.07 a	1.83 a	424 a	366 a	0.185 a	0.130 a
2	LIQUID BACTERIA CONCENTRATE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A	2.10 a	1.89 a	409 a	360 a	0.188 a	0.128 a
3	SOIL RESTORE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A	2.15 a	1.87 a	403 a	355 a	0.200 a	0.115 a
4	LIQUID BACTERIA CONCENTRATE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A	2.21 a	2.03 a	422 a	373 a	0.193 a	0.120 a
4	SOIL RESTORE	100	SL	2 fl oz/a		2 fl oz/a		PRE	A						
LSD (P=.05)										0.230	0.412	45.9	50.0	0.0336	0.0193
Replicate F										2.033	0.606	2.709	0.411	1.415	0.617
Replicate Prob(F)										0.1797	0.6274	0.1078	0.7492	0.3011	0.6211
Treatment F										0.761	0.469	0.515	0.248	0.396	1.306
Treatment Prob(F)										0.5438	0.7109	0.6822	0.8610	0.7591	0.3312

Means followed by same letter do not significantly differ (P=.05, LSD)

Nutrapathic Product Evaluation in Corn - BRC.

Trial ID: 09-20A-MME30 Location: Belleville Res.Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code													
Crop Code										SOIL	SOIL	SOIL	SOIL
Rating Date										06-26-09	12-01-09	06-26-09	12-01-09
Rating Data Type										NO3-N	NO3-N	NH4-N	NH4-N
Rating Unit										ppm	ppm	ppm	ppm
Rating Timing													
Trt-Eval Interval										-1 DA-A	157 DA-A	-1 DA-A	157 DA-A
1	NONTREATED									87.58 a	3.48 a	2.23 a	1.98 ab
2	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	71.63 a	3.33 a	2.20 a	2.28 a
3	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	83.15 a	4.10 a	2.23 a	1.80 b
4	LIQUID BACTERIA CONCENTRATE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A	86.30 a	4.00 a	2.33 a	2.13 ab
4	SOIL RESTORE	100	SL	2	fl oz/a	2	fl oz/a	PRE	A				
LSD (P=.05)										32.907	0.853	0.287	0.441
Replicate F										0.851	0.250	9.000	2.172
Replicate Prob(F)										0.5004	0.8595	0.0045	0.1693
Treatment F										0.499	2.137	0.381	2.263
Treatment Prob(F)										0.6921	0.1737	0.7695	0.1583

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Nutrapathic.
2. Ratings: Corn stand counts 7-14 DAP, corn vigor 14-21 DAP, corn height 21 DAP,
   leaf greenness at tasseling (VT growth stage) - measure ear leaf with SPAD meter (10 per plot).
3. Yield, moisture, and test weight.
4. Blanket PRE application of Bicep II Magnum (2.4 qt/A) to entire area was applied 6-26-09.
5. Take soil samples in each plot prior to application and again at harvest (minimum 60 g or 1 cup).
   Soil samples must be stored dry (air dry) or frozen, prefer to be dried right away.
   Submit soil samples to Brookside Labs for their S001 (standard soil test), S110 (available N as NH4-N + NO3-N)
   and S112 (total N).
6. Corn height; 5 Plants is average height of 5 random plants per plot, Overall is looking across the top of the plants.
   Plants 000/A = Thousands per acre.
   SPAD = Minolta chlorophyll meter (model SPAD 502) reading on on the ear leaf.
7. Soil test data; * Mehlich III extractable elements.
   § This value represents the percent of a given element found on the soils total exchange capacity.
   Values should add to 100 for a given sample.
   Note: For a listing of methods and references please refer to the website for Brookside Laboratories Inc (www.blinc.com).
8. Harvested 12-16-09, (2) 30 inch rows by 22 ft.

BASF and DuPont Foliar Fungicides in Corn.

Trial ID: 09-23M-N210 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-24-09

Objectives: Evaluate commercial and experimental formulations of foliar fungicides for use in corn.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-69 **Description:** RR2(VT3)
Planting Method: SEEDED **Planting Date:** 06-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: D **Code:** CERCZM Cercospora zeae-maydis Gray leaf spot of corn
Pest 2 Type: D **Code:** PUCCPY Puccinia polysora Southern rust of corn

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** MINIMUM-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.8 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** CASEYVILLE
CEC: 8 **Fert. Level:** P1: 145 LB/A, K: 383 LB/A

Application Description

	A	B
Application Date:	07-18-09	08-19-09
Time of Day:	10:00	13:15
Application Method:	Spray	Spray
Application Timing:	V6	VT
Application Placement:	BROFOL	BROFOL
Applied By:	NVH	DKP
Air Temperature, Unit:	70 F	84 F
% Relative Humidity:	80	92
Wind Velocity, Unit:	6 MPH	8 MPH
Wind Direction:	N	S
Dew Presence (Y/N):	N	N
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	30	80
	07-18-09	08-19-09
Crop stage at application:	V5	VT
Height Min, Max (inch):	9 11	96 108

Pest Stage At Each Application

Application Date:	07-18-09	08-19-09
Weed Code:	CERCZM	CERCZM
Stage Majority (leaves):	NA	NA
Weed Code:	PUCCPY	PUCCPY
Stage Majority (leaves):	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	5 FT	5 FT
Spray Volume, Unit:	20 GPA	20 GPA

BASF and DuPont Foliar Fungicides in Corn.

Trial ID: 09-23M-N210 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 11-05-09 Lodging Percent EOS	ZEAMD 12-04-09 Moisture Percent	ZEAMD 12-04-09 Yield bu/A	ZEAMD Injury Percent 28 DAT	ZEAMD Injury Percent 42 DAT	ZEAMD Injury Percent R5
1	NONTREATED									10 ab	21.0 bcd	161 a	0 a	0 a	0 a
2	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	V6	A	13 a	20.9 cd	155 a	0 a	0 a	0 a
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A						
3	HEADLINE SC	2.09	SC	0.098	lb ai/a	6	fl oz/a	V6	A	7 ab	20.8 cd	162 a	0 a	0 a	0 a
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A						
4	BAS 556 UUF	1.67	SC	0.13	lb ai/a	10	fl oz/a	V6	A	5 ab	20.8 cd	164 a	0 a	0 a	0 a
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A						
5	BAS 500 18F	2.09	L	0.098	lb ai/a	6	fl oz/a	V6	A						
6	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	B	7 ab	21.3 abc	161 a	0 a	0 a	0 a
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
7	HEADLINE SC	2.09	SC	0.098	lb ai/a	6	fl oz/a	VT	B	2 b	21.7 a	166 a	0 a	0 a	0 a
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
8	BAS 556 UUF	1.67	SC	0.13	lb ai/a	10	fl oz/a	VT	B	2 b	21.2 abc	159 a	0 a	0 a	0 a
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
9	QUILT	1.66	SC	0.182	lb ai/a	14	fl oz/a	VT	B	3 b	20.5 d	163 a	0 a	0 a	0 a
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
10	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	VT	B	3 b	21.3 abc	161 a	0 a	0 a	0 a
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
11	TILT	3.6	EC	0.113	lb ai/a	4	fl oz/a	VT	B	10 ab	21.2 abc	164 a	0 a	0 a	0 a
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
12	DPX-LEM17	1.67	EC	0.209	lb ai/a	16	fl oz/a	VT	B	7 ab	21.0 bcd	161 a	0 a	0 a	0 a
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
13	DPX-YT669	2.08	SC	0.146	lb ai/a	9	fl oz/a	VT	B	7 ab	21.5 ab	156 a	0 a	0 a	0 a
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
LSD (P=.05)										9.6	0.59	17.0	0.0	0.0	0.0
Replicate F										1.398	10.253	11.744	0.000	0.000	0.000
Replicate Prob(F)										0.2395	0.0001	0.0001	1.0000	1.0000	1.0000
Treatment F										1.110	2.343	0.318	0.000	0.000	0.000
Treatment Prob(F)										0.3710	0.0190	0.9789	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

BASF and DuPont Foliar Fungicides in Corn.

Trial ID: 09-23M-N210 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										CERCZM	CERCZM	CERCZM	CERCZM	CERCZM	CERCZM	CERCZM	CERCZM
Crop Code										ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Rating Date																	
Rating Data Type										Incidence	Severity	Incidence	Severity	Incidence	Severity	Incidence	Severity
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										0 DAT	0 DAT	28 DAT	28 DAT	42 DAT	42 DAT	R5	R5
Trt-Eval Interval																	
1	NONTREATED									0 a	0 a	0.0 b	0.0 b	1.0 a	0.2 b	1.0 a	0.2 b
2	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	V6	A	0 a	0 a	0.0 b	0.0 b	1.0 a	0.2 b	1.0 a	0.2 b
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A								
3	HEADLINE SC	2.09	SC	0.098	lb ai/a	6	fl oz/a	V6	A	0 a	0 a	0.0 b	0.0 b	1.0 a	0.2 b	1.0 a	0.2 b
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A								
4	BAS 556 UUF	1.67	SC	0.13	lb ai/a	10	fl oz/a	V6	A	0 a	0 a	0.0 b	0.0 b	1.0 a	0.2 b	1.0 a	0.2 b
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A								
5	BAS 500 18F	2.09	L	0.098	lb ai/a	6	fl oz/a	V6	A								
6	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 b	1.0 a	0.2 b
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
7	HEADLINE SC	2.09	SC	0.098	lb ai/a	6	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 b	1.0 a	0.2 b
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
8	BAS 556 UUF	1.67	SC	0.13	lb ai/a	10	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 b	1.0 a	0.2 b
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
9	QUILT	1.66	SC	0.182	lb ai/a	14	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 b	1.0 a	0.2 b
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
10	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 b	1.0 a	0.2 b
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
11	TILT	3.6	EC	0.113	lb ai/a	4	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 b	1.0 a	0.2 b
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
12	DPX-LEM17	1.67	EC	0.209	lb ai/a	16	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 a	1.0 a	0.2 a
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
13	DPX-YT669	2.08	SC	0.146	lb ai/a	9	fl oz/a	VT	B	0 a	0 a	1.0 a	0.2 a	1.0 a	0.2 b	1.0 a	0.2 b
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B								
LSD (P=.05)										0.0	0.0	0.00	0.00	0.00	0.01	0.00	0.01
Replicate F										0.000	0.000	0.000	0.000	0.000	1.007	0.000	1.007
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	0.4226	1.0000	0.4226
Treatment F										0.000	0.000	0.000	0.000	0.000	1.003	0.000	1.003
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	0.4559	1.0000	0.4559

Means followed by same letter do not significantly differ (P=.05, LSD)

BASF and DuPont Foliar Fungicides in Corn.

Trial ID: 09-23M-N210 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	PUCCPY ZEAMD Incidence Percent 42 DAT	PUCCPY ZEAMD Severity Percent 42 DAT	PUCCPY ZEAMD Incidence Percent R5	PUCCPY ZEAMD Severity Percent R5	ZEAMD 10-19-09 Greenness Percent	ZEAMD 10-19-09 Plant Hlth 1-10
1	NONTREATED											1.0 a	5.0 a	54 bc	4 ab
2	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	V6	A			1.0 a	5.0 a	50 c	4 a
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A						
3	HEADLINE SC	2.09	SC	0.098	lb ai/a	6	fl oz/a	V6	A			1.0 a	5.0 a	59 bc	3 abc
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A						
4	BAS 556 UUF	1.67	SC	0.13	lb ai/a	10	fl oz/a	V6	A			1.0 a	5.0 a	67 ab	3 abc
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	V6	A						
5	BAS 500 18F	2.09	L	0.098	lb ai/a	6	fl oz/a	V6	A						
6	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	VT	B	1.0 a	1.0 b	1.0 a	1.0 c	65 abc	3 abc
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
7	HEADLINE SC	2.09	SC	0.098	lb ai/a	6	fl oz/a	VT	B	1.0 a	1.0 b	1.0 a	1.0 c	77 a	3 c
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
8	BAS 556 UUF	1.67	SC	0.13	lb ai/a	10	fl oz/a	VT	B	1.0 a	1.3 b	1.0 a	1.3 c	68 ab	3 abc
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
9	QUILT	1.66	SC	0.182	lb ai/a	14	fl oz/a	VT	B	1.0 a	1.0 b	1.0 a	1.0 c	64 abc	3 abc
9	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
10	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	VT	B	1.0 a	3.0 a	1.0 a	3.0 b	63 abc	3 abc
10	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
11	TILT	3.6	EC	0.113	lb ai/a	4	fl oz/a	VT	B	1.0 a	2.7 a	1.0 a	2.7 b	63 abc	3 bc
11	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
12	DPX-LEM17	1.67	EC	0.209	lb ai/a	16	fl oz/a	VT	B	1.0 a	2.7 a	1.0 a	2.7 b	63 abc	3 abc
12	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
13	DPX-YT669	2.08	SC	0.146	lb ai/a	9	fl oz/a	VT	B	1.0 a	3.0 a	1.0 a	3.0 b	63 abc	3 abc
13	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	VT	B						
LSD (P=.05)										0.00	0.58	0.00	0.47	16.6	0.7
Replicate F										0.000	1.155	0.000	1.147	4.575	5.720
Replicate Prob(F)										1.0000	0.3504	1.0000	0.3468	0.0015	0.0003
Treatment F										0.000	22.087	0.000	102.669	1.291	1.400
Treatment Prob(F)										1.0000	0.0001	1.0000	0.0001	0.2541	0.1993

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: BASF (CF1), DuPont.
2. Ratings: Record disease pressure in each plot at application; Percent disease control and CI at 28 and 42 DAT, and at R5 including stalk rot and anthracnose top die back.
   Percent greenness 1-2 weeks before harvest.
   Corn percent corn lodging at or near harvest; Stalk push test at harvest.
3. Yield.
4. Blanket PRE application of Lumax + Atrazine and maintain weedfree with Touchdown Total if necessary.
5. Missing data for treatment 5 was due to unavailablity of product at application time, nothing was applied.
6. CERCZM = Gray leaf spot of corn (Cercospora zeae-maydis).
   PUCCPY = Southern rust of corn (Puccinia polysora).
7. DAT = Days after either the V6 or VT application. EOS = End of season.
   The nontreated plots were rated the same day as the VT treatments
   Ratings at 0 days after the V6 and VT applications were on 7-18-09 and 8-19-09, respectively.
   Ratings at 28 days after the V6 and VT applications were on 8-15-09 and 9-16-09, respectively.
   Ratings at 42 days after the V6 and VT applications were on 8-29-09 and 9-30-09, respectively.
   Ratings at R5 were on 9-30-09.
8. Harvested 12-4-09, (2) 30 inch rows by 27 ft.

Evaluation of Quilt Xcel Formulation in Corn.

Trial ID: 09-23M-S90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-24-09

Objectives: Evalaute Quilt versus Headline, Stratego and Twinline for activity on corn diseases, corn safety and yield.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-69 **Description:** RR2(VT3)
Planting Method: SEEDED **Planting Date:** 06-24-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN **Seed Bed:** MEDIUM/TRASHY

Pest 1 Type: D **Code:** CERCZM Cercospora zeae-maydis Gray leaf spot of corn
Pest 2 Type: D **Code:** PUCCPY Puccinia polysora Southern rust of corn

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** MINIMUM-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.8 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** CASEYVILLE
CEC: 8 **Fert. Level:** P1: 145 LB/A, K: 383 LB/A

Application Description

	A
Application Date:	08-21-09
Time of Day:	11:45
Application Method:	Spray
Application Timing:	R1
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	78 F
% Relative Humidity:	70
Wind Velocity, Unit:	8 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	20
	08-21-09
Crop stage at application:	R1
Height Min, Max (inch):	86 96

Pest Stage At Each Application

Application Date:	08-21-09
Weed Code:	CERCZM
Stage Majority (leaves):	NA
Weed Code:	PUCCPY
Stage Majority (leaves):	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	5 FT
Spray Volume, Unit:	20 GPA

Southern Illinois University

Evaluation of Quilt Xcel Formulation in Corn.

Trial ID: 09-23M-S90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-04-09 Moisture Percent	ZEAMD 12-04-09 Yield bu/A	ZEAMD 09-04-09 Injury Percent
	Pest Code											
	Crop Code									ZEAMD	ZEAMD	ZEAMD
	Rating Date									12-04-09	12-04-09	09-04-09
	Rating Data Type									Moisture	Yield	Injury
	Rating Unit									Percent	bu/A	Percent
	Rating Timing											
	Trt-Eval Interval											14 DA-A
1	NONTREATED									20.4 a	144 b	0 a
2	A13705	1.67	SC	0.183	lb ai/a	14	fl oz/a	R1	A	20.7 a	152 ab	0 a
3	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R1	A	21.3 a	162 a	0 a
4	QUILT XCEL	2.2	SC	0.24	lb ai/a	14	fl oz/a	R1	A	21.1 a	155 ab	0 a
5	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R1	A	20.4 a	158 ab	0 a
6	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	R1	A	20.8 a	160 a	0 a
7	TWINLINE	1.75	EC	0.096	lb ai/a	7	fl oz/a	R1	A	20.3 a	161 a	0 a
	LSD (P=.05)									1.15	13.5	0.0
	Replicate F									2.087	10.508	0.000
	Replicate Prob(F)									0.1378	0.0003	1.0000
	Treatment F									1.058	1.786	0.000
	Treatment Prob(F)									0.4222	0.1588	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Southern Illinois University

Evaluation of Quilt Xcel Formulation in Corn.

Trial ID: 09-23M-S90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	CERCZM ZEAMD 08-21-09 Incidence Percent	CERCZM ZEAMD 08-21-09 Severity Percent	CERCZM ZEAMD 09-11-09 Incidence Percent	CERCZM ZEAMD 09-11-09 Severity Percent	CERCZM ZEAMD 09-24-09 Incidence Percent	CERCZM ZEAMD 09-24-09 Severity Percent	CERCZM ZEAMD 10-09-09 Incidence Percent	CERCZM ZEAMD 10-09-09 Severity Percent
	Pest Code									CERCZM	CERCZM	CERCZM	CERCZM	CERCZM	CERCZM	CERCZM	CERCZM
	Crop Code									ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
	Rating Date									08-21-09	08-21-09	09-11-09	09-11-09	09-24-09	09-24-09	10-09-09	10-09-09
	Rating Data Type									Incidence	Severity	Incidence	Severity	Incidence	Severity	Incidence	Severity
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing																
	Trt-Eval Interval									0 DA-A	0 DA-A	21 DA-A	21 DA-A	34 DA-A	34 DA-A	49 DA-A	49 DA-A
1	NONTREATED									0 a	0 a	1.0 a	1.0 a	1.0 a	1.0 a	1.0 a	1.0 a
2	A13705	1.67	SC	0.183	lb ai/a	14	fl oz/a	R1	A	0 a	0 a	1.0 a	0.2 b	1.0 a	0.2 b	1.0 a	0.2 b
3	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R1	A	0 a	0 a	1.0 a	0.2 b	1.0 a	0.2 b	1.0 a	0.2 b
4	QUILT XCEL	2.2	SC	0.24	lb ai/a	14	fl oz/a	R1	A	0 a	0 a	1.0 a	0.2 b	1.0 a	0.2 b	1.0 a	0.2 b
5	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R1	A	0 a	0 a	1.0 a	0.2 b	1.0 a	0.2 b	1.0 a	0.2 b
6	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	R1	A	0 a	0 a	1.0 a	0.2 b	1.0 a	0.2 b	1.0 a	0.2 b
7	TWINLINE	1.75	EC	0.096	lb ai/a	7	fl oz/a	R1	A	0 a	0 a	1.0 a	0.2 b	1.0 a	0.2 b	1.0 a	0.2 b
	LSD (P=.05)									0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00
	Replicate F									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Replicate Prob(F)									1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	Treatment F									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Treatment Prob(F)									1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Evaluation of Quilt Xcel Formulation in Corn.

Trial ID: 09-23M-S90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	PUCCPY ZEAMD 10-09-09 Incidence Percent 49 DA-A	PUCCPY ZEAMD 10-09-09 Severity Percent 49 DA-A	ZEAMD 10-19-09 Greenness Percent 59 DA-A	ZEAMD 11-05-09 Stalk Rot 0-5 EOS	ZEAMD 11-05-09 AbnormalEar /6 plnts EOS	ZEAMD 11-05-09 Lodging Percent EOS
1	NONTREATED									1.0 a	5.0 a	53 a	0.7 a	1.5 a	3 a
2	A13705	1.67	SC	0.183	lb ai/a	14	fl oz/a	R1	A	1.0 a	1.0 c	53 a	0.3 c	0.5 b	3 a
3	QUILT XCEL	2.2	SC	0.18	lb ai/a	10.5	fl oz/a	R1	A	1.0 a	1.0 c	63 a	0.3 c	0.5 b	8 a
4	QUILT XCEL	2.2	SC	0.24	lb ai/a	14	fl oz/a	R1	A	1.0 a	1.0 c	56 a	0.3 c	0.5 b	3 a
5	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R1	A	1.0 a	1.0 c	64 a	0.5 ab	0.5 b	5 a
6	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	R1	A	1.0 a	3.0 b	65 a	0.4 bc	0.5 b	5 a
7	TWINLINE	1.75	EC	0.096	lb ai/a	7	fl oz/a	R1	A	1.0 a	1.0 c	63 a	0.3 c	0.3 b	10 a
LSD (P=.05)										0.00	1.30	12.6	0.22	0.94	10.8
Replicate F										0.000	1.000	20.905	7.562	7.931	1.000
Replicate Prob(F)										1.0000	0.4155	0.0001	0.0018	0.0014	0.4155
Treatment F										0.000	13.000	1.609	4.687	1.634	0.636
Treatment Prob(F)										1.0000	0.0001	0.2019	0.0049	0.1952	0.6999

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (FAZ001A3).
2. Ratings: Many including disease present at application, CI, foliar disease severity, greenness at senescence, and pre-harvest stalk and ear evaluations.
3. Yield.
4. Blanket PRE application of Lumax + Atrazine was applied 6-24-09.
   Blanket POST Touchdown Total if necessary, was not needed, not applied.
5. Inoculation at planting and/or V6-V8 corn stage, was at V6.
6. CERCZM = Gray leaf spot of corn (Cercospora zeae-maydis).
   PUCCPY = Southern rust of corn (Puccinia polysora).
   EOS = End of season.
7. Stalk Rot, 0-5 = University of Illinois stalk rot ratings scale (Hines-Shaw-White).
   0 = no visible discoloration of the internal below ear stalk nodes or pith.
   1 = internal discoloration at the stalk nodes below the ear.
   2 = internal discoloration at the stalk nodes and in the pith below the ear.
   3 = pith separation occurring below the ear.
   4 = complete discoloration and decay of the pith between at least two nodes below the ear, but stalk still standing.
   5 = stalk lodged below the ear due to stalk rot.
8. AbnormalEar, /6 plnts = The number of abnormal ears per 6 corn plants evaluated.
9. Harvested 12-4-09, (2) 30 inch rows by 27 ft.

Endigo in Corn.

Trial ID: 09-ARC-5-E70 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 06-01-09

Objectives: To evaluate the effictiveness of Endigo 2.06ZC to protect corn silks and yield from corn rootworm adults and Japanese beetles.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-01-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 138 LB/A, K2O 0 LB/A

% OM: 1.8 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** STOY
CEC: 8.2 **Fert. Level:** P1: 61 LB/A, K: 282 LB/A

Application Description

	A
Application Date:	08-05-09
Time of Day:	16:30
Application Method:	Spray
Application Timing:	THRSH
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	83 F
% Relative Humidity:	68
Wind Velocity, Unit:	3 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	79 F
Soil Moisture:	ABONOR
% Cloud Cover:	10
	08-05-09
Crop stage at application:	R2
Height Min, Max (inch):	110 118

Pest Stage At Each Application

Application Date:	08-05-09
Weed Code:	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	5 FT
Spray Volume, Unit:	20 GPA

Endigo in Corn.

Trial ID: 09-ARC-5-E70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code																
Crop Code										ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Rating Date										11-09-09	11-09-09	11-09-09	08-04-09	08-08-09	08-12-09	08-19-09
Rating Data Type										Moisture	Test wt.	Yield	Jap Beetle	Jap Beetle	Jap Beetle	Jap Beetle
Rating Unit										Percent	lb/bu	bu/A	#/10 ear	#/10 ear	#/10 ear	#/10 ear
Rating Timing																
Trt-Eval Interval													-1 DA-A	3 DA-A	7 DA-A	14 DA-A
1	ENDIGO	2.06	SC	0.0563	lb ai/a	3.5	fl oz/a	THRSH	A	15.8 b	54.5 a	188 a	2.0 a	0.3 b	2.3 a	0.3 a
2	ENDIGO	2.06	SC	0.0724	lb ai/a	4.5	fl oz/a	THRSH	A	15.9 b	54.3 a	177 a	0.8 a	0.5 b	2.0 a	0.5 a
3	WARRIOR II	2.09	CS	0.021	lb ai/a	1.28	fl oz/a	THRSH	A	16.4 a	54.5 a	187 a	1.5 a	0.5 b	1.0 a	0.3 a
4	WARRIOR II	2.09	CS	0.0314	lb ai/a	1.92	fl oz/a	THRSH	A	15.9 b	54.4 a	165 a	1.3 a	0.5 b	1.0 a	0.8 a
5	HERO	1.24	EC	0.0388	lb ai/a	4	fl oz/a	THRSH	A	16.0 ab	54.3 a	175 a	3.0 a	0.8 b	2.3 a	0.0 a
6	NONTREATED									16.0 ab	54.4 a	190 a	0.5 a	2.8 a	1.3 a	0.8 a
LSD (P=.05)										0.43	1.06	31.4	3.49	1.95	2.61	1.13
Replicate F										1.658	2.385	2.183	3.789	3.607	2.119	0.882
Replicate Prob(F)										0.2184	0.1100	0.1324	0.0332	0.0384	0.1406	0.4724
Treatment F										2.127	0.066	0.829	0.615	2.075	0.490	0.647
Treatment Prob(F)										0.1183	0.9964	0.5483	0.6904	0.1256	0.7785	0.6680

Means followed by same letter do not significantly differ (P=.05, LSD)

Endigo in Corn.

Trial ID: 09-ARC-5-E70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code													
Crop Code										ZEAMD	ZEAMD	ZEAMD	ZEAMD
Rating Date										08-04-09	08-08-09	08-12-09	08-19-09
Rating Data Type										Silk Clip	Silk Clip	Silk Clip	Silk Clip
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval										-1 DA-A	3 DA-A	7 DA-A	14 DA-A
1	ENDIGO	2.06	SC	0.0563	lb ai/a	3.5	fl oz/a	THRSH	A	3.0 a	2.0 b	4.3 a	4.0 a
2	ENDIGO	2.06	SC	0.0724	lb ai/a	4.5	fl oz/a	THRSH	A	1.3 a	0.0 b	3.5 a	3.8 ab
3	WARRIOR II	2.09	CS	0.021	lb ai/a	1.28	fl oz/a	THRSH	A	1.3 a	0.8 b	3.8 a	0.8 b
4	WARRIOR II	2.09	CS	0.0314	lb ai/a	1.92	fl oz/a	THRSH	A	1.3 a	0.8 b	4.3 a	4.0 a
5	HERO	1.24	EC	0.0388	lb ai/a	4	fl oz/a	THRSH	A	2.5 a	2.5 ab	5.5 a	3.8 ab
6	NONTREATED									2.5 a	5.0 a	5.5 a	3.5 ab
LSD (P=.05)										4.11	2.57	4.13	3.17
Replicate F										3.714	8.161	9.639	7.583
Replicate Prob(F)										0.0353	0.0019	0.0009	0.0026
Treatment F										0.342	4.471	0.392	1.431
Treatment Prob(F)										0.8794	0.0108	0.8464	0.2695

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (ITH001A3).
2. Ratings: Pre-counts of insects along with 3, 7 and 14 day post application counts.
   (If this trial is done on a five day spray schedule pre-counts would be taken along with three and five day counts - five day counts would come prior to sequential application.) Evaluate 10 ears/plot.
   Percent of silk clipping - 3, 7 and 14 da post application.
3. Yield.
4. Make applications after R1 when corn rootworm adults or Japanese beetles reach economic thresholds.
   This would be five per ear for rootworm adults or three per ear for Japanese beetle.
   Multiple applications may be required. If so, apply on a spray schedule with a maximum of 4 applications.
5. Blanket PRE application of Lumax (2.5 qt/A) + Aatrex (1 qt/A) to the entire plot area was applied on 6-2-09.
6. Jap Beetle, #/10 ear = Japanese beetles, number per 10 ears.
7. Harvested 11-9-09, (2) 30 inch rows by 27 ft.

Evaluation of Microsun ZnO in Corn.

Trial ID: 09-WF-SE-N70 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-28-09

Objectives: Evaluate the seed treatment product MAIZE Coat Zn for enhanced corn growth and development in a Roundup Ready system.

Crop 1: ZEAMD Dent corn **Variety:** P33K44 **Description:** RR/LL
Planting Method: SEEDED **Planting Date:** 06-28-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.1 **Texture:** SILT LOAM
pH: 5.6 **Soil Name:** WINFIELD
CEC: 10 **Fert. Level:** P1: 54 LB/A, K: 316 LB/A

Application Description

	A
Application Date:	07-24-09
Time of Day:	11:15
Application Method:	Spray
Application Timing:	V6
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	82 F
% Relative Humidity:	92
Wind Velocity, Unit:	1 MPH
Wind Direction:	N
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	10
	07-24-09
Crop stage at application:	V6
Height Min, Max (inch):	17 22

Pest Stage At Each Application

Application Date:	07-24-09
Weed Code:	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	10 FT
Spray Volume, Unit:	20 GPA

Evaluation of Microsun ZnO in Corn.

Trial ID: 09-WF-SE-N70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-16-09 Moisture Percent	ZEAMD 12-16-09 Yield bu/A	ZEAMD 07-27-09 Plants 000/A 3 DA-A	ZEAMD 07-31-09 SPAD 7 DA-A	ZEAMD 10-26-09 Height Inch EOS
1	NO SEED TREATMENT									23.0 a	126 a	30.2 a	50.7 a	113.7 a
2	NO SEED TREATMENT									22.7 a	121 a	29.6 a	50.5 a	112.3 bc
2	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V6	A					
3	MICROSUN ZNO SEED TRT			4	oz wt/cwt					22.6 a	129 a	29.5 a	51.4 a	113.3 ab
4	MICROSUN ZNO SEED TRT			4	oz wt/cwt					22.7 a	122 a	29.5 a	51.1 a	111.7 c
4	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V6	A					
5	MICROSUN ZNO SEED TRT			6	oz wt/cwt					23.0 a	127 a	30.4 a	51.1 a	113.3 ab
6	MICROSUN ZNO SEED TRT			6	oz wt/cwt					22.7 a	119 a	30.1 a	51.3 a	111.7 c
6	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V6	A					
LSD (P=.05)										0.65	10.7	1.59	1.35	1.23
Replicate F										1.901	0.429	1.391	3.538	20.500
Replicate Prob(F)										0.1300	0.8239	0.2616	0.0148	0.0001
Treatment F										0.532	1.212	0.531	0.673	4.500
Treatment Prob(F)										0.7501	0.3325	0.7510	0.6478	0.0046

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/RFK.
2. Ratings: Corn stand count 30 DAP, SPAD reading after POST application, plant height at harvest, grain yield.
3. Blanket PRE application of Lumax (3 qt/A) plus Aatrex 90 (1.38 lb/A) was applied 6-28-09.
4. SPAD = Minolta chlorophyll meter (model SPAD 502) reading on on the newest fully developed leaf.
   Plants 000/A = Thousands per acre.
5. EOS = End of season.
6. Harvested 12-16-09, (2) 30 inch rows by 27 ft.

Bayer ProTech Plus in Corn.

Trial ID: 09-20A-W160 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-26-09

Objectives: Evaluate the combination of technologies in the Bayer ProTechPlus concept for corn response and yield.

Crop 1: ZEAMD Dent corn **Variety:** RR
Planting Method: SEEDED **Planting Date:** 06-26-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: D **Code:** CERCZM Cercospora zeae-maydis Gray leaf spot of corn
Pest 2 Type: D **Code:** PUCCPY Puccinia polysora Southern rust of corn

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 36 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1 78 LB/A, K 423 LB/A

Application Description

	A	B	C	D
Application Date:	06-26-09	06-27-09	07-13-09	08-21-09
Time of Day:		9:45	13:30	12:15
Application Method:	Seed	Spray	Spray	Spray
Application Timing:	Treatment	PRE	POST	ATGRST
Application Placement:		BROSOI	BROFOL	BROFOL
Applied By:		DKP	NVH	DKP
Air Temperature, Unit:		86 F	80 F	78 F
% Relative Humidity:		88	92	70
Wind Velocity, Unit:		1 MPH	4 MPH	8 MPH
Wind Direction:		NE	SE	W
Dew Presence (Y/N):		N	N	N
Soil Moisture:		NORMAL	ABONOR	ABONOR
% Cloud Cover:		20	30	60
	06-26-09	06-27-09	07-13-09	08-21-09
Crop stage at application:	NA	NA	V5-V6	VT
Height Min, Max (inch):			16 18	96 120

Pest Stage At Each Application

Application Date:	06-26-09	06-27-09	07-13-09	08-21-09
Weed Code:	CERCZM	CERCZM	CERCZM	CERCZM
Stage Majority (leaves):	NA	NA	NA	NA
Weed Code:	PUCCPY	PUCCPY	PUCCPY	PUCCPY
Stage Majority (leaves):	NA	NA	NA	NA

Application Equipment

Appl. Equipment:	SEED TRT	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:		30 PSI	30 PSI	30 PSI
Nozzle Type:		Flat fan	Flat fan	Flat fan
Nozzle Size:		XR 8002	XR 8002	XR 8002
Boom Length, Unit:		5 FT	5 FT	5 FT
Spray Volume, Unit:		15 GPA	15 GPA	15 GPA

Bayer ProTech Plus in Corn.

Trial ID: 09-20A-W160 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-06-09 Moisture Percent	ZEAMD 12-06-09 Yield bu/A	ZEAMD 07-22-09 Vigor 1-6 21 DAE	ZEAMD 07-22-09 Plants 000/A 21 DAE
1	MAXIM XL	2.683333	LS			0.631	oz/cwt	SEEDTRT	A	23.7 ab	168 a	2.2 a	30.2 a
1	APRON XL	2.916667	ES			0.1659	oz/cwt	SEEDTRT	A				
1	PRO-IZED RED COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
1	DYNASTY	0.8288333	FS			0.584	oz/cwt	SEEDTRT	A				
1	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
1	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
1	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
2	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	23.3 abc	169 a	2.2 a	30.6 a
2	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
2	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
2	PONCHO FS	5	FS					SEEDTRT	A				
2	GB 126 240FS	2.060417	FS					SEEDTRT	A				
2	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
2	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
2	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
2	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
3	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	23.5 abc	167 a	2.5 a	30.6 a
3	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
3	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
3	PONCHO FS	5	FS					SEEDTRT	A				
3	GB 126 240FS	2.060417	FS					SEEDTRT	A				
3	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
3	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
3	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
3	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
3	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
3	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
3	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
4	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	23.0 c	172 a	2.3 a	29.5 a
4	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
4	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
4	PONCHO FS	5	FS					SEEDTRT	A				
4	GB 126 240FS	2.060417	FS					SEEDTRT	A				
4	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
4	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
4	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
4	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
4	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
4	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
5	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	23.8 a	173 a	2.2 a	30.3 a
5	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
5	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
5	PONCHO FS	5	FS					SEEDTRT	A				
5	GB 126 240FS	2.060417	FS					SEEDTRT	A				
5	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
5	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
5	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
5	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
5	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
5	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
5	TEST COMPOUND 1	100	SL	1	pt/a	1	pt/a	ATGRST	D				

Bayer ProTech Plus in Corn.

Trial ID: 09-20A-W160 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 12-06-09 Moisture Percent	ZEAMD 12-06-09 Yield bu/A	ZEAMD 07-22-09 Vigor 1-6 21 DAE	ZEAMD 07-22-09 Plants 000/A 21 DAE
6	MAXIM XL	2.683333	LS			0.631	oz/cwt	SEEDTRT	A	23.1 bc	168 a	2.3 a	30.2 a
6	APRON XL	2.916667	ES			0.1659	oz/cwt	SEEDTRT	A				
6	DYNASTY	0.8288333	FS			0.584	oz/cwt	SEEDTRT	A				
6	CRUISER 5FS	5	FS					SEEDTRT	A				
6	PRO-IZED RED COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
6	L1463-B	0	AL			7.55	oz/cwt	SEEDTRT	A				
6	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
6	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
6	QUILT	1.66	SC	0.182	lb ai/a	14	oz/a	ATGRST	D				
7	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	23.0 c	171 a	2.3 a	29.9 a
7	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
7	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
7	PONCHO FS	5	FS					SEEDTRT	A				
7	GB 126 240FS	2.060417	FS					SEEDTRT	A				
7	PRO-IZED PURPLE COLORAN	0	FS			1.899	oz/cwt	SEEDTRT	A				
7	L1463-B	0	AL			18.93	oz/cwt	SEEDTRT	A				
7	L1273-B	0.8333333	AL			2.264	oz/cwt	SEEDTRT	A				
7	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
7	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
7	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
7	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
LSD (P=.05)										0.64	9.1	0.47	1.47
Replicate F										4.933	9.814	18.706	2.635
Replicate Prob(F)										0.0021	0.0001	0.0001	0.0433
Treatment F										2.350	0.497	0.588	0.567
Treatment Prob(F)										0.0559	0.8051	0.7370	0.7534

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTech Plus in Corn.

Trial ID: 09-20A-W160 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	CERCZM ZEAMD 10-13-09 Incidence Percent EOS	CERCZM ZEAMD 10-13-09 Severity Percent EOS	PUCCPY ZEAMD 10-13-09 Incidence Percent EOS	PUCCPY ZEAMD 10-13-09 Severity Percent EOS
1	MAXIM XL	2.683333	LS			0.631	oz/cwt	SEEDTRT	A	1 a	1.0 a	1 a	1.4 ab
1	APRON XL	2.916667	ES			0.1659	oz/cwt	SEEDTRT	A				
1	PRO-IZED RED COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
1	DYNASTY	0.8288333	FS			0.584	oz/cwt	SEEDTRT	A				
1	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
1	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
1	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
2	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	1 a	1.0 a	1 a	2.3 a
2	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
2	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
2	PONCHO FS	5	FS					SEEDTRT	A				
2	GB 126 240FS	2.060417	FS					SEEDTRT	A				
2	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
2	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
2	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
2	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
2	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
2	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
3	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	1 a	0.9 a	1 a	1.6 ab
3	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
3	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
3	PONCHO FS	5	FS					SEEDTRT	A				
3	GB 126 240FS	2.060417	FS					SEEDTRT	A				
3	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
3	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
3	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
3	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
3	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
3	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
3	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
4	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	1 a	0.9 a	1 a	0.6 b
4	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
4	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
4	PONCHO FS	5	FS					SEEDTRT	A				
4	GB 126 240FS	2.060417	FS					SEEDTRT	A				
4	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
4	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
4	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
4	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
4	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
4	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
4	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
5	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	1 a	0.9 a	1 a	0.6 b
5	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
5	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
5	PONCHO FS	5	FS					SEEDTRT	A				
5	GB 126 240FS	2.060417	FS					SEEDTRT	A				
5	PRO-IZED GREEN COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
5	PRECISE S FINISHER 1006	0	AL			15.1	oz/cwt	SEEDTRT	A				
5	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
5	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
5	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
5	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
5	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
5	TEST COMPOUND 1	100	SL	1	pt/a	1	pt/a	ATGRST	D				

Bayer ProTech Plus in Corn.

Trial ID: 09-20A-W160 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	CERCZM ZEAMD 10-13-09 Incidence Percent EOS	CERCZM ZEAMD 10-13-09 Severity Percent EOS	PUCCPY ZEAMD 10-13-09 Incidence Percent EOS	PUCCPY ZEAMD 10-13-09 Severity Percent EOS
6	MAXIM XL	2.683333	LS			0.631	oz/cwt	SEEDTRT	A	1 a	1.0 a	1 a	0.5 b
6	APRON XL	2.916667	ES			0.1659	oz/cwt	SEEDTRT	A				
6	DYNASTY	0.8288333	FS			0.584	oz/cwt	SEEDTRT	A				
6	CRUISER 5FS	5	FS					SEEDTRT	A				
6	PRO-IZED RED COLORANT	0	FS			1.138	oz/cwt	SEEDTRT	A				
6	L1463-B	0	AL			7.55	oz/cwt	SEEDTRT	A				
6	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
6	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
6	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
6	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
6	QUILT	1.66	SC	0.182	lb ai/a	14	oz/a	ATGRST	D				
7	VORTEX FL	3.735	FS			0.324	oz/cwt	SEEDTRT	A	1 a	1.0 a	1 a	0.6 b
7	ALLEGIANCE FL	2.65	FS			0.365	oz/cwt	SEEDTRT	A				
7	TRILEX FLOWAB FUNGICIDE	2	FS			0.605	oz/cwt	SEEDTRT	A				
7	PONCHO FS	5	FS					SEEDTRT	A				
7	GB 126 240FS	2.060417	FS					SEEDTRT	A				
7	PRO-IZED PURPLE COLORAN	0	FS			1.899	oz/cwt	SEEDTRT	A				
7	L1463-B	0	AL			18.93	oz/cwt	SEEDTRT	A				
7	L1273-B	0.8333333	AL			2.264	oz/cwt	SEEDTRT	A				
7	TALC	100	WP			3.786	oz/cwt	SEEDTRT	A				
7	CORVUS	2.62	SC	0.115	lb ai/a	5.6	oz/a	PRE	B				
7	AATREX	4	SC	1.5	lb ai/a	3	pt/a	PRE	B				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C				
7	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	POST	C				
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	C				
7	USF0731	4.17	SC	0.163	lb ai/a	5	oz/a	ATGRST	D				
LSD (P=.05)										0.0	0.13	0.0	1.39
Replicate F										0.000	4.500	0.000	1.738
Replicate Prob(F)										1.0000	0.0035	1.0000	0.1563
Treatment F										0.000	1.000	0.000	2.037
Treatment Prob(F)										1.0000	0.4435	1.0000	0.0915

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (M3C).
2. Ratings: Corn stand counts (2 rows by 17.5 ft) at 21-28 DAE, Corn vigor rating same day as stand counts on a 1 to 6 scale, (1 = highly superior to market standard, 6 = unacceptably inferior to market standard).
   Assess foliar disease if there are noticable treatment differences.
   Note insect or disease damage as incidence and/or severity if great enough to affect yield comparisons.
3. Yield - trim plots to 30 ft length for harvesting.
4. Mixing and spraying instruction; Applications B and C to be bulk sprayed 10 ft wide.
5. Plants 000/A = Thousands per acre. DAE = Days after crop emergence. EOS = End of season.
6. Plots were evaluated at 0 DAT with no observable disease.
   CERCZM = Gray leaf spot of corn (Cercospora zeae-maydis).
   PUCCPY = Southern rust of corn (Puccinia polysora).
7. Harvested 12-6-09, (2) 30 inch rows by 30 ft.

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Miscellaneous, Including Sorghum, Pasture, and Wheat

Southern Illinois University

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Evaluate crop tolerance and weed control of Callisto and Lumax applied in a sequential program with Dual Magnum or applied alone as a post-directed application in grain sorghum.

Crop 1: SORVU Grain sorghum **Variety:** Pioneer 84662 **Description:** Concep II
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 9 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** SETFA Setaria faberi Herrm. foxtail, giant
Pest 2 Type: W **Code:** ABUTH Abutilon theophrasti Medicus velvetleaf
Pest 3 Type: W **Code:** AMBEL Ambrosia artemisiifolia L. ragweed, common
Pest 4 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 5 Type: W **Code:** IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 26 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 5.3 **Soil Name:** WINFIELD
CEC: 8 **Fert. Level:** P1: 109 LB/A, K: 592 LB/A

Application Description

	A	B	C	D
Application Date:	07-01-09	07-16-09	07-16-09	07-23-09
Time of Day:	8:45	15:45	16:00	12:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	6-7"SG	6-7"DIR	11-12"DIR
Application Placement:	BROSOI	BROSOI	BROSOI	BROSOI
Applied By:	DKP	NVH	NVH	NVH
Air Temperature, Unit:	70 F	86 F	86 F	80 F
% Relative Humidity:	92	72	72	60
Wind Velocity, Unit:	4 MPH	3 MPH	3 MPH	1 MPH
Wind Direction:	NW	NE	NE	W
Dew Presence (Y/N):	N	N	N	N
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL
% Cloud Cover:	80	15	15	10
	07-01-09	07-16-09	07-16-09	07-23-09
Crop stage at application:	NA	V4	V4	V5
Height Min, Max (inch):		6 8	6 8	10 12

Pest Stage At Each Application

Application Date:	07-01-09	07-16-09	07-16-09	07-23-09
Weed Code:	SETFA	SETFA	SETFA	SETFA
Stage Majority (leaves):	NA	3	3	3
Stage Min, Max:		1 5	1 5	1 3
Height Majority:		3 IN	3 IN	3 IN
Height Min, Max:		1 6	1 6	1 6
Density, Unit:		10 FT2	10 FT2	0.01 FT2
Weed Code:	ABUTH	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	2	2	2
Stage Min, Max:		COTY 4	COTY 4	1 4
Height Majority:		2 IN	2 IN	2.5 IN
Height Min, Max:		0.5 2.5	0.5 2.5	1.5 4
Density, Unit:		0.6 FT2	0.6 FT2	1 FT2
Weed Code:	AMBEL	AMBEL	AMBEL	AMBEL
Stage Majority (leaves):	NA	2	2	4
Stage Min, Max:		COTY 3	COTY 3	2 6
Height Majority:		1.5 IN	1.5 IN	3 IN
Height Min, Max:		0.5 3	0.5 3	2 4.5
Density, Unit:		0.2 FT2	0.2 FT2	0.6 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	4	4	6
Stage Min, Max:		2 7	2 7	4 12
Height Majority:		2 IN	2 IN	3 IN
Height Min, Max:		1 2.5	1 2.5	1 8
Density, Unit:		1.5 FT2	1.5 FT2	0.01 FT2
Weed Code:	IPOHE	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	3	3	4
Stage Min, Max:		COTY 5	COTY 5	3 6
Height Majority:		2.5 IN	2.5 IN	5 IN
Height Min, Max:		0.5 4	0.5 4	3 8
Density, Unit:		0.75 FT2	0.75 FT2	0.7 FT2

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR8002EVS	XR8002EVS
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SORVU 11-13-09 Moisture Percent	SORVU 11-13-09 Yield bu/A	SORVU 07-23-09 Injury Percent 7 DA-B+C 0 DA-D	SORVU 07-30-09 Injury Percent 14 DA-B+C 7 DA-D	SORVU 08-06-09 Injury Percent 21 DA-B+C 14 DA-D	SORVU 08-13-09 Injury Percent 21 DA-D
1	NONTREATED									25.8 bcd	12 ef	0 g	0 f	0 g	0 a
2	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B	27.7 abc	22 de	27 d	25 c	24 bc	
2	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B						
3	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	25.8 bcd	19 de	29 cd	22 c	22 cd	
3	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B						
3	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	23.3 d	52 ab	16 ef	11 de	7 fg	
4	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"DIR	C						
4	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	23.0 d	53 ab	20 e	18 cd	17 cde	
5	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	6-7"DIR	C						
5	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	24.4 d	41 bc	33 bcd	23 c	13 def	
6	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"DIR	C						
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"DIR	C						
6	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-7"DIR	C	28.5 ab	34 cd	38 b	37 b	33 b	
7	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	6-7"DIR	C						
7	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"DIR	C						
7	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C						
8	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	29.7 a	65 a	0 g	10 de	5 fg	0 a
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	11-12"DIR	D						
8	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	11-12"DIR	D						
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	11-12"DIR	D						
8	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D						
9	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	27.8 abc	56 ab	2 g	10 de	6 fg	0 a
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	11-12"DIR	D						
9	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	11-12"DIR	D						
9	AATREX	4	SC	1	lb ai/a	2	pt/a	11-12"DIR	D						
9	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	24.0 d	42 bc	13 f	5 ef	4 fg	
10	PEAK	57	WG	0.0267	lb ai/a	0.75	oz/a	6-7"SG	B						
10	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"SG	B						
10	AGRIDEX	100	SL	1	% v/v	1	% v/v	6-7"SG	B						
11	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	30.0 a	1 f	63 a	72 a	80 a	
11	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"SG	B						
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"SG	B						
11	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	24.9 cd	13 ef	33 bc	18 cd	12 ef	
12	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	6-7"SG	B						
LSD (P=.05)										2.97	15.9	6.5	7.8	9.5	0.0
Replicate F										7.015	4.922	1.445	5.272	1.350	0.000
Replicate Prob(F)										0.0044	0.0171	0.2573	0.0135	0.2799	1.0000
Treatment F										5.789	14.295	69.813	49.852	44.947	0.000
Treatment Prob(F)										0.0002	0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										SETFA		SETFA		SETFA		SETFA
Crop Code																
Rating Date										07-23-09		08-13-09		08-20-09		08-27-09
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing										7 DA-B+C		28 DA-B+C				42 DA-B+C
Trt-Eval Interval										0 DA-D				28 DA-D		35 DA-D
1	NONTREATED									0	e	0	f			0 e
2	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B	52	c	13	e			13 de
2	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B							
3	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	50	c	7	ef			7 de
3	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B							
3	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	50	c	23	d			20 d
4	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"DIR	C							
4	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	73	b	70	b			68 b
5	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	6-7"DIR	C							
5	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	70	b	52	c			42 c
6	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"DIR	C							
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"DIR	C							
6	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-7"DIR	C	90	a	78	a			70 b
7	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	6-7"DIR	C							
7	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"DIR	C							
7	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
8	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	97	a			83	a	90 a
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	11-12"DIR	D							
8	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	11-12"DIR	D							
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	11-12"DIR	D							
8	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D							
9	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	97	a			87	a	94 a
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	11-12"DIR	D							
9	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	11-12"DIR	D							
9	AATREX	4	SC	1	lb ai/a	2	pt/a	11-12"DIR	D							
9	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	42	d	10	e			5 e
10	PEAK	57	WG	0.0267	lb ai/a	0.75	oz/a	6-7"SG	B							
10	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"SG	B							
10	AGRIDEX	100	SL	1	% v/v	1	% v/v	6-7"SG	B							
11	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	40	d	13	e			7 de
11	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"SG	B							
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"SG	B							
11	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	0	e	0	f			2 e
12	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	6-7"SG	B							
LSD (P=.05)										7.1		7.9		7.2		14.9
Replicate F										1.983		0.834		81.000		0.649
Replicate Prob(F)										0.1615		0.4502		0.0122		0.5324
Treatment F										181.499		119.815		4.000		50.807
Treatment Prob(F)										0.0001		0.0001		0.1835		0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										ABUTH	ABUTH	ABUTH	ABUTH
Crop Code													
Rating Date										07-23-09	08-13-09	08-13-09	08-27-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										7 DA-B+C	28 DA-B+C		42 DA-B+C
Trt-Eval Interval										0 DA-D		28 DA-D	35 DA-D
1	NONTREATED									0 c	0 b		0 c
2	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B	99 a	99 a		99 a
2	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B				
3	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	99 a	99 a		99 a
3	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B				
3	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99 a	99 a		99 a
4	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"DIR	C				
4	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99 a	99 a		99 a
5	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	6-7"DIR	C				
5	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99 a	99 a		99 a
6	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"DIR	C				
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"DIR	C				
6	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-7"DIR	C	99 a	99 a		99 a
7	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	6-7"DIR	C				
7	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"DIR	C				
7	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
8	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	33 b		96 a	98 b
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	11-12"DIR	D				
8	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	11-12"DIR	D				
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	11-12"DIR	D				
8	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D				
9	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	30 b		99 a	99 a
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	11-12"DIR	D				
9	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	11-12"DIR	D				
9	AATREX	4	SC	1	lb ai/a	2	pt/a	11-12"DIR	D				
9	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	99 a	99 a		99 a
10	PEAK	57	WG	0.0267	lb ai/a	0.75	oz/a	6-7"SG	B				
10	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"SG	B				
10	AGRIDEX	100	SL	1	% v/v	1	% v/v	6-7"SG	B				
11	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	99 a	99 a		99 a
11	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"SG	B				
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"SG	B				
11	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	96 a	99 a		99 a
12	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	6-7"SG	B				
LSD (P=.05)										8.9	0.0	12.9	1.1
Replicate F										2.018	0.000	1.000	1.000
Replicate Prob(F)										0.1568	1.0000	0.5000	0.3840
Treatment F										140.067	0.000	1.000	5500.563
Treatment Prob(F)										0.0001	1.0000	0.4226	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										AMBEL		AMBEL		AMBEL		AMBEL
Crop Code																
Rating Date										07-23-09		08-13-09		08-13-09		08-27-09
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing										7 DA-B+C		28 DA-B+C				42 DA-B+C
Trt-Eval Interval										0 DA-D				28 DA-D		35 DA-D
1	NONTREATED									0	d	0	b			0 c
2	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B	99	a	99	a			99 a
2	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B							
3	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	99	a	99	a			99 a
3	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B							
3	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99	a	99	a			99 a
4	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"DIR	C							
4	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99	a	99	a			99 a
5	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	6-7"DIR	C							
5	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99	a	99	a			99 a
6	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"DIR	C							
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"DIR	C							
6	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-7"DIR	C	99	a	99	a			99 a
7	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	6-7"DIR	C							
7	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"DIR	C							
7	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C							
8	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	50	c			98	a	95 b
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	11-12"DIR	D							
8	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	11-12"DIR	D							
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	11-12"DIR	D							
8	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D							
9	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	57	b			99	a	99 a
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	11-12"DIR	D							
9	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	11-12"DIR	D							
9	AATREX	4	SC	1	lb ai/a	2	pt/a	11-12"DIR	D							
9	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	99	a	99	a			99 a
10	PEAK	57	WG	0.0267	lb ai/a	0.75	oz/a	6-7"SG	B							
10	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"SG	B							
10	AGRIDEX	100	SL	1	% v/v	1	% v/v	6-7"SG	B							
11	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	99	a	99	a			99 a
11	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"SG	B							
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"SG	B							
11	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	99	a	99	a			99 a
12	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	6-7"SG	B							
LSD (P=.05)										2.9		0.0		5.7		2.2
Replicate F										0.955		0.000		1.000		1.000
Replicate Prob(F)										0.4011		1.0000		0.5000		0.3840
Treatment F										1028.586		0.000		1.000		1437.312
Treatment Prob(F)										0.0001		1.0000		0.4226		0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										AMATA		AMATA		AMATA		AMATA
Crop Code																
Rating Date										07-23-09		08-13-09		08-13-09		08-27-09
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing										7 DA-B+C		28 DA-B+C				42 DA-B+C
Trt-Eval Interval										0 DA-D				28 DA-D		35 DA-D
1	NONTREATED									0	c	0	b			0	c
2	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B	99	a	99	a			99	a
2	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B								
3	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	99	a	99	a			99	a
3	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B								
3	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99	a	99	a			99	a
4	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"DIR	C								
4	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C								
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99	a	99	a			99	a
5	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	6-7"DIR	C								
5	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C								
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	99	a	99	a			99	a
6	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"DIR	C								
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"DIR	C								
6	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C								
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-7"DIR	C	99	a	99	a			99	a
7	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	6-7"DIR	C								
7	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"DIR	C								
7	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C								
8	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	80	b			99	a	99	b
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	11-12"DIR	D								
8	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	11-12"DIR	D								
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	11-12"DIR	D								
8	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D								
9	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	86	b			98	a	99	a
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	11-12"DIR	D								
9	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	11-12"DIR	D								
9	AATREX	4	SC	1	lb ai/a	2	pt/a	11-12"DIR	D								
9	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D								
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	99	a	99	a			99	a
10	PEAK	57	WG	0.0267	lb ai/a	0.75	oz/a	6-7"SG	B								
10	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"SG	B								
10	AGRIDEX	100	SL	1	% v/v	1	% v/v	6-7"SG	B								
11	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	99	a	99	a			99	a
11	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"SG	B								
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"SG	B								
11	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B								
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	85	b	99	a			99	a
12	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	6-7"SG	B								
LSD (P=.05)										11.3		0.0		5.7		0.3	
Replicate F										0.989		0.000		1.000		1.000	
Replicate Prob(F)										0.3887		1.0000		0.5000		0.3840	
Treatment F										54.207		0.000		1.000		88156.009	
Treatment Prob(F)										0.0001		1.0000		0.4226		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Callisto and Lumax in Sorghum.

Trial ID: 09-5A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										IPOHE	IPOHE	IPOHE	IPOHE
Crop Code													
Rating Date										07-23-09	08-13-09	08-13-09	08-27-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										7 DA-B+C	28 DA-B+C		42 DA-B+C
Trt-Eval Interval										0 DA-D		28 DA-D	35 DA-D
1	NONTREATED									0 d	0 b		0 d
2	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B	98 a	99 a		99 a
2	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B				
3	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	98 a	99 a		99 a
3	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"SG	B				
3	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B				
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	97 a	99 a		99 a
4	LUMAX	3.95	SE	1.48	lb ai/a	1.5	qt/a	6-7"DIR	C				
4	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	98 a	99 a		99 a
5	LUMAX	3.95	SE	2.47	lb ai/a	2.5	qt/a	6-7"DIR	C				
5	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"DIR	C	98 a	99 a		99 a
6	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"DIR	C				
6	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"DIR	C				
6	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	6-7"DIR	C	99 a	99 a		99 a
7	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	6-7"DIR	C				
7	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"DIR	C				
7	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"DIR	C				
8	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	43 b		67 a	70 c
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	11-12"DIR	D				
8	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	11-12"DIR	D				
8	AATREX	4	SC	0.5	lb ai/a	1	pt/a	11-12"DIR	D				
8	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D				
9	DUAL II MAGNUM	7.64	EC	0.955	lb ai/a	1	pt/a	PRE	A	23 c		77 a	82 b
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	11-12"DIR	D				
9	CALLISTO	4	SC	0.188	lb ai/a	6	fl oz/a	11-12"DIR	D				
9	AATREX	4	SC	1	lb ai/a	2	pt/a	11-12"DIR	D				
9	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	11-12"DIR	D				
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	95 a	99 a		99 a
10	PEAK	57	WG	0.0267	lb ai/a	0.75	oz/a	6-7"SG	B				
10	AATREX	4	SC	1	lb ai/a	2	pt/a	6-7"SG	B				
10	AGRIDEX	100	SL	1	% v/v	1	% v/v	6-7"SG	B				
11	PEAK	57	WG	0.0178	lb ai/a	0.5	oz/a	6-7"SG	B	99 a	99 a		99 a
11	CALLISTO	4	SC	0.094	lb ai/a	3	fl oz/a	6-7"SG	B				
11	AATREX	4	SC	0.5	lb ai/a	1	pt/a	6-7"SG	B				
11	INDUCE	100	SL	0.25	% v/v	0.25	% v/v	6-7"SG	B				
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	6-7"SG	B	98 a	99 a		99 a
12	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	6-7"SG	B				
LSD (P=.05)										19.4	0.0	24.8	10.1
Replicate F										1.901	0.000	12.333	1.759
Replicate Prob(F)										0.1731	1.0000	0.0750	0.1955
Treatment F										28.532	0.000	3.000	69.714
Treatment Prob(F)										0.0001	1.0000	0.2254	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (MS005A4).
2. Ratings: CI at 7, 14 + 21 da B/C and D; WC at 28 + 42 da B/C and 28 da D. WC prior to D.
3. Yield.
4. Special spraying instructions: Applications C + D require 3 nozzle directed spray boom and XR 8002 Even (EVS) tips. Try to treat the bottom leaves of the sorghum avoiding only the whorl.
5. Harvested 11-13-09, 2 (30) inch rows by 23 ft.

Aminopyralid for Pasture Weed Control.

Trial ID: 08-Pasture-Dow Location: SIU Beef Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 05-21-08

Objectives: Evaluation of broadleaf weed control in pasture with aminopyralid and competitive products.

Crop 1: FESSS Fescue
Planting Method: ESTABLISHED

Pest 1 Type: W	**Code:** TRFRE	Trifolium repens L.	clover, white
Pest 2 Type: W	**Code:** CIRVU	Cirsium vulgare (Savi) Ten.	thistle, bull
Pest 3 Type: W	**Code:** SOLCA	Solanum carolinense L.	horsenettle
Pest 4 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.	ragweed, common

Plot Width, Unit: 10 FT **Site Type:** PASTURE
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Application Description

	A	B
Application Date:	05-21-08	06-10-08
Time of Day:	9:00	11:00
Application Method:	Spray	Spray
Application Timing:	SPRING	2-3WA"A"
Application Placement:	BROFOL	BROFOL
Applied By:	NRJ	NRJ
Air Temperature, Unit:	71 F	81 F
% Relative Humidity:	46	55
Wind Velocity, Unit:	2 MPH	3 MPH
Dew Presence (Y/N):	Y	N
Soil Temperature, Unit:	60 F	81 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	0	30
	05-21-08	06-10-08
Crop stage at application:	HEADI	HEADI
Height Min, Max (inch):	15 25	20 30

Pest Stage At Each Application

Application Date:	05-21-08	06-10-08
Weed Code:	TRFRE	TRFRE
Stage Majority (leaves):	25	25
Stage Min, Max:	15 30	15 30
Height Majority:	3 IN	5 IN
Height Min, Max:	2 4	4 6
Density, Unit:	1 FT2	1 FT2
Weed Code:	CIRVU	CIRVU
Stage Majority (leaves):	4	8
Stage Min, Max:	2 6	3 18
Height Majority:	4 IN	6 IN
Height Min, Max:	3 6	4 8
Density, Unit:	0.5 FT2	0.5 FT2
Weed Code:	SOLCA	SOLCA
Stage Majority (leaves):	2	6
Stage Min, Max:	2 4	4 8
Height Majority:	4 IN	8 IN
Height Min, Max:	2 6	4 12
Density, Unit:	0.1 FT2	0.2 FT2
Weed Code:	AMBEL	AMBEL
Stage Majority (leaves):	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA

Aminopyralid for Pasture Weed Control.

Trial ID: 08-Pasture-Dow Location: SIU Beef Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	FESSS Injury Percent 4 WAT	FESSS Injury Percent 6 WAT	FESSS Injury Percent 8 WAT
	Pest Code											
	Crop Code									FESSS	FESSS	FESSS
	Rating Date											
	Rating Data Type									Injury	Injury	Injury
	Rating Unit									Percent	Percent	Percent
	Rating Timing									4 WAT	6 WAT	8 WAT
	Trt-Eval Interval											
1	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	SPRING	A	8 c	0 c	0 a
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A			
2	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	SPRING	A	5 cd	0 c	0 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A			
3	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	SPRING	A	38 ab	29 ab	0 a
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A			
4	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	SPRING	A	41 a	31 a	0 a
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A			
5	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	SPRING	A	39 ab	29 ab	0 a
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A			
6	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	SPRING	A	4 cd	0 c	0 a
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A			
7	CIMARRON MAX (MULTI-PACK)							SPRING	A	34 b	26 b	0 a
7	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	SPRING	A			
7	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	SPRING	A			
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A			
8	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	2-3WA"A"	B	0 d	0 c	0 a
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B			
9	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	2-3WA"A"	B	0 d	0 c	0 a
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B			
10	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	2-3WA"A"	B	3 cd	0 c	0 a
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B			
11	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	2-3WA"A"	B	6 cd	0 c	0 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B			
12	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	2-3WA"A"	B	4 cd	0 c	0 a
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B			
13	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	2-3WA"A"	B	0 d	0 c	0 a
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B			
14	CIMARRON MAX (MULTI-PACK)							2-3WA"A"	B	3 cd	0 c	0 a
14	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	2-3WA"A"	B			
14	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	2-3WA"A"	B			
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B			
LSD (P=.05)										7.0	3.4	0.0
Replicate F										0.221	0.210	0.000
Replicate Prob(F)										0.8814	0.8891	1.0000
Treatment F										44.762	128.661	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Aminopyralid for Pasture Weed Control.

Trial ID: 08-Pasture-Dow Location: SIU Beef Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRFRE Control Percent 4 WAT	TRFRE Control Percent 6 WAT	TRFRE Control Percent 8 WAT	TRFRE 09-30-08 Control Percent EOS	TRFRE 05-21-09 Control Percent 1 YAT
1	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	SPRING	A	99 a	99 a	99 a	99 a	96 ab
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
2	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	SPRING	A	99 a	99 a	99 a	99 a	96 ab
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
3	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	SPRING	A	99 a	99 a	99 a	99 a	93 ab
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
4	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	SPRING	A	99 a	99 a	99 a	99 a	95 ab
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
5	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	SPRING	A	99 a	99 a	99 a	99 a	96 ab
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
6	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	SPRING	A	98 ab	99 a	99 a	99 a	93 ab
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
7	CIMARRON MAX (MULTI-PACK)							SPRING	A	99 a	99 a	99 a	99 a	96 ab
7	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	SPRING	A					
7	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	SPRING	A					
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
8	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	2-3WA"A"	B	99 ab	99 a	99 a	99 a	96 ab
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
9	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	97 ab
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
10	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	97 a
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
11	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	90 b
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
12	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	97 a
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
13	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	2-3WA"A"	B	95 c	99 a	99 a	99 a	90 b
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
14	CIMARRON MAX (MULTI-PACK)							2-3WA"A"	B	97 b	99 a	99 a	99 a	95 ab
14	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	2-3WA"A"	B					
14	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	2-3WA"A"	B					
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
LSD (P=.05)										1.8	0.0	0.0	0.0	6.8
Replicate F										1.309	0.000	0.000	0.000	1.537
Replicate Prob(F)										0.2853	1.0000	1.0000	1.0000	0.2202
Treatment F										3.631	0.000	0.000	0.000	0.972
Treatment Prob(F)										0.0009	1.0000	1.0000	1.0000	0.4947

Means followed by same letter do not significantly differ (P=.05, LSD)

Aminopyralid for Pasture Weed Control.

Trial ID: 08-Pasture-Dow Location: SIU Beef Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	CIRVU Control Percent 4 WAT	CIRVU Control Percent 6 WAT	CIRVU Control Percent 8 WAT	CIRVU 09-30-08 Control Percent EOS	CIRVU 05-21-09 Control Percent 1 YAT
1	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	SPRING	A	99 a	99 a	99 a	99 a	99 a
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
2	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	SPRING	A	99 a	99 a	99 a	99 a	99 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
3	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	SPRING	A	96 abc	98 b	99 a	99 a	99 a
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
4	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	SPRING	A	99 a	99 a	99 a	99 a	99 a
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
5	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	SPRING	A	99 a	99 a	99 a	99 a	99 a
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
6	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	SPRING	A	98 ab	99 a	99 a	98 ab	99 a
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
7	CIMARRON MAX (MULTI-PACK)							SPRING	A	93 c	99 ab	97 b	96 b	94 b
7	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	SPRING	A					
7	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	SPRING	A					
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
8	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	2-3WA"A"	B	99 a	99 ab	99 a	99 a	99 a
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
9	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	99 a
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
10	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	99 a
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
11	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	99 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
12	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	2-3WA"A"	B	99 a	99 a	99 a	99 a	99 a
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
13	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	2-3WA"A"	B	99 a	99 ab	99 a	99 a	99 a
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
14	CIMARRON MAX (MULTI-PACK)							2-3WA"A"	B	95 bc	98 ab	99 a	98 a	99 a
14	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	2-3WA"A"	B					
14	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	2-3WA"A"	B					
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
LSD (P=.05)										4.1	1.2	1.3	1.9	3.6
Replicate F										0.680	0.356	1.000	0.706	1.000
Replicate Prob(F)										0.5698	0.7853	0.4031	0.5543	0.4031
Treatment F										1.817	0.940	1.000	1.322	1.000
Treatment Prob(F)										0.0750	0.5230	0.4697	0.2424	0.4697

Means followed by same letter do not significantly differ (P=.05, LSD)

Aminopyralid for Pasture Weed Control.

Trial ID: 08-Pasture-Dow Location: SIU Beef Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SOLCA Control Percent 4 WAT	SOLCA Control Percent 6 WAT	SOLCA Control Percent 8 WAT	SOLCA 09-30-08 Control Percent EOS	SOLCA 05-21-09 Control Percent 1 YAT
1	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	SPRING	A	98 a	99 a	99 a	99 a	98 a
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
2	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	SPRING	A	95 ab	97 abc	98 ab	99 a	99 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
3	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	SPRING	A	97 a	98 ab	96 abc	96 ab	99 a
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
4	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	SPRING	A	99 a	97 abc	95 abc	96 ab	97 a
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
5	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	SPRING	A	99 a	99 a	98 ab	97 ab	98 a
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
6	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	SPRING	A	89 bc	94 abc	97 abc	97 ab	98 a
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
7	CIMARRON MAX (MULTI-PACK)							SPRING	A	93 ab	95 abc	95 abc	97 ab	98 a
7	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	SPRING	A					
7	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	SPRING	A					
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A					
8	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	2-3WA"A"	B	97 a	95 abc	97 abc	97 ab	97 a
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
9	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	2-3WA"A"	B	83 c	83 bc	97 abc	98 ab	98 a
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
10	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	2-3WA"A"	B	94 ab	98 ab	99 ab	99 a	98 a
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
11	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	2-3WA"A"	B	95 ab	82 c	96 abc	97 ab	99 a
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
12	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	2-3WA"A"	B	98 a	99 a	99 ab	99 a	99 a
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
13	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	2-3WA"A"	B	92 ab	92 abc	95 bc	97 ab	97 a
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
14	CIMARRON MAX (MULTI-PACK)							2-3WA"A"	B	96 ab	91 abc	93 c	95 b	97 a
14	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	2-3WA"A"	B					
14	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	2-3WA"A"	B					
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B					
LSD (P=.05)										7.5	15.0	4.5	3.4	3.5
Replicate F										5.855	3.350	0.269	2.468	1.992
Replicate Prob(F)										0.0021	0.0286	0.8471	0.0763	0.1311
Treatment F										2.915	1.043	1.337	1.137	0.494
Treatment Prob(F)										0.0049	0.4334	0.2341	0.3596	0.9146

Means followed by same letter do not significantly differ (P=.05, LSD)

Aminopyralid for Pasture Weed Control.

Trial ID: 08-Pasture-Dow Location: SIU Beef Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBEL 07-22-08 Control Percent 42 DA-B	AMBEL 08-05-08 Control Percent 56 DA-B	AMBEL 09-30-08 Control Percent EOS	AMBEL 05-21-09 Control Percent 1 YAT
1	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	SPRING	A	99 a	99 a	99 a	96 a
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A				
2	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	SPRING	A	99 a	99 a	99 a	97 a
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A				
3	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	SPRING	A	99 a	99 a	99 a	97 a
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A				
4	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	SPRING	A	99 a	99 a	99 a	96 a
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A				
5	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	SPRING	A	99 a	99 a	99 a	97 a
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A				
6	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	SPRING	A	99 a	99 a	99 a	98 a
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A				
7	CIMARRON MAX (MULTI-PACK)							SPRING	A	99 a	99 a	99 a	98 a
7	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	SPRING	A				
7	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	SPRING	A				
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	A				
8	FOREFRONT R&P	3	SL	0.56	lb ae/a	1.5	pt/a	2-3WA"A"	B	99 a	99 a	99 a	98 a
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B				
9	FOREFRONT R&P	3	SL	0.75	lb ae/a	2	pt/a	2-3WA"A"	B	99 a	99 a	99 a	96 a
9	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B				
10	GF-2050	62	WG	0.058	lb ae/a	1.5	oz/a	2-3WA"A"	B	99 b	98 b	98 b	93 ab
10	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B				
11	GF-2050	62	WG	0.0775	lb ae/a	2	oz/a	2-3WA"A"	B	99 a	99 a	99 a	92 ab
11	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B				
12	GF-2050	62	WG	0.097	lb ae/a	2.5	oz/a	2-3WA"A"	B	99 a	99 a	99 a	95 a
12	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B				
13	WEEDMASTER	3.87	SL	0.97	lb ae/a	2	pt/a	2-3WA"A"	B	99 a	99 a	99 a	97 a
13	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B				
14	CIMARRON MAX (MULTI-PACK)							2-3WA"A"	B	99 a	98 b	99 a	86 b
14	CIMARRON MAX PART A	60	WG	0.0094	lb ai/a	0.25	oz/a	2-3WA"A"	B				
14	CIMARRON MAX PART B	3.87	SL	0.484	lb ae/a	1	pt/a	2-3WA"A"	B				
14	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2-3WA"A"	B				
LSD (P=.05)										0.2	0.5	0.6	6.9
Replicate F										1.000	1.721	0.688	3.689
Replicate Prob(F)										0.4031	0.1786	0.5648	0.0198
Treatment F										1.000	2.382	1.780	1.763
Treatment Prob(F)										0.4697	0.0183	0.0822	0.0856

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Dow AgroSciences (NA08L1B002).
2. WC at 4, 6 + 8 WAT; WC at end of season and 1 YAT.
3. Provide residual control estimates for summer annual weeds if possible.
4. WAT = Weeks after the SPRING or 2-3WA"A" application. DA-B = Days after the 2-3WA"A" application.
   EOS = End of season. YAT = Year after treatment.
   Ratings at 4 WAT were on 06-18-08 and 07-08-08 for the SPRING and 2-3WA"A" applications, respectively.
   Ratings at 6 WAT were on 07-02-08 and 07-22-08 for the SPRING and 2-3WA"A" applications, respectively.
   Ratings at 8 WAT were on 07-16-08 and 08-05-08 for the SPRING and 2-3WA"A" applications, respectively.
5. AMBEL emerged in nontreated strips after the 07-16-08 rating.
   For AMBEL, both the "A" and "B" applications (all treatments) were rated on the same dates.

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 10-30-08

Objectives: Assess the value of several crop management/protection technologies for improved wheat production.

Crop 1: TRZAW Winter wheat **Variety:** See comments
Planting Method: Seeded **Planting Date:** 10-30-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 7.5 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 30 LB/A applied on 10-16-08 and N 85 LB/A applied on 01-29-09.

% OM: 2.3 **Texture:** SILT LOAM
pH: 5.8 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1 79 LB/A, K 386 LB/A

Application Description

	A	B	C	D	E	F
Application Date:		04-08-09	04-08-09	05-04-09	05-11-09	04-22-09
Time of Day:		10:00	10:00	11:30	13:00	16:00
Application Method:	SEEDTRT	Spray	Spray	Spray	Spray	Spray
Application Timing:		2"W	BBCH30	BBCH39	BBCH61	SPGTHRESH
Application Placement:		BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:		RFK	RFK	RFK	RFK	RFK
Air Temperature, Unit:		55 F	55 F	66 F	68 F	74 F
% Relative Humidity:		50	50	62	60	38
Wind Velocity, Unit:		3 MPH	3 MPH	3 MPH	0 MPH	3 MPH
Soil Moisture:		ABONOR	ABONOR	ABONOR	ABONOR	ABONOR
% Cloud Cover:		0	0	0	50	0
		04-08-09	04-08-09	05-04-09	05-11-09	04-22-09
Crop stage at application:	NA	NA 4-5 FK	4-5 FK	9 FK	10.5 FK	6-7 FK
Height Min, Max (inch):		8 10	8 10	24 26	28 36	16 18

Pest Stage At Each Application

Application Date:		04-08-09	04-08-09	05-04-09	05-11-09	04-22-09

Application Equipment

Appl. Equipment:	SEEDTRT	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:		30 PSI	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:		Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:		XR 8002	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:		10 FT	10 FT	10 FT	10 FT	10 FT
Spray Volume, Unit:		15 GPA	15 GPA	15 GPA	15 GPA	15 GPA

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	P25R47	FS628	P25R47	FS628	P25R47	FS628
	Pest Code														
	Crop Code														
	Rating Date									06-25-09	06-25-09	06-25-09	06-25-09	06-25-09	06-25-09
	Rating Data Type									Moisture	Moisture	Test wt.	Test wt.	Yield	Yield
	Rating Unit									Percent	Percent	lb/bu	lb/bu	bu/A	bu/A
	Rating Timing														
	Trt-Eval Interval														
1	NO SEED TREATMENT									10.5 c	11.0 a	44.2 bc	44.9 b	78 c	77 c
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	10.3 c	10.8 a	42.3 c	47.4 ab	82 bc	80 c
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	10.8 bc	11.1 a	46.5 ab	48.1 ab	83 bc	82 bc
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	10.9 abc	11.4 a	44.2 bc	46.8 ab	83 b	87 ab
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D						
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D						
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	10.7 bc	11.2 a	44.2 bc	49.8 a	86 b	87 ab
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D						
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D						
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	11.3 ab	11.2 a	47.8 ab	48.0 ab	94 a	93 a
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C						
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C						
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E						
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E						
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	11.5 a	11.2 a	48.3 a	49.0 ab	94 a	89 a
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E						
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E						
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
LSD (P=.05)										0.68	0.66	3.73	4.39	5.1	5.7
Replicate F										0.369	0.108	0.323	0.171	0.925	0.691
Replicate Prob(F)										0.8660	0.9896	0.8949	0.9713	0.4783	0.6340
Treatment F										3.363	0.665	2.954	1.069	13.289	7.987
Treatment Prob(F)										0.0118	0.6783	0.0219	0.4027	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	P25R47	FS628	P25R47	FS628
	Pest Code												
	Crop Code												
	Rating Date									11-20-08	11-20-08	11-20-08	11-20-08
	Rating Data Type									Plants	Plants	Vigor	Vigor
	Rating Unit									mil/A	mil/A	1-9	1-9
	Rating Timing												
	Trt-Eval Interval									21 DAP	21 DAP	21 DAP	21 DAP
1	NO SEED TREATMENT									1.203 ab	1.225 a	1.0 a	1.0 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	1.200 ab	1.251 a	1.0 a	1.0 a
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	1.152 b	1.258 a	1.0 a	1.0 a
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	1.316 a	1.217 a	1.0 a	1.0 a
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D				
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	1.227 ab	1.215 a	1.0 a	1.0 a
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D				
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	1.179 b	1.278 a	1.0 a	1.0 a
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C				
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	1.205 ab	1.258 a	1.0 a	1.0 a
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
	LSD (P=.05)									0.1329	0.1254	0.00	0.00
	Replicate F									0.437	2.089	0.000	0.000
	Replicate Prob(F)									0.8190	0.0944	1.0000	1.0000
	Treatment F									1.269	0.314	0.000	0.000
	Treatment Prob(F)									0.3010	0.9249	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	P25R47 11-20-08 Aphids 1.0 sqft 21 DAP	FS628 11-20-08 Aphids 1.0 sqft 21 DAP	P25R47 05-06-09 Aphids 1.0 sqft 14 DA-F	FS628 05-06-09 Aphids 1.0 sqft 14 DA-F
1	NO SEED TREATMENT									0.0 a	0.0 a	1.0 a	0.9 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.0 a	0.0 a	0.6 b	0.8 a
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.0 a	0.0 a	0.0 c	0.0 b
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.0 a	0.0 a	0.0 c	0.0 b
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D				
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.0 a	0.0 a	0.0 c	0.0 b
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D				
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.0 a	0.0 a	0.0 c	0.0 b
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C				
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.0 a	0.0 a	0.0 c	0.0 b
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
LSD (P=.05)										0.00	0.00	0.31	0.32
Replicate F										0.000	0.000	1.434	1.397
Replicate Prob(F)										1.0000	1.0000	0.2408	0.2536
Treatment F										0.000	0.000	14.690	14.220
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code															
Crop Code										P25R47	FS628	P25R47	FS628	P25R47	FS628	P25R47
Rating Date										04-22-09	04-22-09	04-22-09	04-22-09	05-18-09	05-18-09	05-25-09
Rating Data Type										Injury	Injury	Injury	Injury	Injury	Injury	Injury
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing																
Trt-Eval Interval										14 DA-B	14 DA-B	14 DA-C	14 DA-C	14 DA-D	14 DA-D	14 DA-E
1	NO SEED TREATMENT									0 a	0 a	0 a	0 a	0 a	0 a	0 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D							
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D							
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D							
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D							
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C							
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C							
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E							
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E							
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E							
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E							
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
LSD (P=.05)										0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code											BYD	BYD	TNST/SEP	TNST/SEP
Crop Code										FS628	P25R47	FS628	P25R47	FS628
Rating Date										05-25-09	05-21-09	05-21-09	05-21-09	05-21-09
Rating Data Type										Injury	Severity	Severity	Severity	Severity
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing														
Trt-Eval Interval										14 DA-E	17 DA-D	17 DA-D	17 DA-D	17 DA-D
1	NO SEED TREATMENT									0 a	0.2 a	0.0 b	14 a	41 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.2 a	0.0 b	11 a	38 a
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.0 b	13 a	43 a
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.0 b	4 b	18 b
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D					
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D					
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.2 a	0.3 a	3 b	12 b
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D					
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D					
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.0 b	3 b	15 b
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C					
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C					
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E					
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E					
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.0 b	4 b	16 b
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E					
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E					
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
LSD (P=.05)										0.0	0.30	0.23	4.5	11.1
Replicate F										0.000	1.500	1.000	4.199	1.896
Replicate Prob(F)										1.0000	0.2194	0.4346	0.0052	0.1247
Treatment F										0.000	0.714	2.500	10.860	13.027
Treatment Prob(F)										1.0000	0.6409	0.0442	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	HEADSCAB P25R47	HEADSCAB FS628	P25R47	FS628
	Pest Code									HEADSCAB	HEADSCAB		
	Crop Code									P25R47	FS628	P25R47	FS628
	Rating Date									06-09-09	06-09-09	06-09-09	06-09-09
	Rating Data Type									Severity	Severity	Greenness	Greenness
	Rating Unit									Percent	Percent	1-9	1-9
	Rating Timing												
	Trt-Eval Interval									EOS	EOS	EOS	EOS
1	NO SEED TREATMENT									29 a	46 a	5.9 ab	2.7 b
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	32 a	43 ab	6.3 ab	3.1 ab
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	36 a	42 ab	5.7 b	2.8 b
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	31 a	40 ab	6.3 ab	4.3 a
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D				
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	31 a	41 ab	6.2 ab	4.0 ab
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D				
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	22 b	33 b	6.7 a	4.0 ab
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C				
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	21 b	38 ab	5.9 ab	2.8 b
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
LSD (P=.05)										7.4	10.0	0.91	1.43
Replicate F										9.936	0.469	0.206	0.574
Replicate Prob(F)										0.0001	0.7965	0.9575	0.7192
Treatment F										4.605	1.419	1.036	1.964
Treatment Prob(F)										0.0020	0.2400	0.4221	0.1025

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 1.

Trial ID: 09-13-S120 Location: Belleville Res. Center

Trial Comments

1. Protocol: Bayer (M3A).
2. Ratings: Plant counts and visual vigor 21-28 days after planting, count (3) 19.2 inch of row, vigor 1 to 9, 1 = best, 9 = dead.
   Crop injury from foliar applications at 14-21 DAT, and until no injury is present.
   Disease incidence and severity when disease symptoms appear and again before leaf senescence.
   Insect incidence and severity at 21-28 days after planting and 14-21 days after the SPGTHRESH application.
3. Yield.
4. Application timings: SEEDTRT = Seed treatment; 2"W = 2 inch weeds;
   BBCH30 = Beginning of stem elongation: pseudostem & tillers erect, but before first node is above the tillering node;
   BBCH39 = Flag leaf fully unrolled, ligule visible; BBCH61 = Beginning of flowering, first anther visible;
   SPGTHRESH = Spring threshold (aphids).
   Wheat varieties are P25R47 and FS628 planted in the left and right 5 ft of each plot, respectively.
5. Test wt. = Test weight. mil/A = Million per acre. DAP = Days after planting. 1.0 sqft = One square ft.
   Vigor 1 to 9, 1 = best, 9 = dead. BYD = Barley yellow dwarf. HEADSCAB = Head scab (fusarium head blight).
   EOS = End of season.
   TNST/SEP = Tan spot and/or septoria leaf blotch on the flag leaf and next lower leaf (80% tan spot and 20% septoria leaf blotch).
   Greenness = Flagleaf greenness, another late season measure of disease severity on the flagleaf, 1 = brown, 9 = deep green.
   No leaf rust was found. No stripe rust was found.
6. Harvested 6-25-09, (6) 7.5 inch rows by 20 ft.

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 10-29-08

Objectives: Assess the value of several crop management/protection technologies for improved wheat production.

Crop 1: TRZAW Winter wheat **Variety:** See comments
Planting Method: Seeded **Planting Date:** 10-29-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1 IN
Row Spacing, Unit: 7.5 IN

Pest 1 Type: W	**Code:** LAMPU	Lamium purpureum L.	deadnettle, purple
Pest 2 Type: W	**Code:** CERVU	Cerastium vulgatum L.	chickweed, mouseear
Pest 3 Type: W	**Code:** STEME	Stellaria media (L.) Vill.	chickweed, common
Pest 4 Type: W	**Code:** LAMAM	Lamium amplexicaule L.	henbit
Pest 5 Type: W	**Code:** RANAB	Ranunculus abortivus L.	buttercup, smallflower

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** NO-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 18 LB/A, P2O5 46 LB/A, K2O 120 LB/A on 10-27-08 and N 95 LB/A as 32% UAN on 3-4-09

% OM: 1.7 **Texture:** SILT LOAM
pH: 5.7 **Soil Name:** STOY
CEC: 11 **Fert. Level:** P1: 60 LB/A, K: 245 LB/A

Application Description

	A	B	C	D	E	F
Application Date:		11-26-08	04-08-09	04-29-09	05-05-09	04-17-09
Time of Day:		13:30	10:00	8:30	16:00	14:00
Application Method:	SEEDTRT	Spray	Spray	Spray	Spray	Spray
Application Timing:		2"W	BBCH30	BBCH39	BBCH61	SPGTHRESH
Application Placement:		BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:		JLM	JLM	JLM	JLM	JLM
Air Temperature, Unit:		57 F	55 F	67 F	72 F	74 F
% Relative Humidity:		42	36	83	53	45
Wind Velocity, Unit:		1 MPH	3 MPH	0 MPH	3 MPH	3 MPH
Wind Direction:		N	N	NA	S	S
Dew Presence (Y/N):		N	N	N	N	N
Soil Temperature, Unit:		40 F	44 F	59 F	65 F	52 F
Soil Moisture:		ABONOR	ABONOR	ABONOR	ABONOR	ABONOR
% Cloud Cover:		0	0	100	90	10

		11-26-08	04-08-09	04-29-09	05-05-09	04-17-09
Crop stage at application:	NA	2 LVS	5 FK	10 FK	10.5 FK	6 FK
Height Min, Max (inch):		2.5 4	9 14	1 15	28 34	16 18

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Pest Stage At Each Application

Application Date:	11-26-08	04-08-09	04-29-09	05-05-09	04-17-09	
Weed Code:	LAMPU	LAMPU	LAMPU	LAMPU	LAMPU	LAMPU
Stage Majority (leaves):	6	6				
Stage Min, Max:	4 6	4 6				
Height Majority:	4 IN	4 IN				
Height Min, Max:	3 5	2 4				
Density, Unit:	0.2 FT2	0.01 FT2				
Weed Code:	CERVU	CERVU	CERVU	CERVU	CERVU	CERVU
Stage Majority (leaves):	2					
Stage Min, Max:	2 16					
Height Majority:	2 IN					
Height Min, Max:	1 3					
Density, Unit:	0.1 FT2					
Weed Code:	STEME	STEME	STEME	STEME	STEME	STEME
Stage Majority (leaves):	8	20				
Stage Min, Max:	2 20	10 20				
Height Majority:	2 IN	8 IN				
Height Min, Max:	1 3	4 8				
Density, Unit:	0.2 FT2	0.01 FT2				
Weed Code:	LAMAM	LAMAM	LAMAM	LAMAM	LAMAM	LAMAM
Stage Majority (leaves):	4					
Stage Min, Max:	2 6					
Height Majority:	2 IN					
Height Min, Max:	1 3					
Density, Unit:	0.1 FT2					
Weed Code:	RANAB	RANAB	RANAB	RANAB	RANAB	RANAB
Stage Majority (leaves):		7				
Stage Min, Max:		2 10				
Height Majority:		4 IN				
Height Min, Max:		2 4				
Density, Unit:		0.01 FT2				

Application Equipment

Appl. Equipment:	SEEDTRT	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI	
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002	
Boom Length, Unit:	10 FT	10 FT	10 FT	10 FT	10 FT	
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA	

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	P25R47 06-19-09 Moisture Percent	FS628 06-19-09 Moisture Percent	P25R47 06-19-09 Test wt. lb/bu	FS628 06-19-09 Test wt. lb/bu	P25R47 06-19-09 Yield bu/A	FS628 06-19-09 Yield bu/A
1	NO SEED TREATMENT									12.5 b	11.8 c	48.7 bc	50.9 c	82 c	79 b
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	12.4 b	11.8 c	48.5 bc	51.0 c	86 bc	78 b
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	13.0 ab	12.0 bc	47.8 c	50.9 c	93 ab	85 ab
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	13.2 ab	12.2 ab	48.7 bc	51.3 bc	97 ab	85 ab
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D						
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D						
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	13.2 ab	12.4 a	49.5 ab	52.0 ab	93 abc	89 ab
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D						
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D						
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	13.8 a	12.3 ab	50.5 a	52.5 a	99 a	88 ab
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C						
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C						
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E						
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E						
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	14.0 a	12.2 ab	49.8 ab	52.4 a	103 a	95 a
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B						
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B						
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B						
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B						
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E						
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E						
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F						
LSD (P=.05)										1.24	0.32	1.57	0.82	11.1	11.4
Replicate F										4.237	2.269	1.673	0.519	0.869	0.111
Replicate Prob(F)										0.0049	0.0749	0.1715	0.7595	0.5135	0.9889
Treatment F										1.942	4.735	2.831	6.279	3.468	2.141
Treatment Prob(F)										0.1062	0.0019	0.0264	0.0003	0.0101	0.0799

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	P25R47	FS628	P25R47	FS628
	Pest Code												
	Crop Code												
	Rating Date									11-19-08	11-19-08	12-02-08	12-02-08
	Rating Data Type									Plants	Plants	Vigor	Vigor
	Rating Unit									mil/A	mil/A	1-9	1-9
	Rating Timing												
	Trt-Eval Interval									21 DAP	21 DAP	21 DAE	21 DAE
1	NO SEED TREATMENT									1.154 a	1.020 ab	5.8 a	5.5 b
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.908 bc	1.123 a	6.3 a	5.8 ab
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.837 bc	0.985 ab	6.8 a	6.5 a
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.864 bc	0.970 ab	6.3 a	5.7 ab
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D				
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.970 abc	0.920 ab	6.4 a	6.2 ab
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D				
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	1.048 ab	0.854 b	6.4 a	6.1 ab
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C				
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0.784 c	0.973 ab	6.5 a	6.2 ab
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
	LSD (P=.05)									0.2241	0.2367	1.26	0.90
	Replicate F									0.872	2.116	0.320	0.779
	Replicate Prob(F)									0.5113	0.0919	0.8968	0.5729
	Treatment F									2.772	1.036	0.505	1.249
	Treatment Prob(F)									0.0289	0.4227	0.7998	0.3122

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	P25R47	FS628	P25R47	FS628	P25R47	FS628	P25R47
	Pest Code															
	Crop Code															
	Rating Date									12-17-08	12-17-08	04-29-09	04-29-09	05-20-09	05-20-09	05-26-09
	Rating Data Type									Injury	Injury	Injury	Injury	Injury	Injury	Injury
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing															
	Trt-Eval Interval									21 DA-B	21 DA-B	21 DA-C	21 DA-C	21 DA-D	21 DA-D	21 DA-E
1	NO SEED TREATMENT									0 a	0 a	0 a	0 a	0 a	0 a	0 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D							
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D							
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D							
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D							
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C							
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C							
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E							
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E							
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0 a	0 a	0 a	0 a	0 a	0 a
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B							
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B							
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B							
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B							
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E							
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E							
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F							
LSD (P=.05)										0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code													BYD	BYD
Crop Code										FS628	TRZAW	TRZAW	P25R47	FS628
Rating Date										05-26-09	11-19-08	05-11-09	05-29-09	05-29-09
Rating Data Type										Injury	Aphids	Aphids	Incidence	Incidence
Rating Unit										Percent	1.0 sqft	1.0 sqft	Percent	Percent
Rating Timing														
Trt-Eval Interval										21 DA-E	21 DAP	24 DA-F		
1	NO SEED TREATMENT									0 a	0.0 a	0.2 a	1.2 a	0.2 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a		0.7 a	0.0 a
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.1 a	1.0 a	0.0 a
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.1 a	0.8 a	0.2 a
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D					
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D					
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.1 a	0.7 a	0.0 a
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D					
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D					
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.1 a	0.8 a	0.0 a
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C					
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C					
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E					
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E					
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	0 a	0.0 a	0.1 a	1.7 a	0.2 a
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B					
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B					
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B					
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B					
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E					
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E					
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F					
LSD (P=.05)										0.0	0.00	0.18	1.03	0.31
Replicate F										0.000	0.000	0.843	0.927	1.762
Replicate Prob(F)										1.0000	1.0000	0.5330	0.4771	0.1533
Treatment F										0.000	0.000	0.843	0.975	0.820
Treatment Prob(F)										1.0000	1.0000	0.5330	0.4590	0.5641

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	HEADSCAB P25R47	HEADSCAB FS628	TNST/SEP P25R47	TNST/SEP FS628
	Pest Code									HEADSCAB	HEADSCAB	TNST/SEP	TNST/SEP
	Crop Code									P25R47	FS628	P25R47	FS628
	Rating Date									05-29-09	05-29-09	05-29-09	05-29-09
	Rating Data Type									Severity	Severity	Severity	Severity
	Rating Unit									Percent	Percent	Percent	Percent
	Rating Timing												
	Trt-Eval Interval												
1	NO SEED TREATMENT									32 a	38 a	5 a	8 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	28 ab	28 ab	4 a	7 a
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	33 a	36 a	5 a	8 a
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	31 a	29 ab	1 b	3 b
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D				
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	28 ab	29 ab	2 b	2 b
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D				
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D				
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	19 b	23 b	1 b	2 b
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C				
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	24 ab	18 b	1 b	2 b
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B				
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B				
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B				
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B				
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E				
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E				
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F				
LSD (P=.05)										11.0	12.4	2.3	2.9
Replicate F										0.436	0.442	0.597	1.748
Replicate Prob(F)										0.8198	0.8156	0.7023	0.1565
Treatment F										1.653	2.546	5.678	8.663
Treatment Prob(F)										0.1686	0.0429	0.0005	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SEPTORIA P25R47	SEPTORIA FS628
	Pest Code									SEPTORIA	SEPTORIA
	Crop Code									P25R47	FS628
	Rating Date									05-29-09	05-29-09
	Rating Data Type									Severity	Severity
	Rating Unit									Percent	Percent
	Rating Timing										
	Trt-Eval Interval										
1	NO SEED TREATMENT									5 a	15 a
1	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B		
1	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B		
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B		
1	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B		
2	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	3 abc	10 b
2	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B		
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B		
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B		
2	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B		
3	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	3 bc	7 bc
3	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B		
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B		
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B		
3	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B		
3	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F		
4	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	4 ab	6 bc
4	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B		
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B		
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B		
4	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B		
4	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	BBCH39	D		
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D		
4	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F		
5	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	4 abc	7 bc
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B		
5	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B		
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B		
5	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B		
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH39	D		
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH39	D		
5	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F		
6	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	2 c	6 c
6	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B		
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B		
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B		
6	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B		
6	STRATEGO	2.08	EC	4	fl oz/a	4	fl oz/a	BBCH30	C		
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH30	C		
6	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E		
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E		
6	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F		
7	GAUCHO XT		LS	3.4	fl oz/cwt	34.3	g ai/100 kg	SEEDTRT	A	3 bc	3 c
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	2"W	B		
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	2"W	B		
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	2"W	B		
7	28% UAN	100	SL	2	qt/a	2	qt/a	2"W	B		
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	BBCH61	E		
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	BBCH61	E		
7	BAYTHROID XL	1	EC	0.0156	lb ai/a	2	fl oz/a	SPGTHRESH	F		
	LSD (P=.05)									2.3	4.1
	Replicate F									0.413	1.272
	Replicate Prob(F)									0.8356	0.3037
	Treatment F									1.970	7.253
	Treatment Prob(F)									0.1029	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Bayer ProTechPlus - Winter Wheat - 2.

Trial ID: 09-ARC-17-200-N110 Location: Agronomy Res. Center

Trial Comments

1. Protocol: Bayer (M3A).
2. Ratings: Plant counts and visual vigor 21-28 days after planting, count (3) 19.2 inch of row, vigor 1 to 9, 1 = best, 9 = dead.
   Crop injury from foliar applications at 14-21 DAT, and until no injury is present.
   Disease incidence and severity when disease symptoms appear and again before leaf senescence.
   Insect incidence and severity at 21-28 days after planting and 14-21 days after the SPGTHRESH application.
3. Yield.
4. Application timings: SEEDTRT = Seed treatment; 2"W = 2 inch weeds;
   BBCH30 = Beginning of stem elongation: pseudostem & tillers erect, but before first node is above the tillering node;
   BBCH39 = Flag leaf fully unrolled, ligule visible; BBCH61 = Beginning of flowering, first anther visible;
   SPGTHRESH = Spring threshold (aphids).
   Wheat varieties are P25R47 and FS628 planted in the left and right 5 ft of each plot, respectively.
5. Blanket burndown of Roundup WeatherMax (32 floz/A) was applied at planting.
6. Plots 102 and 202, right side (FS628) were overlaped about 60% due to planter error, missing data.
7. Test wt. = Test weight. mil/A = Million per acre. DAP = Days after planting. DAE = Days after crop emergence.
   Vigor 1 to 9, 1 = best, 9 = dead. BYD = Barley yellow dwarf. HEADSCAB = Head scab (fusarium head blight).
   TNST/SEP = Tan spot and/or septoria leaf blotch on the flag leaf (80% tan spot and 20% septoria leaf blotch).
   SEPTORIA = Septoria glume blotch. No leaf rust was found. No stripe rust was found.
8. Aphid counts are for the whole plot (both wheat varieties). 1.0 sqft = One square ft.
9. Harvested 6-19-09, (6) 7.5 inch rows by 20 ft.

Evaluation of Bayer Fungicides for Control of Leaf and Head Diseases in Wheat.

Trial ID: 09-20B-S90 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 10-20-08

Objectives: Evaluate foliar disease control with Stratego, Gem and Prosaro, and FHB control with Prosaro.

Crop 1: TRZAW Winter wheat **Variety:** P25R62
Planting Method: SEEDED **Planting Date:** 10-20-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 7.5 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 30 LB/A applied on 10-16-08 and N 85 LB/A applied on 01-29-09.

% OM: 2.6 **Texture:** SILT LOAM
pH: 5.6 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1 86 LB/A, K 446 LB/A

Application Description

	A	B	C
Application Date:	04-16-09	04-29-09	05-11-09
Time of Day:	10:00	13:00	13:00
Application Method:	Spray	Spray	Spray
Application Timing:	FK5-6	FK8-9	FK10.51
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	RFK	RFK	RFK
Air Temperature, Unit:	50 F	68 F	68 F
% Relative Humidity:	90	92	60
Wind Velocity, Unit:	3 MPH	0 MPH	0 MPH
Dew Presence (Y/N):	N	N	
Soil Moisture:	ABONOR	ABONOR	ABONOR
% Cloud Cover:	50	50	50
	04-16-09	04-29-09	05-11-09
Crop stage at application:	5-6 FK 9	FK 10.5 FK	
Height Min, Max (inch):	14 16	20 22	32 36

Pest Stage At Each Application

Application Date:	04-16-09	04-29-09	05-11-09

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan	TwinFlFan
Nozzle Size:	XR 8002	XR 8002	XR 8001
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Evaluation of Bayer Fungicides for Control of Leaf and Head Diseases in Wheat.

Trial ID: 09-20B-S90 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-23-09 Moisture Percent	TRZAW 06-23-09 Test wt. lb/bu	TRZAW 06-23-09 Yield bu/A	TRZAW Injury Percent 7 DAT	TRZAW Injury Percent 14 DAT	HEADSCAB TRZAW 06-09-09 Severity Percent 29 DA-C	TRZAW 06-09-09 Greenness 1-9 29 DA-C	TNST/SEP TRZAW 06-09-09 Severity Percent 29 DA-C
1	NONTREATED									10.7 b	47.6 b	56 e	0 a	0 a	30 ab	4.3 c	43 a
2	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	FK8-9	B	10.7 b	47.3 b	63 d	0 a	0 a	36 a	4.9 bc	28 b
2	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B								
3	USF0731	4.17	SC	0.162	lb ai/a	5	fl oz/a	FK8-9	B	10.9 ab	47.4 b	63 d	0 a	0 a	29 abc	5.6 a	20 bc
3	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B								
4	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK8-9	B	11.0 ab	47.9 b	65 bcd	0 a	0 a	33 ab	5.5 ab	19 bcd
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B								
5	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C	11.0 ab	50.4 a	70 abc	0 a	0 a	17 d	5.8 a	13 cde
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C								
6	STRATEGO	2.08	EC	0.065	lb ai/a	4	fl oz/a	FK5-6	A	11.1 ab	50.8 a	73 a	0 a	0 a	19 cd	5.9 a	6 e
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A								
6	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C								
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C								
7	GEM 500 SC	4.17	SC	0.0487	lb ai/a	1.5	fl oz/a	FK5-6	A	11.2 a	51.1 a	71 ab	0 a	0 a	30 ab	5.6 a	13 cde
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A								
7	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C								
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C								
8	USF0731	4.17	SC	0.065	lb ai/a	2	fl oz/a	FK5-6	A	11.4 a	50.8 a	70 abc	0 a	0 a	24 bcd	5.8 a	8 de
8	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A								
8	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C								
8	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C								
9	TWINLINE	1.75	EC	0.123	lb ai/a	9	fl oz/a	FK8-9	B	10.7 b	46.9 b	65 cd	0 a	0 a	28 abc	6.0 a	7 e
9	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B								
LSD (P=.05)										0.50	1.67	5.9	0.0	0.0	10.6	0.66	11.6
Replicate F										1.668	0.741	1.451	0.000	0.000	0.223	2.697	2.360
Replicate Prob(F)										0.2016	0.5385	0.2539	1.0000	1.0000	0.8796	0.0684	0.0967
Treatment F										2.047	10.000	6.625	0.000	0.000	2.960	6.154	8.815
Treatment Prob(F)										0.0856	0.0001	0.0002	1.0000	1.0000	0.0187	0.0002	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Evaluation of Bayer Fungicides for Control of Leaf and Head Diseases in Wheat.

Trial ID: 09-20B-S90 Location: Belleville Res. Center

Pest Code	
Crop Code	TRZAW
Rating Date	06-23-09
Rating Data Type	Lodging
Rating Unit	Percent
Rating Timing	
Trt-Eval Interval	EOS

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	NONTREATED									0 a
2	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	FK8-9	B	0 a
2	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B	
3	USF0731	4.17	SC	0.162	lb ai/a	5	fl oz/a	FK8-9	B	0 a
3	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B	
4	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK8-9	B	0 a
4	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B	
5	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C	0 a
5	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C	
6	STRATEGO	2.08	EC	0.065	lb ai/a	4	fl oz/a	FK5-6	A	0 a
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A	
6	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C	
6	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C	
7	GEM 500 SC	4.17	SC	0.0487	lb ai/a	1.5	fl oz/a	FK5-6	A	0 a
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A	
7	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C	
7	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C	
8	USF0731	4.17	SC	0.065	lb ai/a	2	fl oz/a	FK5-6	A	0 a
8	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A	
8	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	C	
8	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C	
9	TWINLINE	1.75	EC	0.123	lb ai/a	9	fl oz/a	FK8-9	B	0 a
9	INDUCE	100	SL	0.125	% v/v	0.125	% v/v	FK8-9	B	

LSD (P=.05)	0.0
Replicate F	0.000
Replicate Prob(F)	1.0000
Treatment F	0.000
Treatment Prob(F)	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (B4N).
2. Ratings: Percent crop response, describe symptoms, 7 and 14 DAT, continue if symptoms persist.
   Percent leaf disease incidence and severity at 0, and 14-21 DA-C, rate all plots, rate flag leaf seperately if different.
   Percent flagleaf greenness at 50% greenness in the nontreated plots.
   Percent FHB disease incidence and severity at soft dough, rate all plots.
   Lodging at harvest.
3. Yield, moisture, test weight, and bu/A.
   Retain seed samples for DON testing. Visual inspection of kernals for percent FHB damaged kernals.
4. TNST/SEP = Tan spot and/or septoria leaf blotch on the flag leaf (80% tan spot and 20% septoria leaf blotch).
   Greenness = Flagleaf greenness, another late season measure of disease severity on the flagleaf, 1 = brown, 9 = deep green.
   HEADSCAB = Head scab (fusarium head blight). EOS = End of season.
5. Harvested 6-23-09, (8) 7.5 inch rows by 25 ft.

Efficacy and Crop Response of Foliar Fungicides in Wheat.

Trial ID: 09-30-N70 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 10-17-08

Objectives: Evaluate foliar fungicides including pre-mixes and tankmixes for crop response and control of leaf diseases.

Crop 1: TRZAW Winter wheat **Variety:** P25R62
Planting Method: SEEDED **Planting Date:** 10-17-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 7.5 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 30 LB/A applied on 10-16-08 and N 85 LB/A applied on 01-29-09.

% OM: 2 **Texture:** SILT LOAM
pH: 6 **Soil Name:** WINFIELD
CEC: 9 **Fert. Level:** P1: 70 LB/A, K: 377 LB/A

Application Description

	A	B
Application Date:	04-15-09	04-29-09
Time of Day:	10:00	13:00
Application Method:	Spray	Spray
Application Timing:	FK6-7	FK9
Application Placement:	BROFOL	BROFOL
Applied By:	RFK	RFK
Air Temperature, Unit:	40 F	70 F
% Relative Humidity:	80	65
Wind Velocity, Unit:	5 MPH	6 MPH
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	50 F	65 F
Soil Moisture:	ABONOR	ABONOR
% Cloud Cover:	0	50
	04-15-09	04-29-09
Crop stage at application:	6 FK	9 FK
Height Min, Max (inch):	14 16	22 24

Pest Stage At Each Application

Application Date:	04-15-09	04-29-09

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Efficacy and Crop Response of Foliar Fungicides in Wheat.

Trial ID: 09-30-N70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-23-09 Moisture Percent	TRZAW 06-23-09 Test wt. lb/bu	TRZAW 06-23-09 Yield bu/A	TRZAW Injury Percent 7 DAT	TRZAW Injury Percent 14 DAT	TNST/SEP TRZAW 04-29-09 Severity Percent 0 DA-B	TNST/SEP TRZAW 05-21-09 Severity Percent 22 DA-B
1	HARMONY EXTRA SG	50	SG			0.9	oz/a	FK6-7	A	11.4 ab	48.7 ab	63 c	12 a	0 a	0 a	21 a
1	HARMONY SG	50	SG	0.01875	lb ai/a			FK6-7	A							
1	EXPRESS	50	SG	.009374	lb ai/a			FK6-7	A							
1	KOCIDE 3000	46.1	WG	0.346	lb ai/a	0.75	lb/a	FK6-7	A							
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK6-7	A							
2	HARMONY EXTRA SG	50	SG			0.9	oz/a	FK6-7	A	11.3 ab	48.4 ab	64 c	12 a	0 a	0 a	16 a
2	HARMONY SG	50	SG	0.01875	lb ai/a			FK6-7	A							
2	EXPRESS	50	SG	.009374	lb ai/a			FK6-7	A							
2	KOCIDE 3000	46.1	WG	0.346	lb ai/a	0.75	lb/a	FK6-7	A							
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK6-7	A							
2	LEM17	1.67	EC	0.157	lb ai/a	12	fl oz/a	FK9	B							
3	HARMONY EXTRA SG	50	SG			0.9	oz/a	FK6-7	A	11.4 ab	48.6 ab	67 c	12 a	0 a	0 a	0 b
3	HARMONY SG	50	SG	0.01875	lb ai/a			FK6-7	A							
3	EXPRESS	50	SG	.009374	lb ai/a			FK6-7	A							
3	KOCIDE 3000	46.1	WG	0.346	lb ai/a	0.75	lb/a	FK6-7	A							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK6-7	A							
3	YT669	2.08	SC	0.146	lb ai/a	9	fl oz/a	FK9	B							
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK9	B							
4	NONTREATED									11.2 b	48.0 b	64 c	0 b	0 a	0 a	18 a
5	TWINLINE	1.75	EC	0.123	lb ai/a	9	fl oz/a	FK9	B	11.6 a	49.4 a	72 a	0 b	0 a	0 a	0 b
5	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B							
6	QUILT	1.66	SC	0.182	lb ai/a	14	fl oz/a	FK9	B	11.5 ab	49.2 ab	67 bc	0 b	0 a	0 a	0 b
6	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B							
7	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	FK9	B	11.4 ab	48.7 ab	68 abc	0 b	0 a	0 a	2 b
7	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B							
8	BAS 556 02 F	0.845	SC	0.066	lb ai/a	10	fl oz/a	FK9	B	11.4 ab	48.9 ab	71 ab	0 b	0 a	0 a	0 b
8	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B							
LSD (P=.05)										0.33	1.24	4.4	1.9	0.0	0.0	7.7
Replicate F										1.324	0.839	1.469	0.467	0.000	0.000	2.911
Replicate Prob(F)										0.2767	0.5313	0.2248	0.7984	1.0000	1.0000	0.0267
Treatment F										1.246	1.002	4.379	81.667	0.000	0.000	12.188
Treatment Prob(F)										0.3050	0.4464	0.0014	0.0001	1.0000	1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Efficacy and Crop Response of Foliar Fungicides in Wheat.

Trial ID: 09-30-N70 Location: Belleville Res. Center

Pest Code	
Crop Code	TRZAW
Rating Date	06-23-09
Rating Data Type	Lodging
Rating Unit	Percent
Rating Timing	
Trt-Eval Interval	EOS

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	HARMONY EXTRA SG	50	SG			0.9	oz/a	FK6-7	A	0 a
1	HARMONY SG	50	SG	0.01875	lb ai/a			FK6-7	A	
1	EXPRESS	50	SG	.009374	lb ai/a			FK6-7	A	
1	KOCIDE 3000	46.1	WG	0.346	lb ai/a	0.75	lb/a	FK6-7	A	
1	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK6-7	A	
2	HARMONY EXTRA SG	50	SG			0.9	oz/a	FK6-7	A	0 a
2	HARMONY SG	50	SG	0.01875	lb ai/a			FK6-7	A	
2	EXPRESS	50	SG	.009374	lb ai/a			FK6-7	A	
2	KOCIDE 3000	46.1	WG	0.346	lb ai/a	0.75	lb/a	FK6-7	A	
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK6-7	A	
2	LEM17	1.67	EC	0.157	lb ai/a	12	fl oz/a	FK9	B	
3	HARMONY EXTRA SG	50	SG			0.9	oz/a	FK6-7	A	0 a
3	HARMONY SG	50	SG	0.01875	lb ai/a			FK6-7	A	
3	EXPRESS	50	SG	.009374	lb ai/a			FK6-7	A	
3	KOCIDE 3000	46.1	WG	0.346	lb ai/a	0.75	lb/a	FK6-7	A	
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK6-7	A	
3	YT669	2.08	SC	0.146	lb ai/a	9	fl oz/a	FK9	B	
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FK9	B	
4	NONTREATED									0 a
5	TWINLINE	1.75	EC	0.123	lb ai/a	9	fl oz/a	FK9	B	0 a
5	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B	
6	QUILT	1.66	SC	0.182	lb ai/a	14	fl oz/a	FK9	B	0 a
6	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B	
7	STRATEGO	2.08	EC	0.163	lb ai/a	10	fl oz/a	FK9	B	0 a
7	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B	
8	BAS 556 02 F	0.845	SC	0.066	lb ai/a	10	fl oz/a	FK9	B	0 a
8	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B	

LSD (P=.05)	0.0
Replicate F	0.000
Replicate Prob(F)	1.0000
Treatment F	0.000
Treatment Prob(F)	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: DuPont, BASF (WF3).
2. Ratings: Percent crop response, describe symptoms, 7 and 14 DAT, continue if symptoms persist.
   Percent disease incidence and severity at 0, and 14-21 DA-B, rate all plots, rate flag leaf seperately if different.
   Establish baseline disease pressure at 0 DA-B rating for evaluaton of curative response.
   Lodging at harvest.
3. Yield.
4. TNST/SEP = Tan spot and/or septoria leaf blotch on the leaf below the flagleaf (80% tan spot and 20% septoria leaf blotch).
   An overall evaluation of headscab was made on 6-9-09, infection was very high at 20-40% severity.
   Injury was leaf discoloration.
5. Harvested 6-23-09, (8) 7.5 inch rows by 25 ft.

Nitamin Foilar Fertilizer with and without Headline Fungicide in Wheat.

Trial ID: 09-20B-N130 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 10-20-08

Objectives: Evaluate the potential for synergy between Georgia Pacific foliar fertilizer and Headline fungicide.

Crop 1: TRZAW Winter wheat **Variety:** P25R62
Planting Method: SEEDED **Planting Date:** 10-20-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1 IN
Row Spacing, Unit: 7.5 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 30 LB/A applied on 10-16-08 and N 85 LB/A applied on 01-29-09.

% OM: 2.6 **Texture:** SILT LOAM
pH: 5.6 **Soil Name:** BETHALTO
CEC: 14 **Fert. Level:** P1 86 LB/A, K 446 LB/A

Application Description

	A	B
Application Date:	04-16-09	04-29-09
Time of Day:	10:00	13:00
Application Method:	Spray	Spray
Application Timing:	FK5-6	FK9
Application Placement:	BROFOL	BROFOL
Applied By:	RFK	BGY
Air Temperature, Unit:	45 F	70 F
% Relative Humidity:	90	92
Wind Velocity, Unit:	3 MPH	0 MPH
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	50 F	62 F
Soil Moisture:	ABONOR	ABONOR
% Cloud Cover:	50	50
	04-16-09	04-29-09
Crop stage at application:	5-6 FK	9 FK
Height Min, Max (inch):	14 16	20 22

Pest Stage At Each Application

Application Date:	04-16-09	04-25-09
Stage Majority (leaves):	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

Nitamin Foilar Fertilizer with and without Headline Fungicide in Wheat.

Trial ID: 09-20B-N130 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-23-09 Moisture Percent	TRZAW 06-23-09 Test wt. lb/bu	TRZAW 06-23-09 Yield bu/A	TRZAW Injury Percent 7 DAT	TRZAW Injury Percent 14 DAT	TNST/SEP TRZAW 04-29-09 Severity Percent 0 DA-B	TNST/SEP TRZAW 05-21-09 Severity Percent 22 DA-B	TRZAW 06-09-09 Greenness 1-9 41 DA-B
1	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK5-6	A	10.5 ab	46.7 a	59 cd	0 a	0 a	0 a	11 a	4.9 cd
2	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK5-6	A	10.0 b	44.8 a	61 abc	0 a	0 a	0 a	10 ab	4.6 d
3	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK9	B	10.1 ab	46.6 a	45 e	0 a	0 a	0 a	9 ab	5.0 bcd
4	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK9	B	10.1 ab	46.1 a	58 d	0 a	0 a	0 a	11 a	4.8 cd
5	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK5-6	A	10.3 ab	45.5 a	64 a	0 a	0 a	0 a	3 bc	5.3 a-d
5	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK5-6	A								
6	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK5-6	A	10.5 a	46.3 a	63 abc	0 a	0 a	0 a	5 abc	5.0 bcd
6	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK5-6	A								
7	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK9	B	10.1 ab	44.1 a	65 a	0 a	0 a	0 a	0 c	5.8 ab
7	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK9	B								
8	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK9	B	10.5 ab	47.4 a	63 ab	0 a	0 a	0 a	1 c	6.0 a
8	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK9	B								
9	NONTREATED									10.2 ab	45.8 a	60 cd	0 a	0 a	0 a	10 ab	4.8 cd
10	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK5-6	A	10.5 a	46.9 a	62 abc	0 a	0 a	0 a	4 abc	5.3 a-d
10	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A								
11	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK9	B	10.4 ab	47.0 a	61 bcd	0 a	0 a	0 a	0 c	5.5 abc
11	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B								
LSD (P=.05)										0.53	3.66	3.2	0.0	0.0	0.0	7.6	0.82
Replicate F										1.959	0.624	2.275	0.000	0.000	0.000	2.180	4.056
Replicate Prob(F)										0.1423	0.6055	0.1009	1.0000	1.0000	1.0000	0.1110	0.0156
Treatment F										1.265	0.634	23.597	0.000	0.000	0.000	2.945	2.402
Treatment Prob(F)										0.2946	0.7727	0.0001	1.0000	1.0000	1.0000	0.0107	0.0311

Means followed by same letter do not significantly differ (P=.05, LSD)

Nitamin Foilar Fertilizer with and without Headline Fungicide in Wheat.

Trial ID: 09-20B-N130 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-23-09 Lodging Percent EOS	TRZAW 06-23-09 Height Inch EOS
	Pest Code										
	Crop Code									TRZAW	TRZAW
	Rating Date									06-23-09	06-23-09
	Rating Data Type									Lodging	Height
	Rating Unit									Percent	Inch
	Rating Timing										
	Trt-Eval Interval									EOS	EOS
1	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK5-6	A	0 a	38.8 ab
2	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK5-6	A	0 a	38.5 ab
3	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK9	B	0 a	37.5 b
4	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK9	B	0 a	37.5 b
5	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK5-6	A	0 a	39.3 a
5	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK5-6	A		
6	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK5-6	A	0 a	39.5 a
6	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK5-6	A		
7	NITAMIN	3	SL	3	lb ai/a	1	gal/a	FK9	B	0 a	39.5 a
7	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK9	B		
8	NITAMIN	3	SL	6	lb ai/a	2	gal/a	FK9	B	0 a	39.8 a
8	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK9	B		
9	NONTREATED									0 a	39.3 a
10	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK5-6	A	0 a	39.8 a
10	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK5-6	A		
11	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK9	B	0 a	38.8 ab
11	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	B		
	LSD (P=.05)									0.0	1.55
	Replicate F									0.000	4.235
	Replicate Prob(F)									1.0000	0.0131
	Treatment F									0.000	2.255
	Treatment Prob(F)									1.0000	0.0417

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Georgia Pacific (JSKruse).
2. Ratings: Percent crop response, describe symptoms, 7 and 14 DAT, continue if symptoms persist.
   Percent disease incidence and severity at 0, and 14-21 DA-B, rate all plots, rate flag leaf seperately if different.
   Establish baseline disease pressure at 0 DA-B rating for evaluaton of curative response.
   Percent flagleaf greenness at 50% greenness in the nontreated plots.
   Height (overall) and lodging at harvest.
3. Yield, moisture, test weight, and bu/A.
4. Blanket weed control, if any record here or record no blanket weed control.
5. TNST/SEP = Tan spot and/or septoria leaf blotch on the flag leaf (80% tan spot and 20% septoria leaf blotch).
   Greenness = Flagleaf greenness, another late season measure of disease severity on the flagleaf, 1 = brown, 9 = deep green.
   EOS = End of season.
   An overall evaluation of head diseases was made on 6-9-09, headscab infection was very high at 20-40% severity.
6. Harvested 6-23-09, (8) 7.5 inch rows by 25 ft.

Fusarium Head Blight - Uniform Fungicige Trials on Wheat.

Trial ID: 09-ARC-5B Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 10-31-08

Objectives: Evaluate application timing for several fungicide for control of fusarium head blight in winter wheat.

Crop 1: TRZAW Winter wheat **Variety:** P25R47
Planting Method: SEEDED **Planting Date:** 10-31-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1 IN
Row Spacing, Unit: 7.5 IN

Plot Width, Unit: 5 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 18 LB/A, P2O5 46 LB/A, K2O 120 LB/A on 10-27-08 and N 95 LB/A as 32% UAN on 3-4-09

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** WEIR
CEC: 10 **Fert. Level:** P1: 26 LB/A, K: 177 LB/A

Application Description

	A	B	C	D	E
Application Date:	04-28-09	05-04-09	05-07-09	05-11-09	05-15-09
Time of Day:	8:00	17:00	10:00	12:00	10:00
Application Method:	Spray	Spray	Spray	Spray	Spray
Application Timing:	FK9	FK10	FK10.5	FK10.51	5DA-D
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	JLM	JLM	JLM	JLM	JLM
Air Temperature, Unit:	64 F	68 F	72 F	68 F	77 F
% Relative Humidity:	85	50	80	51	74
Wind Velocity, Unit:	2 MPH	3 MPH	1 MPH	3 MPH	5 MPH
Wind Direction:	W	E	W	NE	SSW
Dew Presence (Y/N):	Y	N	Y	N	N
Soil Temperature, Unit:	60 F	59 F	63 F	55 F	60 F
Soil Moisture:	ABONOR	ABONOR	ABONOR	ABONOR	ABONOR
% Cloud Cover:	100	100	100	10	35
	04-28-09	05-04-09	05-07-09	05-11-09	05-15-09
Crop stage at application:	9 FK	10 FK	10.4 FK	10.51 FK	10.54 FK
Height Min, Max (inch):	20 24	24 28	26 30	30 34	30 34

Pest Stage At Each Application

Application Date:	04-28-08	05-04-09	05-07-09	05-11-09	05-15-09

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	TwinFlFan	TwinFlFan	TwinFlFan	TwinFlFan	TwinFlFan
Nozzle Size:	XR 110015	XR 110015	XR 110015	XR 110015	XR 110015
Boom Length, Unit:	5 FT	5 FT	5 FT	5 FT	5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA

Fusarium Head Blight - Uniform Fungicige Trials on Wheat.

Trial ID: 09-ARC-5B Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-19-09 Moisture Percent	TRZAW 06-19-09 Test wt. lb/bu	TRZAW 06-19-09 Yield bu/A	HEADSCAB TRZAW 06-04-09 Incidence Percent SoftDough 28 DA-C	HEADSCAB TRZAW 06-04-09 Severity Percent SoftDough 28 DA-C	TNST/SEP TRZAW 06-04-09 Incidence Percent SoftDough 28 DA-C	TNST/SEP TRZAW 06-04-09 Severity Percent SoftDough 28 DA-C
1	NONTREATED									12.1 cd	51.1 bc	85 cde	64 a	10 abc	98 ab	6 a
2	PROLINE	4	SC	0.094	lb ai/a	3	fl oz/a	FK10.51	D	14.4 a	52.7 a	105 a	23 d	2 de	90 c	4 bc
2	CARAMBA	0.75	SC	0.041	lb ai/a	7	fl oz/a	FK10.51	D							
2	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	D							
3	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.5	C	13.9 ab	52.0 ab	89 bcd	52 ab	6 cde	92 abc	3 bc
3	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.5	C							
4	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	FK10.51	D	12.6 bcd	52.8 a	96 abc	34 d	7 cd	94 abc	5 abc
4	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	D							
5	PROSARO	3.52	SC	0.179	lb ai/a	6.5	fl oz/a	5 DA-D	E	13.5 abc	52.7 a	94 abc	37 bcd	4 de	91 bc	2 c
5	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	5 DA-D	E							
6	CARAMBA	0.75	SC	0.079	lb ai/a	13.5	fl oz/a	FK10.5	C	12.5 bcd	51.9 ab	81 de	50 abc	10 abc	97 abc	4 abc
6	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.5	C							
7	CARAMBA	0.75	SC	0.079	lb ai/a	13.5	fl oz/a	FK10.51	D	13.4 abc	49.2 d	63 f	28 d	2 e	95 abc	5 abc
7	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	D							
8	CARAMBA	0.75	SC	0.079	lb ai/a	13.5	fl oz/a	5 DA-D	E	13.4 abc	52.7 a	99 ab	35 cd	3 de	95 abc	3 bc
8	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	5 DA-D	E							
9	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK10	B				51 ab	7 bcd	99 a	5 abc
9	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10	B							
10	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK10.5	C	12.2 cd	50.9 bc	79 de	60 a	11 ab	94 abc	5 ab
10	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.5	C							
11	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	FK9	A	12.4 cd	50.6 c	81 de	58 a	13 a	96 abc	3 bc
11	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK9	A							
12	NONTREATED									11.8 d	50.9 bc	76 e				
LSD (P=.05)										1.52	1.19	12.4	15.2	4.6	7.5	2.6
Replicate F										1.106	0.540	12.275	9.746	2.123	3.937	0.210
Replicate Prob(F)										0.3621	0.6588	0.0001	0.0001	0.1182	0.0176	0.8889
Treatment F										2.539	7.952	7.774	6.943	5.281	1.207	1.616
Treatment Prob(F)										0.0237	0.0001	0.0001	0.0001	0.0002	0.3258	0.1499

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: University of Illinois - Bradley.
2. Ratings: DI/DS, based on 50 heads per plot, at soft dough.
3. Yield, seed samples send to Carl Bradley.
4. Spread inoculum at flag leaf, 2 weeks before heading.
5. Application timings, FK10.5 (C) should be approximately 5 days before the FK10.51 (D).
6. Test wt. = Test weight. HEADSCAB = Head scab (fusarium head blight).
   TNST/SEP = Tan spot and/or septoria leaf blotch on the flag leaf (80% tan spot and 20% septoria leaf blotch).
   No leaf rust was found. No stripe rust was found.
7. Treatment 9, yield was compromised by possible tank contamination, yield not reported.
8. Harvested 6-19-09, (6) 7.5 inch rows by 27.5 ft.

Previous Crop Wheat Disease Trial - 2008/2009.

Trial ID: 09-HRC-6-HeadScab Location: Agronomy Res. Ctr.

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: PRELIMINARY **Initiation Date:** 10-28-08

Objectives: Demonstrate that integrated management is the most effective and economical means of reducing losses to FHB/DON and increase grower adoption of integrated strategies to control FHB.

Crop 1: TRZAW Winter wheat **Variety:** See treatment list
Planting Method: Seeded **Planting Date:** 10-28-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1 IN
Row Spacing, Unit: 7.5 IN

Plot Width, Unit: 5 FT **Site Type:** FIELD
Plot Length, Unit: 24 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Split-Block

Prior Crops,	Year
1. See treatment list	2008

Field Prep./Maintenance: N 18 LB/A, P2O5 46 LB/A, K2O 120 LB/A on 10-27-08 and N 95 LB/A as 32% UAN on 3-4-09

% OM: 1.5 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** HOSMER
CEC: 7.2 **Fert. Level:** P1: 46 LB/A, K: 153 LB/A

Application Description

	A	B	C
Application Date:	05-05-09	05-07-09	05-11-09
Time of Day:	15:00	9:00	11:30
Application Method:	Spray	Spray	Spray
Application Timing:	FK10.51	FK10.51	FK10.51
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	JLM	JLM	JLM
Air Temperature, Unit:	72 F	71 F	67 F
% Relative Humidity:	54	81	57
Wind Velocity, Unit:	3 MPH	3 MPH	3 MPH
Wind Direction:	S	S	NE
Dew Presence (Y/N):	N	Y	N
Soil Temperature, Unit:	60 F	65 F	55 F
Soil Moisture:	ABONOR	ABONOR	ABONOR
% Cloud Cover:	75	100	0
	05-05-09	05-07-09	05-11-09
Crop stage at application:	10.51 FK	10.51 FK	10.51 FK
Height Min, Max (inch):	26 36	26 36	26 36

Pest Stage At Each Application

Application Date:	05-05-09	05-07-09	05-11-09

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	TwinFlFan	TwinFlFan	TwinFlFan
Nozzle Size:	XR 110015	XR 110015	XR 110015
Boom Length, Unit:	5 FT	5 FT	5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA

Previous Crop Wheat Disease Trial - 2008/2009.

Trial ID: 09-HRC-6-HeadScab Location: Agronomy Res. Ctr.

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-19-09 Moisture Percent		TRZAW 06-19-09 Test wt. lb/bu		TRZAW 06-19-09 Yield bu/A		HEADSCAB TRZAW 06-04-09 Incidence Percent SoftDough		HEADSCAB TRZAW 06-04-09 Severity Percent SoftDough	
1	SOYBEAN RESIDUE									12.8	c-f	53.1	lm	131	a	85	b	15	f
1	P25R47																		
1	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	B										
1	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	B										
2	SOYBEAN RESIDUE									11.6	jk	52.0	n	117	bc	96	a	23	a-d
2	P25R47																		
3	SOYBEAN RESIDUE									12.0	hij	55.1	hi	126	ab	100	a	18	def
3	P25R54																		
3	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A										
3	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A										
4	SOYBEAN RESIDUE									11.6	k	53.9	jk	111	cde	100	a	27	ab
4	P25R54																		
5	SOYBEAN RESIDUE									12.9	c	57.1	cd	125	ab	100	a	17	ef
5	BW5170																		
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A										
5	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A										
6	SOYBEAN RESIDUE									12.4	fgh	56.0	efg	106	def	97	a	20	c-f
6	BW5170																		
7	SOYBEAN RESIDUE									13.5	b	58.0	ab	110	cde	99	a	18	def
7	BW5530																		
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A										
7	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A										
8	SOYBEAN RESIDUE									12.8	c-f	57.2	c	99	fgh	99	a	22	b-e
8	BW5530																		
9	SOYBEAN RESIDUE									12.4	e-h	56.0	efg	112	cd	100	a	20	c-f
9	COOPER																		
9	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A										
9	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A										
10	SOYBEAN RESIDUE									11.8	ijk	54.4	ij	96	gh	100	a	27	ab
10	COOPER																		
11	SOYBEAN RESIDUE									13.7	b	58.5	a	111	cde	98	a	17	ef
11	KASKASKIA																		
11	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	B										
11	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	B										
12	SOYBEAN RESIDUE									12.6	c-g	56.8	cd	97	fgh	100	a	27	ab
12	KASKASKIA																		
13	NON-BT CORN RESIDUE									13.5	b	52.5	mn	110	cde	97	a	17	ef
13	P25R47																		
13	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C										
13	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C										
14	NON-BT CORN RESIDUE									11.7	jk	50.8	o	90	hij	100	a	23	a-d
14	P25R47																		
15	NON-BT CORN RESIDUE									12.5	d-h	55.4	gh	113	cd	99	a	19	c-f
15	P25R54																		
15	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C										
15	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C										
16	NON-BT CORN RESIDUE									11.5	k	53.5	kl	90	hij	100	a	28	a
16	P25R54																		
17	NON-BT CORN RESIDUE									12.8	c-f	56.5	cde	107	c-f	100	a	20	c-f
17	BW5170																		
17	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A										
17	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A										
18	NON-BT CORN RESIDUE									12.2	ghi	55.5	fgh	90	hij	100	a	28	a
18	BW5170																		

Previous Crop Wheat Disease Trial - 2008/2009.

Trial ID: 09-HRC-6-HeadScab Location: Agronomy Res. Ctr.

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code									
Pest Code														HEADSCAB		HEADSCAB		
Crop Code										TRZAW		TRZAW		TRZAW		TRZAW		
Rating Date										06-19-09		06-19-09		06-19-09		06-04-09		06-04-09
Rating Data Type										Moisture		Test wt.		Yield		Incidence		Severity
Rating Unit										Percent		lb/bu		bu/A		Percent		Percent
Rating Timing																SoftDough		SoftDough
Trt-Eval Interval																		
19	NON-BT CORN RESIDUE									13.5	b	57.3	bc	102	efg	100	a	17 ef
19	BW5530																	
19	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A									
19	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A									
20	NON-BT CORN RESIDUE									12.6	c-g	56.3	def	92	ghi	100	a	19 c-f
20	BW5530																	
21	NON-BT CORN RESIDUE									12.9	cd	55.1	hi	95	gh	98	a	18 def
21	COOPER																	
21	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C									
21	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C									
22	NON-BT CORN RESIDUE									11.5	k	52.7	mn	83	ij	99	a	24 abc
22	COOPER																	
23	NON-BT CORN RESIDUE									14.3	a	58.4	a	98	fgh	99	a	18 def
23	KASKASKIA																	
23	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C									
23	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C									
24	NON-BT CORN RESIDUE									12.9	cde	56.9	cd	81	j	100	a	21 c-f
24	KASKASKIA																	
LSD (P=.05)										0.47		0.79		10.1		8.5		5.9
Replicate F										24.168		5.594		20.185		2.071		23.347
Replicate Prob(F)										0.0001		0.0017		0.0001		0.1121		0.0001
Treatment F										21.395		57.511		13.936		1.089		3.754
Treatment Prob(F)										0.0001		0.0001		0.0001		0.3790		0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Previous Crop Wheat Disease Trial - 2008/2009.

Trial ID: 09-HRC-6-HeadScab Location: Agronomy Res. Ctr.

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TNST/SEP TRZAW 06-04-09 Incidence Percent SoftDough		TNST/SEP TRZAW 06-04-09 Severity Percent SoftDough		TRZAW 06-19-09 Height cm EOS		TRZAW 12-02-08 Stand 1-5 21 DAE	
1	SOYBEAN RESIDUE									38	i	3	fg	85	def	3.8	abc
1	P25R47																
1	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	B								
1	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	B								
2	SOYBEAN RESIDUE									93	ab	8	ab	85	def	3.9	ab
2	P25R47																
3	SOYBEAN RESIDUE									72	def	5	c-f	88	cde	3.5	a-e
3	P25R54																
3	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A								
3	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A								
4	SOYBEAN RESIDUE									93	ab	7	ab	90	bcd	3.9	ab
4	P25R54																
5	SOYBEAN RESIDUE									56	fgh	3	efg	88	cde	4.1	a
5	BW5170																
5	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A								
5	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A								
6	SOYBEAN RESIDUE									77	b-e	6	b-e	86	def	3.9	ab
6	BW5170																
7	SOYBEAN RESIDUE									85	a-d	6	bcd	84	d-g	4.1	a
7	BW5530																
7	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A								
7	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A								
8	SOYBEAN RESIDUE									87	a-d	6	bcd	85	def	3.8	abc
8	BW5530																
9	SOYBEAN RESIDUE									68	ef	4	d-g	83	efg	3.4	b-e
9	COOPER																
9	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A								
9	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A								
10	SOYBEAN RESIDUE									89	abc	7	ab	78	ghi	3.4	b-e
10	COOPER																
11	SOYBEAN RESIDUE									77	b-e	5	b-e	96	ab	3.1	c-g
11	KASKASKIA																
11	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	B								
11	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	B								
12	SOYBEAN RESIDUE									98	a	7	ab	98	a	3.6	a-e
12	KASKASKIA																
13	NON-BT CORN RESIDUE									44	hi	3	fg	81	fgh	3.0	efg
13	P25R47																
13	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C								
13	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C								
14	NON-BT CORN RESIDUE									75	cde	5	b-e	80	f-i	3.1	c-g
14	P25R47																
15	NON-BT CORN RESIDUE									47	ghi	3	fg	86	def	3.1	d-g
15	P25R54																
15	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C								
15	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C								
16	NON-BT CORN RESIDUE									93	ab	8	a	84	efg	2.5	g
16	P25R54																
17	NON-BT CORN RESIDUE									36	i	2	g	81	fgh	3.2	c-f
17	BW5170																
17	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A								
17	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A								
18	NON-BT CORN RESIDUE									91	abc	7	ab	82	e-h	3.6	a-e
18	BW5170																

Previous Crop Wheat Disease Trial - 2008/2009.

Trial ID: 09-HRC-6-HeadScab Location: Agronomy Res. Ctr.

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TNST/SEP TRZAW 06-04-09 Incidence Percent SoftDough	TNST/SEP TRZAW 06-04-09 Severity Percent SoftDough	TRZAW 06-19-09 Height cm EOS	TRZAW 12-02-08 Stand 1-5 21 DAE
19	NON-BT CORN RESIDUE									58 fgh	3 efg	84 d-g	3.6 a-e
19	BW5530												
19	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	A				
19	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	A				
20	NON-BT CORN RESIDUE									76 cde	5 b-e	83 efg	3.7 a-d
20	BW5530												
21	NON-BT CORN RESIDUE									63 efg	4 d-g	74 i	3.3 b-f
21	COOPER												
21	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C				
21	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C				
22	NON-BT CORN RESIDUE									85 a-d	7 abc	76 hi	3.3 b-f
22	COOPER												
23	NON-BT CORN RESIDUE									58 fgh	3 efg	93 abc	2.6 fg
23	KASKASKIA												
23	PROSARO	3.5	SC	0.178	lb ai/a	6.5	fl oz/a	FK10.51	C				
23	ACTIVATOR 90	100	SL	0.125	% v/v	0.125	% v/v	FK10.51	C				
24	NON-BT CORN RESIDUE									88 a-d	7 abc	94 abc	2.6 fg
24	KASKASKIA												
LSD (P=.05)										16.3	2.3	6.3	0.65
Replicate F										1.612	2.286	21.065	0.467
Replicate Prob(F)										0.1944	0.0864	0.0001	0.7061
Treatment F										10.706	5.368	7.002	3.929
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: University of Illinois - Bradley, BASF.
2. Ratings: DI/DS, based on 25 flag leaves/heads per plot, at soft dough.
3. Yield, seed samples.
4. Blanket application of fertilizer at planting and early spring.
   Blanket herbicide application of Roundup WeatherMax (32 floz/A) was applied at planting.
   Blanket application of Harmony Extra SG (0.75 oz/A) at FK5-6 was applied 4-8-09.
   Blanket application of Warrior (2.5 floz/A) was applied on 4-23-09.
5. The FK10.51 application timing was reached on different dates depending on wheat variety and residue.
   The target timing was the beginning of anthesis.
   The percent of anthesis at application for treatments 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, and 23 was
   90, 25, 90, 90, 25, 33, 50, 50, 65, and 33, respectively.
6. Residue was samples on 12-2-08 as 25 points across the plot either with or without crop residue over the soil.
   Average percent residue cover in the soybean and corn plots was 77 and 74, respectively.
7. Test wt. = Test weight. HEADSCAB = Head scab (fusarium head blight). EOS = End of season. DAE = Days after emergence.
   TNST/SEP = Tan spot and/or septoria leaf blotch on the flag leaf (80% tan spot and 20% septoria leaf blotch).
   No leaf rust was found. No stripe rust was found.
8. Harvested 6-19-09, (6) 7.5 inch rows by 20 ft.

Control of Problematic Weeds in Wheat.

Trial ID: 09-YRC-Wheat Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 10-22-08

Objectives: Evaluate herbicide treatments for control of volunteer Roundup-Ready corn, marestail, and other problematic weed species in no-till wheat production.

Crop 1: TRZAW Winter wheat **Variety:** P25R47
Planting Method: Seeded **Planting Date:** 10-29-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1 IN
Row Spacing, Unit: 7.5 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W	**Code:** ZEAMX	Zea mays L.		corn, volunteer
Pest Description:	Roundup Ready corn			
Pest 2 Type: W	**Code:** ALLVI	Allium vineale L.		garlic, wild
Pest 3 Type: W	**Code:** LAMAM	Lamium amplexicaule L.		henbit
Pest 4 Type: W	**Code:** STEME	Stellaria media (L.) Vill.		chickweed, common
Pest 5 Type: W	**Code:** GGGAN			grasses, annual
Pest Description:	winter annual grasses			

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 29 LB/A, P2O5 29 LB/A, K2O 29 LB/A on 10-27-08 and N 90 LB/A as 28% UAN on 3-22-09.

% OM: 2.1 **Texture:** VERY FINE SANDY LOAM
pH: 5 **Soil Name:** ALVIN
CEC: 9 **Fert. Level:** P1 133 LB/A, K 209 LB/A

	Application Description A	B	C
Application Date:	10-22-08	11-25-08	03-26-09
Time of Day:	16:30	15:30	13:30
Application Method:	Spray	Spray	Spray
Application Timing:	7DBP	1-3"W	SPRING
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	BGY	NRJ	TGM
Air Temperature, Unit:	64 F	42 F	61 F
% Relative Humidity:	31	47	48
Wind Velocity, Unit:	6 MPH	1 MPH	2 MPH
Wind Direction:	E	NW	NE
Dew Presence (Y/N):	N	N	N
Soil Temperature, Unit:	58 F	42 F	52 F
Soil Moisture:	NORMAL	ABONOR	ABONOR
% Cloud Cover:	5	0	5
	10-22-08	11-25-08	03-26-09
Crop stage at application:	NA LVS 2	LVS 3-6	TILLER
Height Min, Max (inch):	2	4 6	9

Control of Problematic Weeds in Wheat.

Trial ID: 09-YRC-Wheat Location: Young Res. Center

Pest Stage At Each Application

Application Date:	10-22-08	11-25-08	03-26-09
Weed Code:	ZEAMX	ZEAMX	ZEAMX
Stage Majority (leaves):	1	NA	NA
Stage Min, Max:	1 2		
Height Majority:	3 IN		
Height Min, Max:	3 4		
Density, Unit:	0.5 FT2		
Weed Code:	ALLVI	ALLVI	ALLVI
Stage Majority (leaves):	2	2	1
Stage Min, Max:	1 2	1 2	1 2
Height Majority:	6 IN	10 IN	4 IN
Height Min, Max:	3 10	4 12	2 6
Density, Unit:	4 FT2	4 FT2	2 FT2
Weed Code:	LAMAM	LAMAM	LAMAM
Stage Majority (leaves):	4	10	NA
Stage Min, Max:	COTY 8	2 16	
Height Majority:	1 IN	2 IN	
Height Min, Max:	0.5 2	1 4	
Density, Unit:	8 FT2	8 FT2	
Weed Code:	STEME	STEME	STEME
Stage Majority (leaves):	6	8	NA
Stage Min, Max:	COTY 20	COTY 22	
Height Majority:	3 IN	3 IN	
Height Min, Max:	0.5 6	0.75 6	
Density, Unit:	6 FT2	6 FT2	
Weed Code:	GGGAN	GGGAN	GGGAN
Stage Majority (leaves):	2	2	1
Stage Min, Max:	1 3	1 3	1 2
Height Majority:	2.5 IN	2.5 IN	2 IN
Height Min, Max:	1 3	1 4	2 4
Density, Unit:	0.25 FT2	0.25 FT2	0.25 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Control of Problematic Weeds in Wheat.

Trial ID: 09-YRC-Wheat Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code																ZEAMX
Crop Code										TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	
Rating Date										11-12-08	11-25-08	12-16-08	03-09-09	04-16-09	04-16-09	11-05-08
Rating Data Type										Injury	Injury	Injury	Injury	Injury	Stunt	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										14 DAP			At Spring			7 DAP
Trt-Eval Interval										21 DA-A	0 DA-B	21 DA-B	Greenup	21 DA-C	21 DA-C	14 DA-A
1	NONTREATED									0 a	0 a	0 a	0 a	0 b	0 c	0 c
2	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	0 a	0 a	0 a	2 a	0 b	0 c	0 c
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
3	FINESSE	75	WG			0.5	oz/a	7DBP	A	0 a	3 a	0 a	5 a	12 a	17 a	27 b
3	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A							
3	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A							
3	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
4	FINESSE	75	WG			0.5	oz/a	7DBP	A	0 a	0 a	0 a	0 a	15 a	15 a	38 a
4	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A							
4	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A							
4	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C							
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	C							
5	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		0 a	0 a	3 a	17 a	17 a	0 c
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B							
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
5	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
6	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		0 a	0 a	3 a	7 ab	7 bc	0 c
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B							
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
6	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
7	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		0 a	0 a	7 a	10 ab	10 ab	0 c
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B							
7	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	1-3"W	B							
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
7	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
8	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		0 a	0 a	0 a	0 b	0 c	0 c
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
8	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B							
8	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B							
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
8	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
LSD (P=.05)										0.0	3.6	0.0	7.6	10.5	8.2	5.5
Replicate F										0.000	1.000	0.000	2.625	0.000	1.000	2.194
Replicate Prob(F)										1.0000	0.3927	1.0000	0.1076	1.0000	0.3927	0.1483
Treatment F										0.000	1.000	0.000	1.000	4.000	7.776	71.030
Treatment Prob(F)										1.0000	0.4706	1.0000	0.4706	0.0131	0.0006	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Control of Problematic Weeds in Wheat.

Trial ID: 09-YRC-Wheat Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										ALLVI	ALLVI	ALLVI	ALLVI	ALLVI
Crop Code														
Rating Date										11-12-08	11-25-08	12-16-08	03-09-09	04-16-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										14 DAP			At Spring	
Trt-Eval Interval										21 DA-A	0 DA-B	21 DA-B	Greenup	21 DA-C
1	NONTREATED									0 b	0 d	0 d	0 c	0 c
2	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	48 a	48 c	73 c	72 b	70 b
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
3	FINESSE	75	WG			0.5	oz/a	7DBP	A	70 a	67 ab	87 a	85 a	87 a
3	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A					
3	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A					
3	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
4	FINESSE	75	WG			0.5	oz/a	7DBP	A	88 a	73 a	83 ab	85 a	85 a
4	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A					
4	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A					
4	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C					
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	C					
5	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		57 bc	77 c	78 ab	82 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B					
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
5	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
6	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		63 abc	78 bc	78 ab	80 a
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B					
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
6	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
7	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		57 bc	77 c	78 ab	80 a
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B					
7	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	1-3"W	B					
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
7	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
8	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		67 ab	78 bc	82 a	82 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
8	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B					
8	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B					
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
8	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
LSD (P=.05)										42.0	16.2	6.0	7.5	7.8
Replicate F										2.011	6.782	8.595	7.569	2.956
Replicate Prob(F)										0.2146	0.0087	0.0037	0.0059	0.0850
Treatment F										9.859	18.688	203.747	133.390	125.267
Treatment Prob(F)										0.0098	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Control of Problematic Weeds in Wheat.

Trial ID: 09-YRC-Wheat Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										LAMAM	LAMAM	LAMAM	LAMAM	LAMAM
Crop Code														
Rating Date										11-12-08	11-25-08	12-16-08	03-09-09	04-16-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										14 DAP			At Spring	
Trt-Eval Interval										21 DA-A	0 DA-B	21 DA-B	Greenup	21 DA-C
1	NONTREATED									0 c	0 c	0 c	0 c	0 b
2	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	63 b	93 ab	93 b	86 b	96 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
3	FINESSE	75	WG			0.5	oz/a	7DBP	A	96 a	96 a	99 a	99 a	99 a
3	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A					
3	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A					
3	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
4	FINESSE	75	WG			0.5	oz/a	7DBP	A	94 a	98 a	98 a	99 a	99 a
4	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A					
4	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A					
4	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C					
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	C					
5	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		96 a	96 ab	99 a	99 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B					
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
5	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
6	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		98 a	96 ab	99 a	99 a
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B					
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
6	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
7	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		88 b	99 a	99 a	99 a
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B					
7	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	1-3"W	B					
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
7	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
8	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		88 b	98 a	99 a	99 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A					
8	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B					
8	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B					
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B					
8	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B					
LSD (P=.05)										26.8	7.5	3.3	9.2	3.2
Replicate F										1.616	0.897	1.608	1.000	1.000
Replicate Prob(F)										0.2745	0.4299	0.2352	0.3927	0.3927
Treatment F										33.750	181.190	1027.668	130.754	1080.572
Treatment Prob(F)										0.0004	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Control of Problematic Weeds in Wheat.

Trial ID: 09-YRC-Wheat Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	STEME	STEME	STEME	STEME	STEME	GGGAN	GGGAN
	Pest Code									STEME	STEME	STEME	STEME	STEME	GGGAN	GGGAN
	Crop Code															
	Rating Date									11-12-08	11-25-08	12-16-08	03-09-09	04-16-09	03-09-09	04-16-09
	Rating Data Type									Control	Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing									14 DAP			At Spring		At Spring	
	Trt-Eval Interval									21 DA-A	0 DA-B	21 DA-B	Greenup	21 DA-C	Greenup	21 DA-C
1	NONTREATED									0 b	0 b	0 b	0 b	0 b	0 c	0 d
2	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	98 a	99 a	99 a	94 a	99 a	95 b	90 bc
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
3	FINESSE	75	WG			0.5	oz/a	7DBP	A	98 a	99 a	99 a	98 a	99 a	99 a	93 abc
3	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A							
3	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A							
3	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
4	FINESSE	75	WG			0.5	oz/a	7DBP	A	94 a	99 a	98 a	95 a	99 a	99 a	98 ab
4	GLEAN XP	75	WG	0.0195	lb ai/a			7DBP	A							
4	ALLY XP	60	WG	0.0039	lb ai/a			7DBP	A							
4	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C							
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	SPRING	C							
5	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		99 a	99 a	96 a	99 a	99 a	99 a
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
5	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B							
5	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
5	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
6	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		98 a	99 a	95 a	99 a	98 ab	88 c
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
6	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B							
6	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
6	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
7	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		99 a	99 a	95 a	99 a	98 a	98 ab
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
7	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B							
7	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	1-3"W	B							
7	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
7	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
8	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A		99 a	99 a	98 a	99 a	99 a	99 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7DBP	A							
8	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	1-3"W	B							
8	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	fl oz/a	1-3"W	B							
8	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	1-3"W	B							
8	28% UAN	100	SL	2	qt/a	2	qt/a	1-3"W	B							
	LSD (P=.05)									9.5	1.4	1.4	8.1	0.0	3.4	8.0
	Replicate F									0.369	1.000	1.000	0.424	0.000	0.211	0.958
	Replicate Prob(F)									0.7058	0.3927	0.3927	0.6624	1.0000	0.8120	0.4073
	Treatment F									310.329	5492.849	5492.849	160.030	0.000	965.545	166.086
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: DuPont, Bayer.
2. Ratings: CI/WC at 14 DAP; CI/WCat 0 + 21 da"B"+"C"; WC in-late-season or at maturity.
3. Targets are wild garlic, downy brome, little barley, marestail, volunteer RR corn, and other winter annual BL species.
4. 1-3"W = 1 to 3 inch weeds.
5. DAP = Days after planting. GGGAN = Winter annual grasses including BROTE (downy brome) and HORPU (little barley). Wheat injury was discoloration and stand reduction, stunt was height reduction and related to stand reduction.
6. Volunteer corn was damaged by cold nights before the planned 14 DAP rating.
7. Not harvested.

Huskie Evaluation in Wheat.

Trial ID: 09-HRC-6-BAY Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 10-28-08

Objectives: Evaluate crop tolerance and broadleaf weed control attributes of Huskie when fall or spring applied.

Crop 1: TRZAW Winter wheat **Variety:** P25R47
Planting Method: SEEDED **Planting Date:** 10-28-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 7.5 IN

Pest 1 Type: W	**Code:** ALLVI	Allium vineale L.	garlic, wild
Pest 2 Type: W	**Code:** LAMAM	Lamium amplexicaule L.	henbit
Pest 3 Type: W	**Code:** LAMPU	Lamium purpureum L.	deadnettle, purple
Pest 4 Type: W	**Code:** MYOVE	Myosotis verna Nutt.	forget-me-not, spring
Pest 5 Type: W	**Code:** POAAN	Poa annua L.	bluegrass, annual
Pest 6 Type: W	**Code:** STEME	Stellaria media (L.) Vill.	chickweed, common
Pest 7 Type: W	**Code:** CARPA	Cardamine parviflora L.	bittercress, smallflowered

Plot Width, Unit: 15 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 18 LB/A, P2O5 46 LB/A, K2O 120 LB/A on 10-27-08 and N 95 LB/A as 32% UAN on 3-4-09

% OM: 1.5 **Texture:** SILT LOAM
pH: 6.5 **Soil Name:** HOSMER
CEC: 7.2 **Fert. Level:** P1: 46 LB/A, K: 153 LB/A

Application Description	**A**
Application Date:	11-25-08
Time of Day:	14:00
Application Method:	Spray
Application Timing:	2-4LBL
Application Placement:	BROFOL
Applied By:	NRJ
Air Temperature, Unit:	47 F
% Relative Humidity:	33
Wind Velocity, Unit:	1 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	46 F
Soil Moisture:	ABONOR
% Cloud Cover:	0
	11-25-08
Crop stage at application:	2 LVS
Height Min, Max (inch):	3 4

Huskie Evaluation in Wheat.

Trial ID: 09-HRC-6-BAY Location: Agronomy Res. Center

Pest Stage At Each Application

Application Date:	11-25-08
Weed Code:	ALLVI
Stage Majority (leaves):	2
Stage Min, Max:	2 4
Height Majority:	6 IN
Height Min, Max:	4 8
Density, Unit:	1 FT2
Weed Code:	LAMAM
Stage Majority (leaves):	14
Stage Min, Max:	6 20
Height Majority:	2 IN
Height Min, Max:	1 4
Density, Unit:	25 FT2
Weed Code:	LAMPU
Stage Majority (leaves):	10
Stage Min, Max:	6 18
Height Majority:	3 IN
Height Min, Max:	2 6
Density, Unit:	15 FT2
Weed Code:	MYOVE
Stage Majority (leaves):	6
Stage Min, Max:	4 12
Height Majority:	0.5 IN
Height Min, Max:	0.25 1
Density, Unit:	1 FT2
Weed Code:	POAAN
Stage Majority (leaves):	6 TILLERS
Stage Min, Max:	1-2 LVS
Height Majority:	2 IN
Height Min, Max:	1 2.5
Density, Unit:	1 FT2
Weed Code:	STEME
Stage Majority (leaves):	6
Stage Min, Max:	4 12
Height Majority:	1 IN
Height Min, Max:	1 2
Density, Unit:	1 FT2
Weed Code:	CARPA
Stage Majority (leaves):	2
Stage Min, Max:	1 3
Height Majority:	0.5 IN
Height Min, Max:	0.5 1
Density, Unit:	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Huskie Evaluation in Wheat.

Trial ID: 09-HRC-6-BAY Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 12-04-08 Injury Percent 9 DA-A	TRZAW 12-19-08 Injury Percent 24 DA-A	TRZAW 03-09-09 Injury Percent At Spring Greenup	ALLVI 12-19-08 Control Percent 24 DA-A	ALLVI 01-08-09 Control Percent 44 DA-A	ALLVI 03-09-09 Control Percent At Spring Greenup
1	NONTREATED									0 a	0 a	0 a	0 a	0 d	0 d
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	0 a	0 a	0 a	2 d	13 bc
2	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
2	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	0 a	0 a	0 a	10 bcd	10 c
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
3	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	0 a	0 a	0 a	8 cd	10 c
4	BUCTRIL	2	EC	0.078	lb ai/a	5	oz/a	2-4LBL	A						
4	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
4	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
5	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	0 a	0 a	0 a	8 cd	
5	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	2-4LBL	A						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
5	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
6	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	0 a	0 a	0 a	20 ab	15 bc
6	MCPA-ESTER	3.7	EC	0.347	lb ae/a	0.75	pt/a	2-4LBL	A						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
6	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
7	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	0 a	0 a	0 a	15 bc	20 b
7	OLYMPUS FLEX	11.25	SG	0.014	lb ai/a	2	oz/a	2-4LBL	A						
7	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
7	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
8	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	0 a	0 a	0 a	30 a	30 a
8	OLYMPUS FLEX	11.25	SG	0.021	lb ai/a	3	oz/a	2-4LBL	A						
8	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
8	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
LSD (P=.05)										0.0	0.0	0.0	0.0	12.2	7.6
Replicate F										0.000	0.000	0.000	0.000	0.260	1.944
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	0.7793	0.2130
Treatment F										0.000	0.000	0.000	0.000	7.977	17.033
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	0.0109	0.0007

Means followed by same letter do not significantly differ (P=.05, LSD)

Huskie Evaluation in Wheat.

Trial ID: 09-HRC-6-BAY Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	LAMAM	LAMAM	LAMAM	LAMPU	LAMPU	LAMPU
	Pest Code									LAMAM	LAMAM	LAMAM	LAMPU	LAMPU	LAMPU
	Crop Code														
	Rating Date									12-19-08	01-08-09	03-09-09	12-19-08	01-08-09	03-09-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing											At Spring			At Spring
	Trt-Eval Interval									24 DA-A	44 DA-A	Greenup	24 DA-A	44 DA-A	Greenup
1	NONTREATED									0 c	0 c	0 c	0 e	0 b	0 b
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	4 a	88 a	96 a	7 ab	93 a	98 a
2	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
2	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	4 a	85 a	99 a	8 a	95 a	99 a
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
3	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	3 ab	82 a	98 a	5 bc	95 a	99 a
4	BUCTRIL	2	EC	0.078	lb ai/a	5	oz/a	2-4LBL	A						
4	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
4	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
5	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	1 bc	93 a	99 a	1 de	93 a	99 a
5	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	2-4LBL	A						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
5	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
6	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	3 ab	95 a	99 a	3 cd	95 a	99 a
6	MCPA-ESTER	3.7	EC	0.347	lb ae/a	0.75	pt/a	2-4LBL	A						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
6	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
7	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	2 bc	58 b	85 b	1 de	80 a	99 a
7	OLYMPUS FLEX	11.25	SG	0.014	lb ai/a	2	oz/a	2-4LBL	A						
7	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
7	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
8	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	1 bc	58 b	93 ab	1 de	77 a	99 a
8	OLYMPUS FLEX	11.25	SG	0.021	lb ai/a	3	oz/a	2-4LBL	A						
8	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
8	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
	LSD (P=.05)									2.2	17.1	7.9	2.7	19.9	1.4
	Replicate F									0.191	3.625	0.645	0.365	2.473	1.000
	Replicate Prob(F)									0.8285	0.0539	0.5394	0.7008	0.1203	0.3927
	Treatment F									5.027	31.527	171.065	12.762	24.606	5492.849
	Treatment Prob(F)									0.0050	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Huskie Evaluation in Wheat.

Trial ID: 09-HRC-6-BAY Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	MYOVE	MYOVE	MYOVE	POAAN	POAAN	POAAN
	Pest Code									MYOVE	MYOVE	MYOVE	POAAN	POAAN	POAAN
	Crop Code														
	Rating Date									12-19-08	01-08-09	03-09-09	12-19-08	01-08-09	03-09-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing											At Spring			At Spring
	Trt-Eval Interval									24 DA-A	44 DA-A	Greenup	24 DA-A	44 DA-A	Greenup
1	NONTREATED									0 a	0 c	0 b	0 a	0 c	0 a
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	77 ab	83 a	0 a	0 c	0 a
2	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
2	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	90 a	96 a	0 a	0 c	0 a
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
3	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	67 b	98 a	0 a	0 c	0 a
4	BUCTRIL	2	EC	0.078	lb ai/a	5	oz/a	2-4LBL	A						
4	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
4	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
5	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	87 a	99 a	0 a	0 c	0 a
5	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	2-4LBL	A						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
5	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
6	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	85 a	99 a	0 a	0 c	0 a
6	MCPA-ESTER	3.7	EC	0.347	lb ae/a	0.75	pt/a	2-4LBL	A						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
6	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
7	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	67 b	98 a	0 a	62 b	0 a
7	OLYMPUS FLEX	11.25	SG	0.014	lb ai/a	2	oz/a	2-4LBL	A						
7	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
7	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
8	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	68 b	98 a	0 a	87 a	0 a
8	OLYMPUS FLEX	11.25	SG	0.021	lb ai/a	3	oz/a	2-4LBL	A						
8	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
8	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
	LSD (P=.05)									0.0	16.6	17.7	0.0	7.8	0.0
	Replicate F									0.000	3.477	1.069	0.000	1.485	0.000
	Replicate Prob(F)									1.0000	0.0594	0.3697	1.0000	0.2601	1.0000
	Treatment F									0.000	27.762	34.595	0.000	186.841	0.000
	Treatment Prob(F)									1.0000	0.0001	0.0001	1.0000	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Huskie Evaluation in Wheat.

Trial ID: 09-HRC-6-BAY Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	STEME 12-19-08 Control Percent 24 DA-A	STEME 01-08-09 Control Percent 44 DA-A	STEME 03-09-09 Control Percent At Spring Greenup	CARPA 12-19-08 Control Percent 24 DA-A	CARPA 01-08-09 Control Percent 44 DA-A	CARPA 03-09-09 Control Percent At Spring Greenup
1	NONTREATED									0 a	0 d	0 c	0 a	0 c	0 b
2	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	80 abc	93 ab	0 a	80 ab	99 a
2	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
2	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
3	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	93 a	96 a	0 a	93 a	99 a
3	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
3	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
4	HUSKIE	2.06	EC	0.217	lb ai/a	13.5	oz/a	2-4LBL	A	0 a	77 abc	98 a	0 a	60 b	99 a
4	BUCTRIL	2	EC	0.078	lb ai/a	5	oz/a	2-4LBL	A						
4	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
4	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
5	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	85 ab	82 b	0 a	85 a	99 a
5	2,4-D LV 4	3.8	EC	0.237	lb ae/a	0.5	pt/a	2-4LBL	A						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
5	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
6	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	92 a	88 ab	0 a	83 ab	99 a
6	MCPA-ESTER	3.7	EC	0.347	lb ae/a	0.75	pt/a	2-4LBL	A						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
6	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
7	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	65 c	87 ab	0 a	75 ab	99 a
7	OLYMPUS FLEX	11.25	SG	0.014	lb ai/a	2	oz/a	2-4LBL	A						
7	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
7	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
8	HUSKIE	2.06	EC	0.177	lb ai/a	11	oz/a	2-4LBL	A	0 a	72 bc	95 a	0 a	70 ab	99 a
8	OLYMPUS FLEX	11.25	SG	0.021	lb ai/a	3	oz/a	2-4LBL	A						
8	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	2-4LBL	A						
8	28% UAN	100	SL	2	qt/a	2	qt/a	2-4LBL	A						
LSD (P=.05)										0.0	18.1	11.3	0.0	22.6	0.0
Replicate F										0.000	3.582	3.353	0.000	0.242	0.000
Replicate Prob(F)										1.0000	0.0576	0.0646	1.0000	0.7896	1.0000
Treatment F										0.000	25.762	77.496	0.000	16.547	0.000
Treatment Prob(F)										1.0000	0.0001	0.0001	1.0000	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (AP1).
2. Ratings: CI at 6-10 and 19-25 DAT. WC at 19-25 and 45-59 DAT.
3. Application code: 2-4LBL = 2 to 4 leaf broadleaf weeds.
4. Not harvested.

Annual Bluegrass Control in Winter Wheat.

Trial ID: 09-ARC-9-W90 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 10-28-08

Objectives: Evaluate various herbicide programs in winter wheat especially for control of annual bluegrass.

Crop 1: TRZAW Winter wheat **Variety:** P25R47
Planting Method: Seeded **Planting Date:** 10-28-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1 IN
Row Spacing, Unit: 7.5 IN

Pest 1 Type: W **Code:** POAAN Poa annua L. bluegrass, annual
Pest 2 Type: W **Code:** LAMAM Lamium amplexicaule L. henbit
Pest 3 Type: W **Code:** STEME Stellaria media (L.) Vill. chickweed, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 18 LB/A, P2O5 46 LB/A, K2O 120 LB/A on 10-27-08 and N 95 LB/A as 32% UAN on 3-4-09

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** STOY
CEC: 7.4 **Fert. Level:** P1: 66 LB/A, K: 274 LB/A

Application Description

	A	B	C	D
Application Date:	10-31-08	11-26-08	03-26-09	03-26-09
Time of Day:	15:30	14:30	10:00	10:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	FALL-1	FALL-2	SPRING
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	DKT	TGM	NVH	NVH
Air Temperature, Unit:	75 F	57 F	55 F	55 F
% Relative Humidity:	36	42	53	53
Wind Velocity, Unit:	6 MPH	1 MPH	5 MPH	5 MPH
Wind Direction:	SW	N	NE	NE
Dew Presence (Y/N):	N	N	Y	Y
Soil Temperature, Unit:	59 F	40 F	52 F	52 F
Soil Moisture:	ABONOR	ABONOR	ABONOR	ABONOR
% Cloud Cover:	10	0	70	70
	10-31-08	11-26-08	03-26-09	03-26-09
Crop stage at application:	NA	2 LVS	16-18 LVS	16-18 LVS
Height Min, Max (inch):		2 4	8 10	8 10

Pest Stage At Each Application

Application Date:	10-31-08	11-26-08	03-26-09	03-26-09
Weed Code:	POAAN	POAAN	POAAN	POAAN
Stage Majority (leaves):	2 LVS	4 TILLER	7 TILLER	7 TILLER
Stage Min, Max:	1 3	2 4	20 40	20 40
Height Majority:	1 IN	3 IN	3 IN	3 IN
Height Min, Max:	1 2	2 4	2 4	2 4
Density, Unit:	10 FT2	15 FT2	15 FT2	15 FT2
Weed Code:	LAMAM	LAMAM	LAMAM	LAMAM
Stage Majority (leaves):	4	6	30	30
Stage Min, Max:	COTY 8	2 12	25 35	25 35
Height Majority:	1 IN	3 IN	6 IN	6 IN
Height Min, Max:	0.5 2	1 5	4 8	4 8
Density, Unit:	2 FT2	2 FT2	2 FT2	2 FT2
Weed Code:	STEME	STEME	STEME	STEME
Stage Majority (leaves):	10	12	70	70
Stage Min, Max:	COTY 16	2 20	30 100	30 100
Height Majority:	2.5 IN	3 IN	6 IN	6 IN
Height Min, Max:	0.5 3.5	1 4	4 7	4 7
Density, Unit:	2 FT2	2 FT2	2 FT2	2 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Annual Bluegrass Control in Winter Wheat.

Trial ID: 09-ARC-9-W90 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-22-09 Moisture Percent		TRZAW 06-22-09 Test wt. lb/bu		TRZAW 06-22-09 Yield bu/A	
1	NONTREATED									10.6	a	49.1	abc	57	ab
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	9.9	cd	48.7	c	68	a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
2	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
2	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
3	FINESSE	75	WG			0.5	oz/a	PRE	A	10.7	a	51.2	ab	48	b
3	GLEAN XP	75	WG	0.0195	lb ai/a			PRE	A						
3	ALLY XP	60	WG	0.0039	lb ai/a			PRE	A						
3	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	PRE	A						
3	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
3	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	10.6	a	51.5	a	51	b
4	FINESSE	75	WG			0.5	oz/a	PRE	A						
4	GLEAN XP	75	WG	0.0195	lb ai/a			PRE	A						
4	ALLY XP	60	WG	0.0039	lb ai/a			PRE	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
4	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
5	FINESSE	75	WG			0.3	oz/a	FALL-1	B	10.6	ab	51.2	ab	55	ab
5	GLEAN XP	75	WG	0.0117	lb ai/a			FALL-1	B						
5	ALLY XP	60	WG	0.00234	lb ai/a			FALL-1	B						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
5	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
6	FINESSE	75	WG			0.4	oz/a	FALL-1	B	10.3	abc	50.4	abc	50	b
6	GLEAN XP	75	WG	0.0156	lb ai/a			FALL-1	B						
6	ALLY XP	60	WG	0.00312	lb ai/a			FALL-1	B						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
6	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	9.8	cd	48.4	c	67	a
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-2	C						
7	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-2	C						
7	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-2	C						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	9.7	d	48.5	c	61	ab
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
8	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-2	C						
8	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	FALL-2	C						
8	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-2	C						
8	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-2	C						
9	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-1	B	10.3	abc	49.7	abc	61	ab
9	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
9	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-1	B						
10	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-1	B	10.0	bcd	49.0	bc	68	a
10	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	FALL-1	B						
10	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
10	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-1	B						
LSD (P=.05)										0.58		2.45		14.8	
Replicate F										6.736		0.106		1.481	
Replicate Prob(F)										0.0065		0.9004		0.2538	
Treatment F										3.799		2.188		2.231	
Treatment Prob(F)										0.0077		0.0753		0.0705	

Means followed by same letter do not significantly differ (P=.05, LSD)

Annual Bluegrass Control in Winter Wheat.

Trial ID: 09-ARC-9-W90 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 03-09-09 Injury Percent Spring Greenup	TRZAW 04-02-09 Discolor Percent 7-DA-C 7 DA-D	TRZAW 04-07-09 Stunt Percent 12-DA-C 12 DA-D	TRZAW 04-07-09 Stand Red Percent 12-DA-C 12 DA-D	TRZAW 05-11-09 Injury Percent 46-DA-C 46 DA-D	TRZAW 05-11-09 Stunt Percent 46-DA-C 46 DA-D
1	NONTREATED									0 b	0 a	2 cd	3 c	0 c	0 d
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	0 b	0 a	2 cd	2 c	0 c	0 d
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
2	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
2	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
3	FINESSE	75	WG			0.5	oz/a	PRE	A	7 a	0 a	18 ab	25 ab	23 a	22 a
3	GLEAN XP	75	WG	0.0195	lb ai/a			PRE	A						
3	ALLY XP	60	WG	0.0039	lb ai/a			PRE	A						
3	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	PRE	A						
3	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
3	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	5 ab	0 a	28 a	30 a	25 a	20 a
4	FINESSE	75	WG			0.5	oz/a	PRE	A						
4	GLEAN XP	75	WG	0.0195	lb ai/a			PRE	A						
4	ALLY XP	60	WG	0.0039	lb ai/a			PRE	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
4	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
5	FINESSE	75	WG			0.3	oz/a	FALL-1	B	2 ab	0 a	13 bc	12 bc	13 b	10 b
5	GLEAN XP	75	WG	0.0117	lb ai/a			FALL-1	B						
5	ALLY XP	60	WG	0.00234	lb ai/a			FALL-1	B						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
5	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
6	FINESSE	75	WG			0.4	oz/a	FALL-1	B	5 ab	0 a	17 ab	12 bc	27 a	20 a
6	GLEAN XP	75	WG	0.0156	lb ai/a			FALL-1	B						
6	ALLY XP	60	WG	0.00312	lb ai/a			FALL-1	B						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
6	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	0 b	0 a	8 bcd	7 c	7 bc	3 cd
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-2	C						
7	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-2	C						
7	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-2	C						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	2 ab	0 a	7 bcd	13 bc	8 b	7 bc
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
8	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-2	C						
8	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	FALL-2	C						
8	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-2	C						
8	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-2	C						
9	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-1	B	2 ab	0 a	7 bcd	5 c	0 c	0 d
9	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
9	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-1	B						
10	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-1	B	0 b	0 a	0 d	2 c	0 c	0 d
10	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	FALL-1	B						
10	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
10	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-1	B						
LSD (P=.05)										5.2	0.0	12.2	13.6	7.6	5.6
Replicate F										2.818	0.000	1.839	1.118	0.673	0.310
Replicate Prob(F)										0.0861	1.0000	0.1876	0.3485	0.5226	0.7370
Treatment F										2.030	0.000	4.761	4.533	18.579	23.526
Treatment Prob(F)										0.0961	1.0000	0.0024	0.0031	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Annual Bluegrass Control in Winter Wheat.

Trial ID: 09-ARC-9-W90 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	POAAN	POAAN	LAMAM	LAMAM	STEME	STEME
	Pest Code									POAAN	POAAN	LAMAM	LAMAM	STEME	STEME
	Crop Code														
	Rating Date									03-09-09	05-11-09	03-09-09	05-11-09	03-09-09	05-11-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing									Spring	46-DA-C	Spring	46-DA-C	Spring	46-DA-C
	Trt-Eval Interval									Greenup	46 DA-D	Greenup	46 DA-D	Greenup	46 DA-D
1	NONTREATED									0 d	0 c	0 c	0 b	0 c	0 b
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	95 a	96 a	99 a	99 a	99 a	99 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
2	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
2	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
3	FINESSE	75	WG			0.5	oz/a	PRE	A	53 b	60 b	99 a	99 a	99 a	99 a
3	GLEAN XP	75	WG	0.0195	lb ai/a			PRE	A						
3	ALLY XP	60	WG	0.0039	lb ai/a			PRE	A						
3	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	PRE	A						
3	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
3	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	96 a	95 a	99 a	99 a	99 a	99 a
4	FINESSE	75	WG			0.5	oz/a	PRE	A						
4	GLEAN XP	75	WG	0.0195	lb ai/a			PRE	A						
4	ALLY XP	60	WG	0.0039	lb ai/a			PRE	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
4	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
5	FINESSE	75	WG			0.3	oz/a	FALL-1	B	22 c	43 b	99 a	99 a	99 a	99 a
5	GLEAN XP	75	WG	0.0117	lb ai/a			FALL-1	B						
5	ALLY XP	60	WG	0.00234	lb ai/a			FALL-1	B						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
5	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
5	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
6	FINESSE	75	WG			0.4	oz/a	FALL-1	B	38 b	48 b	99 a	99 a	99 a	99 a
6	GLEAN XP	75	WG	0.0156	lb ai/a			FALL-1	B						
6	ALLY XP	60	WG	0.00312	lb ai/a			FALL-1	B						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
6	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	D						
6	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	SPRING	D						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	93 a	96 a	99 a	98 a	99 a	99 a
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
7	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-2	C						
7	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-2	C						
7	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-2	C						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	PRE	A	95 a	99 a	99 a	99 a	98 a	99 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	PRE	A						
8	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-2	C						
8	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	FALL-2	C						
8	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-2	C						
8	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-2	C						
9	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-1	B	85 a	82 a	87 b	98 a	95 b	99 a
9	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
9	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-1	B						
10	OLYMPUS FLEX	11.25	SG	0.0246	lb ai/a	3.5	oz/a	FALL-1	B	85 a	92 a	96 a	99 a	98 a	99 a
10	HUSKIE	2.06	EC	0.177	lb ai/a	11	fl oz/a	FALL-1	B						
10	ACTIVATOR 90	100	SL	0.5	% v/v	0.5	% v/v	FALL-1	B						
10	28% UAN	100	SL	4	pt/a	4	pt/a	FALL-1	B						
	LSD (P=.05)									16.4	17.4	3.5	1.8	3.0	0.0
	Replicate F									0.132	0.647	0.288	0.474	1.449	0.000
	Replicate Prob(F)									0.8768	0.5355	0.7530	0.6302	0.2608	1.0000
	Treatment F									41.123	31.138	693.466	2596.661	977.498	0.000
	Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Annual Bluegrass Control in Winter Wheat.

Trial ID: 09-ARC-9-W90 Location: Agronomy Res. Center

Trial Comments

1. Protocol: DuPont, Bayer (EH1).
2. Ratings: CI and WC as needed.
3. The FALL-2 application was delayed until spring because weed pressure was low in plots following the PRE applcation.
4. Wheat injury was discoloration and stand reduction. Discolor = Discoloration.
   Stunt was height reduction was not apparent until stem elongation started. Stand Red = Stand reduction.
5. An overall evaluation of leaf and head diseases was made on 6-2-09,
   tanspot infection was low at 1-8% severity on the flagleaf and headscab infection was very high at 20-40% severity.
6. Harvested 6-22-09, (8) 7.5 inch rows by 27 ft.

CMT560 on Soybean Yield - Site 1.

Trial ID: 09-27-M50 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Describe the benefit of foliar insecticide treatments on soybean yield.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 29 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1: 67 LB/A, K: 409 LB/A

Application Description

	A	B	C
Application Date:	07-27-09	08-03-09	08-25-09
Time of Day:	10:00	9:30	11:00
Application Method:	Spray	Spray	Spray
Application Timing:	EPOST	MPOST	LPOST
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKP	DKP	NVH
Air Temperature, Unit:	76 F	75 F	78 F
% Relative Humidity:	76	92	86
Wind Velocity, Unit:	3 MPH	7 MPH	4 MPH
Wind Direction:	S	S	S
Dew Presence (Y/N):	N	N	N
Soil Moisture:	NORMAL	ABONOR	NORMAL
% Cloud Cover:	10	60	5
	07-27-09	08-03-09	08-25-09
Crop stage at application:	V1-V2	V4	R3
Height Min, Max (inch):	2 5	6 9	24 30

Pest Stage At Each Application

Application Date:	07-27-09	08-03-09	08-25-09
Weed Code:	NA	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	10 FT	10 FT	10 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

CMT560 on Soybean Yield - Site 1.

Trial ID: 09-27-M50 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code												
Crop Code										GLXMA	GLXMA	GLXMA
Rating Date										11-08-09	11-08-09	11-08-09
Rating Data Type										Moisture	Test wt.	Yield
Rating Unit										Percent	lb/bu	bu/A
Rating Timing												
Trt-Eval Interval												
1	NONTREATED									11.7 a	56.4 a	47 b
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	EPOST	A	11.8 a	56.3 a	51 a
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	MPOST	B			
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	LPOST	C			
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	EPOST	A	11.7 a	56.4 a	51 a
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	EPOST	A			
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	MPOST	B			
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	MPOST	B			
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	LPOST	C			
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	LPOST	C			
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	EPOST	A	11.8 a	56.4 a	50 a
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	MPOST	B			
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	LPOST	C			
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	EPOST	A	11.8 a	56.2 a	50 a
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	EPOST	A			
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	MPOST	B			
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	MPOST	B			
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	LPOST	C			
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	LPOST	C			
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
LSD (P=.05)										0.15	0.40	1.8
Replicate F										0.550	1.535	13.512
Replicate Prob(F)										0.7366	0.2240	0.0001
Treatment F										0.278	0.430	5.764
Treatment Prob(F)										0.8889	0.7849	0.0030

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (B5A).
2. Ratings:
3. Application timing instructions: The EPOST and MPOST applications should coincide with traditional Roundup timings, make the LPOST application 30 days after MPOST.
4. Yield plus grain quality.
5. Monitor insects (below ground).
6. Blanket PRE application of Firstrate (0.031 lbai/A) + Spartan (0.25 lbai/A) + Dual II Magnum (1.27 lbai/A) was applied on 7-1-09.
7. Harvested 11-8-09, (2) 30 inch rows by 26 ft.

CMT560 on Soybean Yield - Site 2.

Trial ID: 09-ARC-13-E60 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 06-02-09

Objectives: Describe the benefit of foliar insecticide treatments on soybean yield.

Crop 1: GLXMA Soybean **Variety:** P94Y70 **Description:** RR
Planting Method: SEEDED **Planting Date:** 06-02-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Code: NA

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

% OM: 1.4 **Texture:** SILT LOAM
pH: 6.1 **Soil Name:** WEIR
CEC: 74 **Fert. Level:** P1: 69 LB/A, K: 402 LB/A

Application Description

	A	B	C
Application Date:	07-10-09	07-15-09	08-14-09
Time of Day:	7:00	13:30	9:00
Application Method:	Spray	Spray	Spray
Application Timing:	EPOST	MPOST	LPOST
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKT	DKT	DKT
Air Temperature, Unit:	80 F	86 F	75 F
% Relative Humidity:	70	60	58
Wind Velocity, Unit:	1 MPH	2 MPH	1 MPH
Wind Direction:	NW	SW	W
Dew Presence (Y/N):	Y	N	Y
Soil Temperature, Unit:	80 F	86 F	80 F
Soil Moisture:	NORMAL	ABONOR	NORMAL
% Cloud Cover:	93	70	10
	07-10-09	07-15-09	08-14-09
Crop stage at application:	V5	R1	R5
Height Min, Max (inch):	8 10	12 15	30 36

Pest Stage At Each Application

Application Date:	07-10-09	07-15-09	08-14-09
Weed Code:	NA	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	10 FT	10 FT	10 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

CMT560 on Soybean Yield - Site 2.

Trial ID: 09-ARC-13-E60 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Code											
Crop Code										GLXMA	GLXMA
Rating Date										11-05-09	11-05-09
Rating Data Type										Moisture	Yield
Rating Unit										Percent	bu/A
Rating Timing											
Trt-Eval Interval											
1	NONTREATED									10.9 a	52 a
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	EPOST	A	10.7 a	51 a
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A		
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	MPOST	B		
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B		
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	LPOST	C		
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C		
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	EPOST	A	10.8 a	54 a
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	EPOST	A		
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A		
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	MPOST	B		
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	MPOST	B		
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B		
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	LPOST	C		
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	LPOST	C		
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C		
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	EPOST	A	10.7 a	50 a
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A		
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	MPOST	B		
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B		
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	LPOST	C		
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C		
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	EPOST	A	10.8 a	52 a
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	EPOST	A		
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A		
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	MPOST	B		
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	MPOST	B		
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B		
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	LPOST	C		
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	LPOST	C		
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C		
LSD (P=.05)										0.18	4.8
Replicate F										0.648	1.164
Replicate Prob(F)										0.6663	0.3608
Treatment F										0.880	1.039
Treatment Prob(F)										0.4937	0.4118

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (B5A).
2. Ratings:
3. Application timing instructions: The EPOST and MPOST applications should coincide with traditional Roundup timings, make the LPOST application 30 days after MPOST.
4. Yield plus grain quality.
5. Monitor insects (below ground).
6. Blanket PRE application of Dual Magnum (1.33 pt/A) + Authority First (6 oz/A) was applied on 6-2-09.
7. Harvested 11-5-09, (2) 30 inch rows by 22 ft.

Evaluation of Zn-Mn+Booster in Soybean.

Trial ID: 09-27-S70 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Evaluate the seed treatment product SOYA Coat Zn+Mn for enhanced soybean growth and development in a Roundup Ready system.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 29 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 2.8 **Texture:** SILT LOAM
pH: 6 **Soil Name:** BETHALTO
CEC: 13 **Fert. Level:** P1: 67 LB/A, K: 409 LB/A

Application Description

	A
Application Date:	08-11-09
Time of Day:	13:00
Application Method:	Spray
Application Timing:	V5
Application Placement:	BROFOL
Applied By:	NVH
Air Temperature, Unit:	78 F
% Relative Humidity:	92
Wind Velocity, Unit:	4 MPH
Wind Direction:	SW
Dew Presence (Y/N):	N
Soil Moisture:	ABONOR
% Cloud Cover:	40
	08-11-09
Crop stage at application:	V5
Height Min, Max (inch):	8 10

Pest Stage At Each Application

Application Date:	08-11-09
Weed Code:	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	10 FT
Spray Volume, Unit:	20 GPA

Evaluation of Zn-Mn+Booster in Soybean.

Trial ID: 09-27-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-09-09 Moisture Percent	GLXMA 11-09-09 Yield bu/A	GLXMA 08-01-09 Plants 000/A 30 DAP	GLXMA 11-09-09 Plants 000/A EOS	GLXMA 08-18-09 SPAD 7 DA-A	GLXMA 08-18-09 Injury Percent 7 DA-A	GLXMA 11-09-09 Height Inch EOS
1	NO SEED TREATMENT									14.7 a	40 ab	106.8 b	92.2 bc	25.9 a	0 a	29 a
2	NO SEED TREATMENT									14.7 a	39 b	116.3 ab	101.2 ab	26.3 a	0 a	29 a
2	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V5	A							
3	NO SEED TREATMENT									14.5 ab	39 b	108.2 b	90.7 c	25.9 a	0 a	28 a
3	ZN-MN+BOOSTER	100	SL	1	qt/a	1	qt/a	V5	A							
4	NO SEED TREATMENT									14.5 ab	39 b	116.3 ab	99.6 abc	25.3 a	0 a	29 a
4	ZN-MN+BOOSTER	100	SL	1	qt/a	1	qt/a									
4	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V5	A							
5	MICROSUN ZNO SEED TRT			6	oz wt/cwt					14.4 b	43 a	122.0 a	102.8 a	26.8 a	0 a	29 a
6	MICROSUN ZNO SEED TRT			6	oz wt/cwt					14.5 ab	43 ab	126.9 a	105.8 a	26.0 a	0 a	29 a
6	ROUNDUP POWERMAX	4.5	SL	1.125	lb ae/a	32	fl oz/a	V5	A							
LSD (P=.05)										0.23	3.6	11.78	9.91	1.72	0.0	0.9
Replicate F										4.585	2.222	7.382	9.570	2.551	0.000	6.960
Replicate Prob(F)										0.0045	0.0852	0.0003	0.0001	0.0536	1.0000	0.0004
Treatment F										2.106	2.314	3.691	3.145	0.719	0.000	1.050
Treatment Prob(F)										0.0996	0.0752	0.0128	0.0253	0.6156	1.0000	0.4118

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU/RFK.
2. Ratings: Soybean stand count 30 DAP, SPAD reading after POST application, plant height at harvest, grain yield.
3. Blanket PRE application of Firstrate (0.031 lbai/A) plus Spartan (0.25 lbai/A) plus Dual II Magnum (1.27 lbai/A) was applied on 7-1-09.
4. Stand reduction due to standing water was observed and recorded by plot.
5. Plants 000/A = Thousands per acre. DAP = Days after planting.
   SPAD = Minolta chlorophyll meter (model SPAD 502) reading on on the newest fully developed leaf.
6. Harvested 11-9-09, (2) 30 inch rows by 26 ft.

Invinsa Evaluation in Wheat.

Trial ID: 09-ARC-18A Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 10-28-08

Objectives: Evaluate if A16087 can mitigate the effects of environmentally triggered stress ethylene on wheat yield and quality.

Crop 1: TRZAW Winter wheat **Variety:** AgriPro Branson
Planting Method: Seeded **Planting Date:** 10-28-08
Rate, Unit: 1.3 mil. S/A **Depth, Unit:** 1 IN
Row Spacing, Unit: 7.5 IN

Plot Width, Unit: 15 FT **Site Type:** FIELD
Plot Length, Unit: 40 FT **Tillage Type:** NO-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 18 LB/A, P2O5 46 LB/A, K2O 120 LB/A on 10-27-08 and N 95 LB/A as 32% UAN on 3-4-09

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.4 **Soil Name:** STOY/HOSMER
CEC: 7.7 **Fert. Level:** P1: 50 LB/A, K: 320 LB/A

Application Description

	A	B	C	D
Application Date:	04-27-09	05-05-09	05-15-09	05-01-09
Time of Day:	8:30	11:00	9:00	10:30
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	FK9	FK10.5	10DA-B	DSSAT
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	JLM	JLM	JLM	JLM
Air Temperature, Unit:	74 F	70 F	73 F	72 F
% Relative Humidity:	51	60	78	70
Wind Velocity, Unit:	3 MPH	2 MPH	4 MPH	3 MPH
Wind Direction:	S	S	SSW	S
Dew Presence (Y/N):	N	N	N	Y
Soil Temperature, Unit:	64 F	58 F	63 F	60 F
Soil Moisture:	NORMAL	ABONOR	ABONOR	ABONOR
% Cloud Cover:	15	0	60	50
	04-27-09	05-05-09	05-15-09	05-01-09
Crop stage at application:	10 FK	10.5 FK	10.51 FK	10.3 FK
Height Min, Max (inch):	24 26	28 32	28 32	26 30

Pest Stage At Each Application

Application Date:	04-27-09	05-05-09	05-15-09	05-01-09

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	27 PSI	27 PSI	27 PSI	27 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8003	XR 8003	XR 8003	XR 8003
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA

Invinsa Evaluation in Wheat.

Trial ID: 09-ARC-18A Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	TRZAW 06-22-09 Moisture Percent	TRZAW 06-22-09 Test wt. lb/bu	TRZAW 06-22-09 Yield bu/A	TRZAW Injury Percent 7 DAT	TRZAW 06-05-09 Senescence 1-10 21 DA-C	TRZAW 06-22-09 Height inch EOS	TRZAW 06-22-09 Lodging Percent EOS
1	NONTREATED									11.6 ab	52.5 ab	77 ab	0 a	6.2 a	35.7 a	0 a
2	SILWET L77	100	SL	0.035	% v/v	0.035	% v/v	FK9	A	11.5 ab	53.0 a	74 b	0 a	5.8 ab	35.6 a	0 a
2	A16087	3.8	WP	9.4	oz/a	25	g ai/ha	FK9	A							
3	NONTREATED									11.5 ab	53.1 a	73 b	0 a	4.7 b	35.0 ab	0 a
4	SILWET L77	100	SL	0.035	% v/v	0.035	% v/v	FK10.5	B	11.9 a	53.2 a	73 b	0 a	5.6 ab	35.3 ab	0 a
4	A16087	3.8	WP	9.4	oz/a	25	g ai/ha	FK10.5	B							
5	NONTREATED									11.6 ab	53.3 a	77 ab	0 a	5.4 ab	35.5 a	0 a
6	SILWET L77	100	SL	0.035	% v/v	0.035	% v/v	10DA-B	C	11.6 ab	53.2 a	75 ab	0 a	5.5 ab	35.6 a	0 a
6	A16087	3.8	WP	9.4	oz/a	25	g ai/ha	10DA-B	C							
7	NONTREATED									11.3 b	52.8 ab	75 ab	0 a	5.3 ab	35.8 a	0 a
8	SILWET L77	100	SL	0.035	% v/v	0.035	% v/v	FK9	A	11.4 ab	53.0 a	75 ab	0 a	5.1 ab	35.1 ab	0 a
8	A16087	3.8	WP	9.4	oz/a	25	g ai/ha	FK9	A							
8	SILWET L77	100	SL	0.035	% v/v	0.035	% v/v	10DA-B	C							
8	A16087	3.8	WP	9.4	oz/a	25	g ai/ha	10DA-B	C							
9	NONTREATED									11.5 ab	52.7 ab	75 ab	0 a	5.2 ab	35.4 ab	0 a
10	SILWET L77	100	SL	0.035	% v/v	0.035	% v/v	DSSAT	D	11.7 ab	53.1 a	74 b	0 a	5.1 ab	34.5 b	0 a
10	A16087	3.8	WP	9.4	oz/a	25	g ai/ha	DSSAT	D							
11	NONTREATED									11.5 ab	52.8 ab	76 ab	0 a	5.3 ab	35.8 a	0 a
12	QUADRIS	2.08	SC	4.23	fl oz/a	77	g ai/ha	FK9	A	11.4 ab	51.7 b	76 ab	0 a	5.6 ab	35.8 a	0 a
12	AGRIDEX	100	SL	1	% v/v	1	% v/v	FK9	A							
13	NONTREATED									11.6 ab	52.8 ab	78 a	0 a	5.8 ab	35.9 a	0 a
14	QUADRIS	2.08	SC	4.23	fl oz/a	77	g ai/ha	FK9	A	11.5 ab	53.0 a	77 ab	0 a	6.0 a	35.6 a	0 a
14	AGRIDEX	100	SL	1	% v/v	1	% v/v	FK9	A							
14	A16087	3.8	WP	9.4	oz/a	25	g ai/ha	FK9	A							
LSD (P=.05)										0.55	1.23	4.0	0.0	1.31	0.93	0.0
Replicate F										0.875	0.903	3.735	0.000	1.401	3.414	0.000
Replicate Prob(F)										0.5034	0.4853	0.0050	1.0000	0.2355	0.0084	1.0000
Treatment F										0.595	0.820	1.178	0.000	0.759	1.298	0.000
Treatment Prob(F)										0.8485	0.6375	0.3164	1.0000	0.6984	0.2375	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (PMC151A3).
2. Observe and provide comments on mixing and application characteristics.
3. Ratings: CI 7 days after each application, describe the symptoms and continue evaluations until symptoms disappear.
   Height at harvest (overall is fine, no subsamples needed) from the top of the head to the ground.
   At every rating date, application date and any time an observation is made, record crop stage and height as ranges.
   Confirm crop density is as planted, if there is stand loss then count enough plots for an overall crop density.
   Record date of flowering (+/- 2-5 days) and physiological maturity (+/- 2-5 days).
   Record in the Application Timing Comment Section whether or not application "D" was triggered
   by the model or the default timing.
4. Crop yield as bu/A adjusted to 13.5% moisture, percent moisture, test weight, percent lodging (at harvest).
5. Assess flagleaf senescence (1-10 scale 1 = brown 10 = deepest green) and/or with spad meter at 14-21 da the "C" application, but before complete leaf senescence.
6. See original Syngenta protocol (attached) for details on mixing and spraying.

Application "D" DSSAT is to be determined based on computer modeling of stress following the FK9 application.
A. Begin tracking weather when crop reaches the specified developmental stage (Feekes 9)
B. Every other weekday (MWF), you should enter the daily high temperature forecast* (in ºF) for each of the next 10-15 days.
C. If the temperature stress conditions are appropriate for application (i.e. cell in column is green), plan to spray within the next 3 days.
D. If the daily high temperature on your selected spray date exceeds 85F, then delay spraying and re-assess forecast tomorrow.
* Use Accuweather.com and enter the nearest zip code for the research site.
Application "D" should be at least 3 days away from applications "A" and "B".
If model shows no stress by FK10.5 then apply at FK10.5 plus 5 days.

7. Blanket application of Harmony Extra (0.75 oz/A) + Warrior (2 floz/A) at FK5-6 was applied 4-9-09.
   If there is heavy disease early then blanket with Tilt (4 floz/A) early (FK8-9), not needed, not applied.
8. For all applications use XR 8003 tips and 50 mesh screens.
   Use (2) 2 liter bottles per treatment and a drop-tube header.
9. Crop is at 50% flowering in most plots on May 8, 2009.
   Crop is at 90% done flowering in most plots on May 15, 2009.
   Crop is physiologically mature (hard dough) in most plots on June 12, 2009.
10. DAT = Days after treatment. EOS = End of season.
    Ratings at 7 days after the FK9, FK10.5, 10DA-B, and DSSAT applications were on 5-4-09, 5-8-09, 5-12-09, and 5-22-09, respectively.
11. Harvested 6-22-09, (8) 7.5 inch rows by 30 ft.

Invinsa Application Timing in Corn.

Trial ID: 09-3-N150 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-29-09

Objectives: Evalaute Invinsa (1-MCP) applied in corn for yield enhancement, including the benefits of applying Invinsa at V10 and R1, and to test the model based on stress driven application timings.

Crop 1: ZEAMD Dent corn **Variety:** DKC 61-69 **Description:** RR2(VT3)
Planting Method: SEEDED **Planting Date:** 06-29-09
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Plot Width, Unit: 15 FT **Site Type:** FIELD
Plot Length, Unit: 50 FT **Tillage Type:** REDUCED-TILL
Replications: 6 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 150 LB/A, P2O5 50 LB/A, K2O 150 LB/A

% OM: 1.4 **Texture:** SILT LOAM
pH: 6.3 **Soil Name:** PIERRON
CEC: 7 **Fert. Level:** P1 90 LB/A, K 305 LB/A

Application Description

	A	B	C	D
Application Date:	08-17-09	08-25-09	08-31-09	09-14-09
Time of Day:	8:30	13:00	11:30	11:30
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	V10-12	V8-VT	V8-R1	R1-3
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NVH	NRJ	RFK	RFK
Air Temperature, Unit:	78 F	78 F	66 F	78 F
% Relative Humidity:	92	86	70	70
Wind Velocity, Unit:	2 MPH	3 MPH	3 MPH	0 MPH
Dew Presence (Y/N):	Y	N	N	N
Soil Moisture:	ABONOR	NORMAL	NORMAL	NORMAL
% Cloud Cover:	100	5	90	0
	08-17-09	08-25-09	08-31-09	09-14-09
Crop stage at application:	V11	VT	R1	R3
Height Min, Max (inch):	72 84	96 108	96 108	96 108

Pest Stage At Each Application

Application Date:	08-17-09	08-25-09	08-31-09	09-14-09
Stage Majority (leaves):	NA	NA	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8003	XR 8003	XR 8003	XR 8003
Boom Length, Unit:	5 FT	5 FT	5 FT	5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA

Invinsa Application Timing in Corn.

Trial ID: 09-3-N150 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ZEAMD 01-19-10 Moisture Percent	ZEAMD 01-19-10 Test wt. lb/bu	ZEAMD 01-19-10 Yield bu/A	ZEAMD Injury Percent 10 DAT	ZEAMD 10-19-09 Greenness Percent	ZEAMD 11-09-09 Maturity DAP	ZEAMD 11-30-09 Lodging Percent	ZEAMD 12-14-09 Plants 000/A
1	NONTREATED									21.2 ab	47.3 ab	83 a	0 a	90 a	133 a	0 a	26.0 a
2	A16781	0.08	OD	0.0223	lb ai/a	25	gai/ha	V10-12	A	21.1 ab	47.7 ab	89 a	0 a	90 a	133 a	0 a	26.2 a
3	NONTREATED									21.1 ab	48.0 ab	92 a	0 a	90 a	133 a	0 a	27.4 a
4	A16781	0.08	OD	0.0223	lb ai/a	25	gai/ha	V8-VT	B	21.4 ab	47.3 ab	90 a	0 a	90 a	133 a	0 a	26.9 a
5	NONTREATED									22.2 a	46.8 b	87 a	0 a	90 a	133 a	0 a	26.9 a
6	A16781	0.08	OD	0.0223	lb ai/a	25	gai/ha	V8-R1	C	21.2 ab	47.8 ab	88 a	0 a	90 a	133 a	0 a	26.5 a
7	NONTREATED									20.1 b	48.2 a	100 a	0 a	90 a	133 a	0 a	26.9 a
8	A16781	0.08	OD	0.0223	lb ai/a	25	gai/ha	R1-3	D	19.9 b	48.5 a	99 a	0 a	90 a	133 a	0 a	27.9 a
LSD (P=.05)										1.81	1.40	22.1	0.0	0.0	0.0	0.0	2.30
Replicate F										0.039	0.317	1.964	0.000	0.000	0.000	0.000	0.259
Replicate Prob(F)										0.9991	0.8992	0.1086	1.0000	1.0000	1.0000	1.0000	0.9324
Treatment F										1.333	1.386	0.575	0.000	0.000	0.000	0.000	0.573
Treatment Prob(F)										0.2644	0.2422	0.7712	1.0000	1.0000	1.0000	1.0000	0.7725

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (PMC003A3).
2. Ratings: Drought stress rated on 1-9 scale at each application timing and 7 days after each application.
   See Syngenta's instructions for drought stress ratings on the following pages.
   CI 7-14 days after each application, describe the symptoms and continue evaluations until symptoms disappear.
   Percent senescence, one rating per plot, when nontreated plots are at 50% senescence.
   Stand count lodging at harvest.
   Record comments about general plant health, pests or anything that could impact yield on a per plot basis.
3. Yield, bu/A and test weight, harvest the (2) center rows by 40 ft after trimming 5 ft from each end of the plots.
4. Observe and provide comments on mixing and application characteristics.
   At every rating date, application date and any time an observation is made, record crop stage and height as ranges.
   Record whether or not applications "B" and "D" were triggered by the model or the default timing.
   Record average date of flowering (+/- 2-5 days) and average date of physiological maturity (+/- 2-5 days).
   Record GPS coordinates (lower left hand corner) for test site.
5. For all applications use XR 8003 tips and 50 mesh screens.
   Use (2) 2 liter bottles per treatment and a drop-tube header.
6. Blanket PRE application of Lumax + Atrazine and maintain weedfree with Touchdown Total if necessary.
7. Application timings:
   A = Corn V10-V12
   B = Stress Driven Model #1 V8-VT, if Stress Driven application not triggered by VT, make the application at VT.
   C = Stress Driven Model #2 V8-R1, if Stress Driven application not triggered by R1, make the application at R1.
   D = Stress Driven Model #1 R1-R3, if Stress Driven application not triggered by R3, make the application at R3.
8. Crop was planted on 6-29-09 which was 45-60 days later than normal, planting was delayed due to wet soil conditions.
   Crop has flowered on 8-27-09.
   Crop was monitored for physiological maturity and was not mature by 10-17-09 when overnight temperatures dipped to 29 degrees F.
   Two days after the freeze a greeness rating was made in advance on corn leaf browning (from the freeze), all plots were at 90% greeness, no differences.
9. All applications were mixed and sprayed without incident.
   No applications were triggered by model, default timings were used.
   Drought stress was rated 1 at each applications and 7 days after each application (1 = no drought stress).
10. Harvested 1-19-10, (2) 30 inch rows by 40 ft.

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Fall Applied Herbicides

Southern Illinois University

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 11-21-08

Objectives: Evaluate the efficacy of various herbicide treatments for burndown and residual control of winter annual weeds in fall application ahead of soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 06-27-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** HORPU	Hordeum pusillum Nutt.	barley, little
Pest 2 Type: W	**Code:** RANAB	Ranunculus abortivus L.	buttercup, smallflower
Pest 3 Type: W	**Code:** LAMAM	Lamium amplexicaule L.	henbit
Pest 4 Type: W	**Code:** STEME	Stellaria media (L.) Vill.	chickweed, common
Pest 5 Type: W	**Code:** SENGL	Senecio glabellus Poir.	groundsel, cressleaf
Pest 6 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 33 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 100 LB/A

% OM: 1.8 **Texture:** SILT LOAM
pH: 5.8 **Soil Name:** PIERRON
CEC: 12 **Fert. Level:** P1 73 LB/A, K 436 LB/A

Application Description

	A	B	C
Application Date:	11-21-08	04-01-09	
Time of Day:	11:30	10:00	Not
Application Method:	Spray	Spray	Applied
Application Timing:	FALL	APRIL1	POST
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKT	RFK	
Air Temperature, Unit:	32 F	50 F	
% Relative Humidity:	50	70	
Wind Velocity, Unit:	1 MPH	3 MPH	
Dew Presence (Y/N):	N	N	
Soil Temperature, Unit:	42 F		
Soil Moisture:	NORMAL	ABONOR	
% Cloud Cover:	0		
	11-21-08	04-01-09	
Crop stage at application:	NA LVS	NA LVS	NA LVS

Pest Stage At Each Application

Application Date:	11-21-08	04-01-09	
Weed Code:	HORPU	HORPU	HORPU
Stage Majority (leaves):	NA	4	NA
Stage Min, Max:		3 4	
Height Majority:		3 IN	
Height Min, Max:		1 3	
Density, Unit:		1 FT2	
Weed Code:	RANAB	RANAB	RANAB
Stage Majority (leaves):	NA	4	NA
Stage Min, Max:		3 4	
Height Majority:		2 IN	
Height Min, Max:		1 2	
Density, Unit:		1 FT2	
Weed Code:	LAMAM	LAMAM	LAMAM
Stage Majority (leaves):	4	NA	NA
Stage Min, Max:	2 6		
Height Majority:	1 IN		
Height Min, Max:	1 2		
Density, Unit:	1 FT2		
Weed Code:	STEME	STEME	STEME
Stage Majority (leaves):	NA	NA	NA
Weed Code:	SENGL	SENGL	SENGL
Stage Majority (leaves):	NA	NA	NA
Weed Code:	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	NA	NA

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	HORPU 11-26-08 Control Percent 5 DA-A	HORPU 12-12-08 Control Percent 21 DA-A	HORPU 04-01-09 Control Percent At spring Greenup	HORPU 04-06-09 Control Percent 5 DA-B	HORPU 04-22-09 Control Percent 21 DA-B	HORPU 05-21-09 Control Percent 0 DAPP
1	NONTREATED									0 a	0 a	0 c			0 e
2	BAS 800 04H	2.85	SC	0.0223	lb ai/a	1	fl oz/a	FALL	A	0 a	0 a	99 a			94 ab
2	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	FALL	A						
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
3	BAS 804 00H	68	WG	0.085	lb ai/a	2	oz/a	FALL	A	0 a	0 a	99 a			76 cd
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
3	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
4	CANOPY EX	29.5	WG			2	oz/a	FALL	A	0 a	0 a	97 a			93 ab
4	CLASSIC	25	WG	0.0283	lb ai/a			FALL	A						
4	EXPRESS	50	SG	0.00848	lb ai/a			FALL	A						
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
5	VALOR XLT	40.3	WG			3	oz/a	FALL	A	0 a	0 a	99 a			99 a
5	VALOR SX	51	WG	0.056	lb ai/a			FALL	A						
5	CLASSIC	25	WG	0.0194	lb ai/a			FALL	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
5	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
6	VALOR XLT	40.3	WG			4	oz/a	FALL	A	0 a	0 a	99 a			98 ab
6	VALOR SX	51	WG	0.075	lb ai/a			FALL	A						
6	CLASSIC	25	WG	0.0258	lb ai/a			FALL	A						
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
6	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
7	VALOR XLT	40.3	WG			5.0	oz/a	FALL	A	0 a	0 a	99 a			98 ab
7	VALOR SX	51	WG	0.093	lb ai/a			FALL	A						
7	CLASSIC	25	WG	0.0322	lb ai/a			FALL	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
7	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A	0 a	0 a	99 a			86 bc
8	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	FALL	A	0 a	0 a	98 a	98	99	97 ab
9	2,4-D LV 4	3.8	EC	0.475	lb ai/a	1	pt/a	FALL	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	APRIL1	B						
9	RAGE D-TECH	4.06	EC	0.38	lb ai/a	12	fl oz/a	APRIL1	B						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	APRIL1	B						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	APRIL1	B						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										HORPU	HORPU	HORPU	HORPU	HORPU	HORPU
Crop Code															
Rating Date										11-26-08	12-12-08	04-01-09	04-06-09	04-22-09	05-21-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing												At spring			
Trt-Eval Interval										5 DA-A	21 DA-A	Greenup	5 DA-B	21 DA-B	0 DAPP
10	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	FALL	A	0 a	0 a	90 b			73 d
10	EXPRESS	50	SG	0.0047	lb ai/a	0.15	oz/a	FALL	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
10	PRIME OIL COC	100	SL	1	pt/a	1	pt/a	FALL	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
LSD (P=.05)										0.0	0.0	3.7	.	.	11.8
Replicate F										0.000	0.000	1.995			1.281
Replicate Prob(F)										1.0000	1.0000	0.1385			0.3007
Treatment F										0.000	0.000	607.736			54.687
Treatment Prob(F)										1.0000	1.0000	0.0001			0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	RANAB 11-26-08 Control Percent 5 DA-A	RANAB 12-12-08 Control Percent 21 DA-A	RANAB 04-01-09 Control Percent At spring Greenup	RANAB 04-06-09 Control Percent 5 DA-B	RANAB 04-22-09 Control Percent 21 DA-B	RANAB 05-21-09 Control Percent 0 DAPP
1	NONTREATED									0 a	0 a	0 e			0 b
2	BAS 800 04H	2.85	SC	0.0223	lb ai/a	1	fl oz/a	FALL	A	0 a	0 a	99 a			99 a
2	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	FALL	A						
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
3	BAS 804 00H	68	WG	0.085	lb ai/a	2	oz/a	FALL	A	0 a	0 a	80 d			99 a
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
3	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
4	CANOPY EX	29.5	WG			2	oz/a	FALL	A	0 a	0 a	99 a			99 a
4	CLASSIC	25	WG	0.0283	lb ai/a			FALL	A						
4	EXPRESS	50	SG	0.00848	lb ai/a			FALL	A						
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
5	VALOR XLT	40.3	WG			3	oz/a	FALL	A	0 a	0 a	99 a			99 a
5	VALOR SX	51	WG	0.056	lb ai/a			FALL	A						
5	CLASSIC	25	WG	0.0194	lb ai/a			FALL	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
5	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
6	VALOR XLT	40.3	WG			4	oz/a	FALL	A	0 a	0 a	99 a			99 a
6	VALOR SX	51	WG	0.075	lb ai/a			FALL	A						
6	CLASSIC	25	WG	0.0258	lb ai/a			FALL	A						
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
6	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
7	VALOR XLT	40.3	WG			5.0	oz/a	FALL	A	0 a	0 a	99 a			99 a
7	VALOR SX	51	WG	0.093	lb ai/a			FALL	A						
7	CLASSIC	25	WG	0.0322	lb ai/a			FALL	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
7	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A	0 a	0 a	89 c			99 a
8	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	FALL	A	0 a	0 a	91 bc	91	99	99 a
9	2,4-D LV 4	3.8	EC	0.475	lb ai/a	1	pt/a	FALL	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	APRIL1	B						
9	RAGE D-TECH	4.06	EC	0.38	lb ai/a	12	fl oz/a	APRIL1	B						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	APRIL1	B						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	APRIL1	B						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										RANAB	RANAB	RANAB	RANAB	RANAB	RANAB
Crop Code															
Rating Date										11-26-08	12-12-08	04-01-09	04-06-09	04-22-09	05-21-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing												At spring			
Trt-Eval Interval										5 DA-A	21 DA-A	Greenup	5 DA-B	21 DA-B	0 DAPP
10	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	FALL	A	0 a	0 a	94 b			99 a
10	EXPRESS	50	SG	0.0047	lb ai/a	0.15	oz/a	FALL	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
10	PRIME OIL COC	100	SL	1	pt/a	1	pt/a	FALL	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
LSD (P=.05)										0.0	0.0	4.9	.	.	0.0
Replicate F										0.000	0.000	0.852			0.000
Replicate Prob(F)										1.0000	1.0000	0.4777			1.0000
Treatment F										0.000	0.000	321.788			0.000
Treatment Prob(F)										1.0000	1.0000	0.0001			1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code												
Pest Code										LAMAM		LAMAM		LAMAM		LAMAM		LAMAM		LAMAM	
Crop Code																					
Rating Date										11-26-08		12-12-08		04-01-09		04-06-09		04-22-09		05-21-09	
Rating Data Type										Control		Control		Control		Control		Control		Control	
Rating Unit										Percent		Percent		Percent		Percent		Percent		Percent	
Rating Timing														At spring							
Trt-Eval Interval										5 DA-A		21 DA-A		Greenup		5 DA-B		21 DA-B		0 DAPP	
1	NONTREATED									0	a	0	a	0	c					0	c
2	BAS 800 04H	2.85	SC	0.0223	lb ai/a	1	fl oz/a	FALL	A	0	a	0	a	99	a					99	a
2	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	FALL	A												
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A												
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A												
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												
3	BAS 804 00H	68	WG	0.085	lb ai/a	2	oz/a	FALL	A	0	a	0	a	99	a					99	a
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A												
3	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A												
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												
4	CANOPY EX	29.5	WG			2	oz/a	FALL	A	0	a	0	a	99	a					99	a
4	CLASSIC	25	WG	0.0283	lb ai/a			FALL	A												
4	EXPRESS	50	SG	0.00848	lb ai/a			FALL	A												
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A												
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A												
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												
5	VALOR XLT	40.3	WG			3	oz/a	FALL	A	0	a	0	a	99	a					99	a
5	VALOR SX	51	WG	0.056	lb ai/a			FALL	A												
5	CLASSIC	25	WG	0.0194	lb ai/a			FALL	A												
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A												
5	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A												
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												
6	VALOR XLT	40.3	WG			4	oz/a	FALL	A	0	a	0	a	99	a					99	a
6	VALOR SX	51	WG	0.075	lb ai/a			FALL	A												
6	CLASSIC	25	WG	0.0258	lb ai/a			FALL	A												
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A												
6	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A												
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												
7	VALOR XLT	40.3	WG			5.0	oz/a	FALL	A	0	a	0	a	99	a					99	a
7	VALOR SX	51	WG	0.093	lb ai/a			FALL	A												
7	CLASSIC	25	WG	0.0322	lb ai/a			FALL	A												
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A												
7	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A												
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A	0	a	0	a	99	a					99	a
8	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A												
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	FALL	A	0	a	0	a	98	b	98		99		98	b
9	2,4-D LV 4	3.8	EC	0.475	lb ai/a	1	pt/a	FALL	A												
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A												
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	APRIL1	B												
9	RAGE D-TECH	4.06	EC	0.38	lb ai/a	12	fl oz/a	APRIL1	B												
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	APRIL1	B												
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	APRIL1	B												
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C												
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C												

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										LAMAM	LAMAM	LAMAM	LAMAM	LAMAM	LAMAM
Crop Code															
Rating Date										11-26-08	12-12-08	04-01-09	04-06-09	04-22-09	05-21-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing												At spring			
Trt-Eval Interval										5 DA-A	21 DA-A	Greenup	5 DA-B	21 DA-B	0 DAPP
10	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	FALL	A	0 a	0 a	99 a			99 a
10	EXPRESS	50	SG	0.0047	lb ai/a	0.15	oz/a	FALL	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
10	PRIME OIL COC	100	SL	1	pt/a	1	pt/a	FALL	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
LSD (P=.05)										0.0	0.0	0.9	.	.	0.9
Replicate F										0.000	0.000	1.000			1.000
Replicate Prob(F)										1.0000	1.0000	0.4079			0.4079
Treatment F										0.000	0.000	9780.001			9780.001
Treatment Prob(F)										1.0000	1.0000	0.0001			0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	STEME 11-26-08 Control Percent 5 DA-A	STEME 12-12-08 Control Percent 21 DA-A	STEME 04-01-09 Control Percent At spring Greenup	STEME 04-06-09 Control Percent 5 DA-B	STEME 04-22-09 Control Percent 21 DA-B	STEME 05-21-09 Control Percent 0 DAPP
1	NONTREATED									0 a	0 a	0 c			0 c
2	BAS 800 04H	2.85	SC	0.0223	lb ai/a	1	fl oz/a	FALL	A	0 a	0 a	99 a			99 a
2	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	FALL	A						
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
3	BAS 804 00H	68	WG	0.085	lb ai/a	2	oz/a	FALL	A	0 a	0 a	99 a			99 a
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
3	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
4	CANOPY EX	29.5	WG			2	oz/a	FALL	A	0 a	0 a	99 a			99 a
4	CLASSIC	25	WG	0.0283	lb ai/a			FALL	A						
4	EXPRESS	50	SG	0.00848	lb ai/a			FALL	A						
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
5	VALOR XLT	40.3	WG			3	oz/a	FALL	A	0 a	0 a	99 a			99 a
5	VALOR SX	51	WG	0.056	lb ai/a			FALL	A						
5	CLASSIC	25	WG	0.0194	lb ai/a			FALL	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
5	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
6	VALOR XLT	40.3	WG			4	oz/a	FALL	A	0 a	0 a	99 a			99 a
6	VALOR SX	51	WG	0.075	lb ai/a			FALL	A						
6	CLASSIC	25	WG	0.0258	lb ai/a			FALL	A						
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
6	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
7	VALOR XLT	40.3	WG			5.0	oz/a	FALL	A	0 a	0 a	99 a			99 a
7	VALOR SX	51	WG	0.093	lb ai/a			FALL	A						
7	CLASSIC	25	WG	0.0322	lb ai/a			FALL	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
7	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A	0 a	0 a	98 b			98 b
8	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	FALL	A	0 a	0 a	99 ab	99	99	99 ab
9	2,4-D LV 4	3.8	EC	0.475	lb ai/a	1	pt/a	FALL	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A						
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	APRIL1	B						
9	RAGE D-TECH	4.06	EC	0.38	lb ai/a	12	fl oz/a	APRIL1	B						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	APRIL1	B						
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	APRIL1	B						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										STEME	STEME	STEME	STEME	STEME	STEME
Crop Code															
Rating Date										11-26-08	12-12-08	04-01-09	04-06-09	04-22-09	05-21-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing												At spring			
Trt-Eval Interval										5 DA-A	21 DA-A	Greenup	5 DA-B	21 DA-B	0 DAPP
10	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	FALL	A	0 a	0 a	99 a			99 a
10	EXPRESS	50	SG	0.0047	lb ai/a	0.15	oz/a	FALL	A						
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
10	PRIME OIL COC	100	SL	1	pt/a	1	pt/a	FALL	A						
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C						
LSD (P=.05)										0.0	0.0	1.0	.	.	1.0
Replicate F										0.000	0.000	0.669			0.669
Replicate Prob(F)										1.0000	1.0000	0.5782			0.5782
Treatment F										0.000	0.000	8719.562			8719.562
Treatment Prob(F)										1.0000	1.0000	0.0001			0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SENGL	SENGL	SENGL	SENGL	AMBTR
	Pest Code									SENGL	SENGL	SENGL	SENGL	AMBTR
	Crop Code													
	Rating Date									04-01-09	04-06-09	04-22-09	05-21-09	05-21-09
	Rating Data Type									Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent
	Rating Timing									At spring				
	Trt-Eval Interval									Greenup	5 DA-B	21 DA-B	0 DAPP	0 DAPP
1	NONTREATED									0 c			0 c	0 b
2	BAS 800 04H	2.85	SC	0.0223	lb ai/a	1	fl oz/a	FALL	A	99 a			99 a	89 a
2	SCEPTER	70	WG	0.123	lb ai/a	2.8	oz/a	FALL	A					
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A					
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
3	BAS 804 00H	68	WG	0.085	lb ai/a	2	oz/a	FALL	A	97 ab			97 ab	79 a
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A					
3	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
4	CANOPY EX	29.5	WG			2	oz/a	FALL	A	99 a			99 a	93 a
4	CLASSIC	25	WG	0.0283	lb ai/a			FALL	A					
4	EXPRESS	50	SG	0.00848	lb ai/a			FALL	A					
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A					
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
5	VALOR XLT	40.3	WG			3	oz/a	FALL	A	99 a			99 a	93 a
5	VALOR SX	51	WG	0.056	lb ai/a			FALL	A					
5	CLASSIC	25	WG	0.0194	lb ai/a			FALL	A					
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A					
5	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
6	VALOR XLT	40.3	WG			4	oz/a	FALL	A	99 a			99 a	95 a
6	VALOR SX	51	WG	0.075	lb ai/a			FALL	A					
6	CLASSIC	25	WG	0.0258	lb ai/a			FALL	A					
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A					
6	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
7	VALOR XLT	40.3	WG			5.0	oz/a	FALL	A	99 a			99 a	97 a
7	VALOR SX	51	WG	0.093	lb ai/a			FALL	A					
7	CLASSIC	25	WG	0.0322	lb ai/a			FALL	A					
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A					
7	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A	95 b			95 b	24 b
8	ROUNDUP P-MAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	FALL	A					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	FALL	A	99 a	99	99	99 a	99 a
9	2,4-D LV 4	3.8	EC	0.475	lb ai/a	1	pt/a	FALL	A					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	FALL	A					
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	APRIL1	B					
9	RAGE D-TECH	4.06	EC	0.38	lb ai/a	12	fl oz/a	APRIL1	B					
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	APRIL1	B					
9	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	APRIL1	B					
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					

General Fall Herbicides in Soybean.

Trial ID: 09-8A Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
	Pest Code									SENGL	SENGL	SENGL	SENGL	AMBTR
	Crop Code													
	Rating Date									04-01-09	04-06-09	04-22-09	05-21-09	05-21-09
	Rating Data Type									Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent
	Rating Timing									At spring				
	Trt-Eval Interval									Greenup	5 DA-B	21 DA-B	0 DAPP	0 DAPP
10	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	FALL	A	95 b			95 b	80 a
10	EXPRESS	50	SG	0.0047	lb ai/a	0.15	oz/a	FALL	A					
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A					
10	PRIME OIL COC	100	SL	1	pt/a	1	pt/a	FALL	A					
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	C					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST	C					
	LSD (P=.05)									3.8	.	.	3.8	26.4
	Replicate F									1.879			1.879	0.826
	Replicate Prob(F)									0.1569			0.1569	0.4910
	Treatment F									562.055			562.055	14.213
	Treatment Prob(F)									0.0001			0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: BASF, Valent, FMC.
2. Ratings: WC at 5-7 and 14-21 DAT, April 1 (spring greenup), and prior to planting.
3. DAPP = Days after planned planting. Planting was delayed due to wet field conditions.
4. By 5-21-09, RANAB in the nontreated plots was senescing naturally thus ratings are different than on 4-1-09.
5. Not harvested.

Fall Metolachlor Applications.

Trial ID: 09-5D-S80 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 11-21-08

Objectives: Evaluate the efficacy of fall applications of metolachlor for control of summer annuals after spring planting as well as the potential for carryover to corn or soybean.

Crop 1: SEE COMMENTS
Planting Method: SEEDED **Planting Date:** 06-27-09

Pest 1 Type: W	**Code:** HORPU	Hordeum pusillum Nutt.	barley, little
Pest 2 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 3 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 4 Type: W	**Code:** AMATA	Amaranthus rudis Sauer	waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

% OM: 1.5 **Texture:** SILT LOAM
pH: 6.6 **Soil Name:** WINFIELD
CEC: 7 **Fert. Level:** P1 81 LB/A, K 313 LB/A

Application Description

	A
Application Date:	11-21-08
Time of Day:	10:00
Application Method:	Spray
Application Timing:	FALL
Application Placement:	BROFOL
Applied By:	TGM
Air Temperature, Unit:	32 F
% Relative Humidity:	50
Wind Velocity, Unit:	2 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	42 F
Soil Moisture:	NORMAL
% Cloud Cover:	0
	11-21-08
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	11-21-08
Weed Code:	HORPU
Stage Majority (leaves):	2
Stage Min, Max:	1 2
Height Majority:	2 IN
Height Min, Max:	1 3
Density, Unit:	8 FT2
Weed Code:	AMBTR
Stage Majority (leaves):	NA
Weed Code:	PANDI
Stage Majority (leaves):	NA
Weed Code:	AMATA
Stage Majority (leaves):	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	7.5 FT
Spray Volume, Unit:	15 GPA

Fall Metolachlor Applications.

Trial ID: 09-5D-S80 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code												HORPU	HORPU	AMBTR	PANDI	PANDI	AMATA	AMATA
Crop Code										GLXMA	ZEAMD							
Rating Date										07-11-09	07-11-09	04-01-09	05-01-09	05-01-09	06-22-09	07-11-09	06-22-09	07-11-09
Rating Data Type										Injury	Injury	Control	Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing												Spring						
Trt-Eval Interval										14 DAP	14 DAP	Greenup	0 DAPP	0 DAPP	42 DAPP	14 DAP	42 DAPP	14 DAP
1	NONTREATED									0 a	0 a	99 a	99 a	0 a	0 a	0 a	0 a	0 a
2	PARALLEL	7.8	EC	1.63	lb ai/a	1.67	pt/a	FALL	A	0 a	0 a	99 a	99 a	0 a	0 a	0 a	0 a	0 a
3	PARALLEL	7.8	EC	1.95	lb ai/a	2.0	pt/a	FALL	A	0 a	0 a	99 a	99 a	0 a	0 a	0 a	0 a	0 a
4	DUAL II MAG	7.64	EC	1.6	lb ai/a	1.67	pt/a	FALL	A	0 a	0 a	99 a	99 a	0 a	0 a	0 a	0 a	0 a
5	DUAL II MAG	7.64	EC	1.91	lb ai/a	2.0	pt/a	FALL	A	0 a	0 a	99 a	99 a	0 a	0 a	0 a	0 a	0 a
LSD (P=.05)										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: MANA (MANA-MET-1).
2. Ratings: CI at 14 and 28 DAP; WC at April 1, May 1 (at planting), and at 14, 28, 42, and 56 DAP.
3. Blanket application of Roundup PowerMax (22 floz/A) at FALL timing to all plots 10 ft wide including the nontreated.
4. Planted 2 rows corn (P33K44 RR/LL) and 2 rows soybean (AG 3905 RR) in each plot on 6-27-09.
5. DAPP = Days after planned planting date, planting was delayed until 6-27-09.
6. On 5-1-09 only HORPU and AMBTR were emerging in the nontreated areas, no summer annual grasses were emerged in nontreated areas.
7. By 14 days after planting on 7-11-09, there was no residual weed control in any plots, ratings were stopped.
8. Not harvested.

Fall Soybean Herbicide Timing -DuPont.

Trial ID: 09-ARC-17-100-S55 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 10-21-08

Objectives: Evaluate the residual activity of early versus late fall herbicide applications in terms of weed control and soybean yield.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** POAAN	Poa annua L.	bluegrass, annual
Pest 2 Type: W	**Code:** LAMAM	Lamium amplexicaule L.	henbit
Pest 3 Type: W	**Code:** STEME	Stellaria media (L.) Vill.	chickweed, common
Pest 4 Type: W	**Code:** AMBTR	Ambrosia trifida L.	ragweed, giant
Pest 5 Type: W	**Code:** PANDI	Panicum dichotomiflorum Michx.	panicum, fall
Pest 6 Type: W	**Code:** ERICA	Conyza canadensis (L.) Crong.	horseweed

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** STOY
CEC: 8.3 **Fert. Level:** P1: 67 LB/A, K: 247 LB/A

Application Description

	A	B	C	D
Application Date:	10-21-08	11-26-08	04-22-09	06-17-09
Time of Day:	17:30	14:00	7:30	8:30
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	OCT	NOV	21DBP	POST
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	BGY	TGM	NRJ	DKP
Air Temperature, Unit:	59 F	57 F	61 F	84 F
% Relative Humidity:	48	42	57	75
Wind Velocity, Unit:	3 MPH	1 MPH	1 MPH	3 MPH
Wind Direction:	E	N	S	W
Dew Presence (Y/N):	N	N	Y	N
Soil Temperature, Unit:	61 F	40 F	48 F	70 F
Soil Moisture:	ABONOR	ABONOR	ABONOR	ABONOR
% Cloud Cover:	70	0	20	50
	10-21-08	11-26-08	04-22-09	06-17-09
Crop stage at application:	NA	NA	NA	V2-V3
Height Min, Max (inch):				5 7

Fall Soybean Herbicide Timing -DuPont.

Trial ID: 09-ARC-17-100-S55 Location: Agronomy Res. Center

Pest Stage At Each Application

Application Date:	10-21-08	11-26-08	04-22-09	06-17-09
Weed Code:	POAAN	POAAN	POAAN	POAAN
Stage Majority (leaves):	4	5	7 TILLERS	NA
Stage Min, Max:	2 6	2 7	4 10	
Height Majority:	1 IN	2 IN	4 IN	
Height Min, Max:	0.5 2	1 3	3 5	
Density, Unit:	1 FT2	1 FT2	0.5 FT2	
Weed Code:	LAMAM	LAMAM	LAMAM	LAMAM
Stage Majority (leaves):	4	6	40	NA
Stage Min, Max:	COTY 8	2 10	25 50	
Height Majority:	1 IN	2 IN	7 IN	
Height Min, Max:	0.5 2	1 3	6 8	
Density, Unit:	2 FT2	2 FT2	2 FT2	
Weed Code:	STEME	STEME	STEME	STEME
Stage Majority (leaves):	10	12	70	NA
Stage Min, Max:	COTY 20	2 24	60 80	
Height Majority:	1.5 IN	3 IN	5 IN	
Height Min, Max:	0.5 3	1 5	4 6	
Density, Unit:	4 FT2	4 FT2	2 FT2	
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	NA	4	35
Stage Min, Max:			2 4	10 50
Height Majority:			2 IN	44 IN
Height Min, Max:			1 3	8 60
Density, Unit:			0.5 FT2	0.5 FT2
Weed Code:	PANDI	PANDI	PANDI	PANDI
Stage Majority (leaves):	NA	NA	NA	10
Stage Min, Max:				3 18
Height Majority:				8 IN
Height Min, Max:				3 14
Density, Unit:				8 FT2
Weed Code:	ERICA	ERICA	ERICA	ERICA
Stage Majority (leaves):	NA	NA	25	40
Stage Min, Max:			15 30	15 50
Height Majority:			3 IN	10 IN
Height Min, Max:			2 4	4 16
Density, Unit:			0.1 FT2	0.1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Fall Soybean Herbicide Timing -DuPont.

Trial ID: 09-ARC-17-100-S55 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Yield bu/A	GLXMA 06-01-09 Injury Percent 9 DAP 40 DA-C	POAAN 04-01-09 Control Percent Spring Greenup	POAAN 05-01-09 Control Percent 9 DA-C	LAMAM 04-01-09 Control Percent Spring Greenup	LAMAM 05-01-09 Control Percent 9 DA-C
1	CANOPY EX	29.5	WG			1.1	oz/a	OCT	A	11.8 ab	56 ab	0 a	97 a	99 a	99 a	99 a
1	CLASSIC	25	WG	0.0156	lb ai/a			OCT	A							
1	EXPRESS	50	SG	0.00468	lb ai/a			OCT	A							
1	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A							
1	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	OCT	A							
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
1	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
2	CANOPY EX	29.5	WG			2	oz/a	OCT	A	11.8 ab	60 a	0 a	99 a	99 a	99 a	99 a
2	CLASSIC	25	WG	0.0283	lb ai/a			OCT	A							
2	EXPRESS	50	SG	0.00848	lb ai/a			OCT	A							
2	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A							
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	OCT	A							
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
2	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
3	ENVIVE	41.3	WG			3.5	oz/a	OCT	A	11.9 ab	56 ab	0 a	99 a	99 a	99 a	99 a
3	CLASSIC	25	WG	0.02	lb ai/a			OCT	A							
3	HARMONY SG	50	SG	0.00643	lb ai/a			OCT	A							
3	VALOR SX	51	WG	0.0635	lb ai/a			OCT	A							
3	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A							
3	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	OCT	A							
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
3	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	OCT	A	11.7 ab	44 b	0 a	97 a	85 a	98 a	99 a
4	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A							
4	AMS	100	SG	2	lb/a	2	lb/a	OCT	A							
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
4	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
5	CANOPY EX	29.5	WG			1.1	oz/a	NOV	B	11.9 ab	47 ab	0 a	90 a	85 a	97 a	99 a
5	CLASSIC	25	WG	0.0156	lb ai/a			NOV	B							
5	EXPRESS	50	SG	0.00468	lb ai/a			NOV	B							
5	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B							
5	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	NOV	B							
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
5	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
6	CANOPY EX	29.5	WG			2	oz/a	NOV	B	11.9 ab	55 ab	0 a	89 a	96 a	99 a	99 a
6	CLASSIC	25	WG	0.0283	lb ai/a			NOV	B							
6	EXPRESS	50	SG	0.00848	lb ai/a			NOV	B							
6	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B							
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	NOV	B							
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
6	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
7	ENVIVE	41.3	WG			3.5	oz/a	NOV	B	11.6 b	47 ab	0 a	91 a	87 a	99 a	99 a
7	CLASSIC	25	WG	0.02	lb ai/a			NOV	B							
7	HARMONY SG	50	SG	0.00643	lb ai/a			NOV	B							
7	VALOR SX	51	WG	0.0635	lb ai/a			NOV	B							
7	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B							
7	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	NOV	B							
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
7	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	NOV	D	11.8 ab	43 bc	0 a	99 a	80 a	99 a	99 a
8	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B							
8	AMS	100	SG	2	lb/a	2	lb/a	NOV	B							
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
8	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DBP	C	11.6 b	49 ab	0 a		99 a		99 a
9	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	21DBP	C							
9	AMS	100	SG	2	lb/a	2	lb/a	21DBP	C							
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D							
9	AMS	100	SG	2	lb/a	2	lb/a	POST	D							
10	NONTREATED									12.0 a	29 c	0 a	0 b	0 b	0 b	0 b
LSD (P=.05)										0.37	13.9	0.0	11.9	19.4	2.8	0.0

Fall Soybean Herbicide Timing -DuPont.

Trial ID: 09-ARC-17-100-S55 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code													POAAN	POAAN	LAMAM	LAMAM
Crop Code										GLXMA	GLXMA	GLXMA				
Rating Date										11-06-09	11-06-09	06-01-09	04-01-09	05-01-09	04-01-09	05-01-09
Rating Data Type										Moisture	Yield	Injury	Control	Control	Control	Control
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent	Percent
Rating Timing												9 DAP	Spring		Spring	
Trt-Eval Interval												40 DA-C	Greenup	9 DA-C	Greenup	9 DA-C
Replicate F										3.281	11.381	0.000	1.215	0.877	0.540	0.000
Replicate Prob(F)										0.0610	0.0006	1.0000	0.3227	0.4329	0.5929	1.0000
Treatment F										1.228	3.615	0.000	65.361	21.206	1276.646	0.000
Treatment Prob(F)										0.3380	0.0098	1.0000	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Soybean Herbicide Timing -DuPont.

Trial ID: 09-ARC-17-100-S55 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	STEME	STEME	AMBTR	AMBTR	PANDI	ERICA
	Pest Code									STEME	STEME	AMBTR	AMBTR	PANDI	ERICA
	Crop Code														
	Rating Date									04-01-09	05-01-09	05-01-09	06-01-09	06-01-09	06-01-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing									Spring					
	Trt-Eval Interval									Greenup	9 DA-C	9 DA-C	40 DA-C	40 DA-C	40 DA-C
1	CANOPY EX	29.5	WG			1.1	oz/a	OCT	A	99 a	99 a	94 ab	86 a	27 abc	99 a
1	CLASSIC	25	WG	0.0156	lb ai/a			OCT	A						
1	EXPRESS	50	SG	0.00468	lb ai/a			OCT	A						
1	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A						
1	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	OCT	A						
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
1	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
2	CANOPY EX	29.5	WG			2	oz/a	OCT	A	99 a	99 a	98 a	96 a	33 ab	99 a
2	CLASSIC	25	WG	0.0283	lb ai/a			OCT	A						
2	EXPRESS	50	SG	0.00848	lb ai/a			OCT	A						
2	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A						
2	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	OCT	A						
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
2	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
3	ENVIVE	41.3	WG			3.5	oz/a	OCT	A	99 a	99 a	99 a	94 a	28 abc	99 a
3	CLASSIC	25	WG	0.02	lb ai/a			OCT	A						
3	HARMONY SG	50	SG	0.00643	lb ai/a			OCT	A						
3	VALOR SX	51	WG	0.0635	lb ai/a			OCT	A						
3	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A						
3	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	OCT	A						
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
3	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	OCT	A	96 b	98 b	76 bc	7 de	0 c	99 a
4	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	OCT	A						
4	AMS	100	SG	2	lb/a	2	lb/a	OCT	A						
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
4	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
5	CANOPY EX	29.5	WG			1.1	oz/a	NOV	B	96 b	99 a	90 abc	50 bc	3 c	91 b
5	CLASSIC	25	WG	0.0156	lb ai/a			NOV	B						
5	EXPRESS	50	SG	0.00468	lb ai/a			NOV	B						
5	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B						
5	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	NOV	B						
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
5	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
6	CANOPY EX	29.5	WG			2	oz/a	NOV	B	99 a	99 a	95 a	81 ab	53 a	99 a
6	CLASSIC	25	WG	0.0283	lb ai/a			NOV	B						
6	EXPRESS	50	SG	0.00848	lb ai/a			NOV	B						
6	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B						
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	NOV	B						
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
6	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
7	ENVIVE	41.3	WG			3.5	oz/a	NOV	B	96 b	99 a	98 a	80 ab	52 a	99 a
7	CLASSIC	25	WG	0.02	lb ai/a			NOV	B						
7	HARMONY SG	50	SG	0.00643	lb ai/a			NOV	B						
7	VALOR SX	51	WG	0.0635	lb ai/a			NOV	B						
7	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B						
7	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	NOV	B						
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
7	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	NOV	D	99 a	99 a	73 c	38 cd	7 bc	99 a
8	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	NOV	B						
8	AMS	100	SG	2	lb/a	2	lb/a	NOV	B						
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
8	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DBP	C		99 a	99 a	93 a	7 bc	99 a
9	2,4-D LV 4	3.8	EC	0.5	lb ae/a	1.05	pt/a	21DBP	C						
9	AMS	100	SG	2	lb/a	2	lb/a	21DBP	C						
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
9	AMS	100	SG	2	lb/a	2	lb/a	POST	D						
10	NONTREATED									0 c	0 c	0 d	0 e	0 c	0 c
LSD (P=.05)										2.4	1.3	18.1	32.0	28.8	3.8

Fall Soybean Herbicide Timing -DuPont.

Trial ID: 09-ARC-17-100-S55 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code										STEME	STEME	AMBTR	AMBTR	PANDI	ERICA
Crop Code															
Rating Date										04-01-09	05-01-09	05-01-09	06-01-09	06-01-09	06-01-09
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										Spring					
Trt-Eval Interval										Greenup	9 DA-C	9 DA-C	40 DA-C	40 DA-C	40 DA-C
Replicate F										0.000	1.000	3.611	3.824	3.110	1.000
Replicate Prob(F)										1.0000	0.3874	0.0480	0.0413	0.0692	0.3874
Treatment F										1603.167	5497.563	24.783	11.534	4.524	577.616
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0032	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: DuPont (09-144).
2. Ratings: WC on April 1, May 1, June 1 (or just prior to POST trt).
3. Yield.
4. Targeted application timings: OCT = prior to October 15, NOV = mid to late November, 21DBP = 15-30 days preplant.
5. Make a second application of glyphosate POST if needed.
6. DAP = Days after planting.
7. Harvested 11-6-09, (2) 30 inch rows by 25 ft.

Fall Applications of Distinct.

Trial ID: 09-ARC-4-E70 Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Carbondale IL 62901 USA
Trial Status: FINAL **Initiation Date:** 11-13-08

Objectives: Evaluate Distinct in fall applications for control of perennial weeds as well as winter annual species prior to corn planting.

Crop 1: ZEAMD Dent corn **Variety:** See comments
Planting Method: SEEDED
Rate, Unit: 28000 S/A **Depth, Unit:** 1.5 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** RUMCR	Rumex crispus		dock, curly
Pest 2 Type: W	**Code:** LAMPU	Lamium purpureum L.		deadnettle, purple
Pest 3 Type: W	**Code:** GLEHE	Glechoma		ivy, ground
Pest 4 Type: W	**Code:** ALLVI	Allium vineale L.		garlic, wild
Pest 5 Type: W	**Code:** STEME	Stellaria media (L.) Vill.		chickweed, common
Pest 6 Type: W	**Code:** ALOCA	Alopecurus carolinianus Walt.		foxtail, Carolina
Pest 7 Type: W	**Code:** RANAB	Ranunculus abortivus L.		buttercup, smallflower

Plot Width, Unit: 15 FT **Site Type:** FIELD
Plot Length, Unit: 35 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

% OM: 1.7 **Texture:** SILT LOAM
pH: 6 **Soil Name:** WEIR
CEC: 8.2 **Fert. Level:** P1: 64 LB/A, K: 319 LB/A

Application Description	**A**
Application Date:	11-13-08
Time of Day:	11:00
Application Method:	Spray
Application Timing:	FALL
Application Placement:	BROFOL
Applied By:	DKT
Air Temperature, Unit:	53 F
% Relative Humidity:	79
Wind Velocity, Unit:	4 MPH
Wind Direction:	SW
Dew Presence (Y/N):	N
Soil Temperature, Unit:	51 F
Soil Moisture:	ABONOR
% Cloud Cover:	100
	11-13-08
Crop stage at application:	NA

Fall Applications of Distinct.

Trial ID: 09-ARC-4-E70 Location: Agronomy Res. Center

Pest Stage At Each Application

Application Date:	11-13-08
Weed Code:	RUMCR
Stage Majority (leaves):	4
Stage Min, Max:	1 4
Height Majority:	2 IN
Height Min, Max:	1 3
Density, Unit:	1 FT2
Weed Code:	LAMPU
Stage Majority (leaves):	4
Stage Min, Max:	2 5
Height Majority:	2 IN
Height Min, Max:	1 3
Density, Unit:	2 FT2
Weed Code:	GLEHE
Stage Majority (leaves):	2
Stage Min, Max:	2 4
Height Majority:	2 IN
Height Min, Max:	1 4
Density, Unit:	1 FT2
Weed Code:	ALLVI
Stage Majority (leaves):	2
Stage Min, Max:	2 3
Height Majority:	5 IN
Height Min, Max:	3 8
Density, Unit:	2 FT2
Weed Code:	STEME
Stage Majority (leaves):	6
Stage Min, Max:	3 6
Height Majority:	1.5 IN
Height Min, Max:	1 3
Density, Unit:	1 FT2
Weed Code:	ALOCA
Stage Majority (leaves):	2
Stage Min, Max:	2 3
Height Majority:	3 IN
Height Min, Max:	2 5
Density, Unit:	2 FT2
Weed Code:	RANAB
Stage Majority (leaves):	2
Stage Min, Max:	Coty 2
Height Majority:	1 IN
Height Min, Max:	0.5 1
Density, Unit:	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	10 FT
Spray Volume, Unit:	15 GPA

Fall Applications of Distinct.

Trial ID: 09-ARC-4-E70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	RUMCR	RUMCR	LAMPU	LAMPU	GLEHE	GLEHE
Pest Code										RUMCR	RUMCR	LAMPU	LAMPU	GLEHE	GLEHE
Crop Code															
Rating Date										04-01-09	05-06-09	11-20-08	12-04-08	11-20-08	12-04-08
Rating Data Type										Control	Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing										Spring	At planting				
Trt-Eval Interval										139 DA-A	174 DA-A	7 DA-A	21 DA-A	7 DA-A	21 DA-A
1	NONTREATED									0 b	0 b	0 a	0 a	0 b	0 b
2	DISTINCT	70	WG	0.0875	lb ae/a	2	oz/a	FALL	A	93 a	83 a	0 a	0 a	3 b	3 b
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A						
2	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A						
3	DISTINCT	70	WG	0.0875	lb ae/a	2	oz/a	FALL	A	95 a	87 a	0 a	0 a	10 a	10 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A						
3	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A						
4	2,4-D LV 4	3.8	EC	0.95	lb ae/a	32	fl oz/a	FALL	A	95 a	92 a	3 a	3 a	3 b	3 b
4	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A						
4	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A						
LSD (P=.05)										4.0	13.2	4.0	4.0	6.0	6.0
Replicate F										1.731	2.571	1.000	1.000	0.600	0.600
Replicate Prob(F)										0.2299	0.1191	0.4363	0.4363	0.6310	0.6310
Treatment F										1416.753	113.096	1.000	1.000	5.400	5.400
Treatment Prob(F)										0.0001	0.0001	0.4363	0.4363	0.0211	0.0211

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Applications of Distinct.

Trial ID: 09-ARC-4-E70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ALLVI 11-20-08 Control Percent 7 DA-A	ALLVI 12-04-08 Control Percent 21 DA-A	ALLVI 04-01-09 Control Percent Spring 139 DA-A	ALLVI 05-06-09 Control Percent At planting 174 DA-A	STEME 11-20-08 Control Percent 7 DA-A	STEME 12-04-08 Control Percent 21 DA-A	STEME 04-01-09 Control Percent Spring 139 DA-A	STEME 05-06-09 Control Percent At planting 174 DA-A
1	NONTREATED									0 c	0 c	0 b	0 b	0 a	0 a	0 b	0 b
2	DISTINCT	70	WG	0.0875	lb ae/a	2	oz/a	FALL	A	10 b	10 b	73 a	88 a	3 a	3 a	96 a	99 a
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A								
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A								
2	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A								
3	DISTINCT	70	WG	0.0875	lb ae/a	2	oz/a	FALL	A	10 b	10 b	68 a	86 a	5 a	5 a	91 a	99 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A								
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A								
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A								
3	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A								
4	2,4-D LV 4	3.8	EC	0.95	lb ae/a	32	fl oz/a	FALL	A	15 a	15 a	74 a	90 a	5 a	5 a	96 a	99 a
4	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A								
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A								
4	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A								
LSD (P=.05)										4.6	4.6	7.6	7.1	7.7	7.7	6.9	0.0
Replicate F										1.000	1.000	0.256	0.292	1.000	1.000	0.273	0.000
Replicate Prob(F)										0.4363	0.4363	0.8554	0.8302	0.4363	0.4363	0.8436	1.0000
Treatment F										19.000	19.000	227.977	394.487	1.000	1.000	479.519	0.000
Treatment Prob(F)										0.0003	0.0003	0.0001	0.0001	0.4363	0.4363	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Applications of Distinct.

Trial ID: 09-ARC-4-E70 Location: Agronomy Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ALOCA	ALOCA	ALOCA	ALOCA	RANAB	RANAB
	Pest Code									ALOCA	ALOCA	ALOCA	ALOCA	RANAB	RANAB
	Crop Code														
	Rating Date									11-20-08	12-04-08	04-01-09	05-06-09	04-01-09	05-06-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing											Spring	At planting	Spring	At planting
	Trt-Eval Interval									7 DA-A	21 DA-A	139 DA-A	174 DA-A	139 DA-A	174 DA-A
1	NONTREATED									0 b	0 b	0 b	0 c	0 c	0 c
2	DISTINCT	70	WG	0.0875	lb ae/a	2	oz/a	FALL	A	0 b	8 b	85 a	20 ab	83 b	87 ab
2	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
2	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A						
2	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A						
3	DISTINCT	70	WG	0.0875	lb ae/a	2	oz/a	FALL	A	5 ab	8 b	80 a	18 b	91 a	91 a
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
3	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
3	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A						
3	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A						
4	2,4-D LV 4	3.8	EC	0.95	lb ae/a	32	fl oz/a	FALL	A	8 a	28 a	86 a	33 a	83 b	69 b
4	CORNERSTONE	3	SL	0.56	lb ae/a	24	fl oz/a	FALL	A						
4	ACTIVATOR 90	100	SL	0.25	% v/v	0.25	% v/v	FALL	A						
4	N-PAK AMS	100	SL	5.0	% v/v	5	% v/v	FALL	A						
LSD (P=.05)										5.5	9.3	11.6	14.7	7.6	19.6
Replicate F										1.941	1.163	1.319	1.918	0.736	0.217
Replicate Prob(F)										0.1936	0.3763	0.3275	0.1972	0.5566	0.8820
Treatment F										4.765	16.347	131.723	8.459	329.960	47.372
Treatment Prob(F)										0.0296	0.0006	0.0001	0.0055	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: BASF.
2. Ratings: WC at 5-7 and 14-21 DAT, April 1 (spring greenup), and prior to planting.
3. Corn was not planted, not needed to complete the ratings.
4. DA-A = Days after FALL application.
5. Not harvested.

Glyphosate-Resistant Marestail or Waterhemp Control

Southern Illinois University

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-DeSoto-BDtankmix Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-04-09

Objectives: Evaluate the effectiveness of various tank-mix partners with Roundup PowerMax, Ignite, and Gramoxone Inteon in no-till soybean.

Crop 1: GLXMA Soybean **Variety:** AG 3905 **Description:** RR
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed
Pest 2 Type: W **Code:** HORPU Hordeum pusillum Nutt. barley, little
Pest 3 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A	B
Application Date:	05-04-09	06-20-09
Time of Day:	18:00	8:00
Application Method:	Spray	Spray
Application Timing:	7-14EPP	28DAP
Application Placement:	BROFOL	BROFOL
Applied By:	NVH	DKP
Air Temperature, Unit:	74 F	85 F
% Relative Humidity:	39	59
Wind Velocity, Unit:	1 MPH	1 MPH
Wind Direction:	S	W
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	73 F	77 F
Soil Moisture:	ABONOR	NORMAL
% Cloud Cover:	85	10
	05-04-09	06-20-09
Crop stage at application:	NA	V2
Height Min, Max (inch):		7 9

Pest Stage At Each Application

Application Date:	05-04-09	06-20-09
Weed Code:	ERICA	ERICA
Stage Majority (leaves):	18	NA
Stage Min, Max:	4 32	
Height Majority:	4 IN	
Height Min, Max:	1 8	
Density, Unit:	2 FT2	
Weed Code:	HORPU	HORPU
Stage Majority (leaves):	FK10.5	NA
Height Majority:	14 IN	
Height Min, Max:	10 20	
Density, Unit:	70 FT2	
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA	6
Stage Min, Max:		2 10
Height Majority:		3 IN
Height Min, Max:		1 9
Density, Unit:		2.5 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-DeSoto-BDtankmix Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA 07-18-09 Injury Percent	ERICA 05-18-09 Control Percent	ERICA 06-19-09 Control Percent -1 DA-B	HORPU 05-18-09 Control Percent
	Pest Code															
	Crop Code									GLXMA	GLXMA	GLXMA	GLXMA	ERICA	ERICA	HORPU
	Rating Date									11-06-09	11-06-09	11-06-09	07-18-09	05-18-09	06-19-09	05-18-09
	Rating Data Type									Moisture	Test wt.	Yield	Injury	Control	Control	Control
	Rating Unit									Percent	lb/bu	bu/A	Percent	Percent	Percent	Percent
	Rating Timing														-1 DA-B	
	Trt-Eval Interval												28 DA-B	14 DA-A	46 DA-A	14 DA-A
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.7 bc	51.9 ab	41 ab	0 a	43 c	72 c	99 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.0 bc	52.0 ab	44 ab	0 a	79 b	95 a	99 a
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.8 bc	52.6 ab	42 ab	0 a	50 c	78 bc	99 a
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.6 c	52.2 ab	41 ab	0 a	98 a	99 a	99 a
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A							
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.9 bc	51.3 b	42 ab	0 a	88 ab	98 a	99 a
5	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A							
5	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A							
5	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	10.5 c	52.0 ab	45 ab	0 a	91 ab	99 a	99 a
6	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	11.0 bc	51.8 ab	45 ab	0 a	53 c	83 b	99 a
7	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
8	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.6 ab	52.6 ab	40 ab	0 a	99 a	99 a	99 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	10.5 c	53.2 a	42 ab	0 a	99 a	99 a	99 a
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.2 abc	52.5 ab	40 ab	0 a	99 a	99 a	99 a
10	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
11	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.4 abc	52.0 ab	40 ab	0 a	99 a	99 a	99 a
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A							
11	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-DeSoto-BDtankmix Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA 07-18-09 Injury Percent	ERICA 05-18-09 Control Percent	ERICA 06-19-09 Control Percent -1 DA-B	HORPU 05-18-09 Control Percent
	Pest Code															
	Crop Code									GLXMA	GLXMA	GLXMA	GLXMA	ERICA	ERICA	HORPU
	Rating Date									11-06-09	11-06-09	11-06-09	07-18-09	05-18-09	06-19-09	05-18-09
	Rating Data Type									Moisture	Test wt.	Yield	Injury	Control	Control	Control
	Rating Unit									Percent	lb/bu	bu/A	Percent	Percent	Percent	Percent
	Rating Timing														-1 DA-B	
	Trt-Eval Interval												28 DA-B	14 DA-A	46 DA-A	14 DA-A
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	10.6 c	52.7 ab	46 ab	0 a	99 a	99 a	99 a
12	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A							
12	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A							
12	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
13	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	11.0 bc	51.7 ab	49 a	0 a	99 a	99 a	99 a
13	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
14	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	10.9 bc	52.9 ab	47 ab	0 a	99 a	98 a	96 d
14	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
15	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	10.5 c	52.4 ab	39 b	0 a	99 a	98 a	97 c
15	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
16	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.3 abc	51.2 b	39 b	0 a	99 a	99 a	97 c
16	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A							
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
17	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.0 bc	51.9 ab	46 ab	0 a	99 a	98 a	98 b
17	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A							
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
18	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.1 abc	52.0 ab	43 ab	0 a	99 a	99 a	96 d
18	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A							
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
19	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	10.7 bc	52.2 ab	47 ab	0 a	99 a	99 a	98 b
19	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A							
19	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A							
19	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A							
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
20	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	10.9 bc	51.9 ab	48 ab	0 a	93 ab	99 a	98 b
20	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A							
20	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
21	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	11.2 abc	51.3 b	47 ab	0 a	99 a	99 a	99 a
21	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A							
21	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A							
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A							
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B							
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B							
22	NONTREATED									12.0 a	52.2 ab	28 c	0 a	0 d	0 d	0 e

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-DeSoto-BDtankmix Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code														ERICA	ERICA	HORPU
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA			
Rating Date										11-06-09	11-06-09	11-06-09	07-18-09	05-18-09	06-19-09	05-18-09
Rating Data Type										Moisture	Test wt.	Yield	Injury	Control	Control	Control
Rating Unit										Percent	lb/bu	bu/A	Percent	Percent	Percent	Percent
Rating Timing															-1 DA-B	
Trt-Eval Interval													28 DA-B	14 DA-A	46 DA-A	14 DA-A
LSD (P=.05)										0.92	1.82	9.5	0.0	15.5	9.2	0.5
Replicate F										2.805	0.994	4.492	0.000	2.200	1.673	0.417
Replicate Prob(F)										0.0719	0.3786	0.0171	1.0000	0.1234	0.2000	0.6616
Treatment F										1.390	0.640	1.875	0.000	22.597	45.428	12137.352
Treatment Prob(F)										0.1785	0.8634	0.0411	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-DeSoto-BDtankmix Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-19-09 Control Percent -1 DA-B 46 DA-A	AMATA-HR 07-18-09 Control Percent 28 DA-B
	Pest Code									AMATA-HR	AMATA-HR
	Crop Code										
	Rating Date									06-19-09	07-18-09
	Rating Data Type									Control	Control
	Rating Unit									Percent	Percent
	Rating Timing									-1 DA-B	
	Trt-Eval Interval									46 DA-A	28 DA-B
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	0 e	0 a
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	0 e	0 a
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A		
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
2	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	38 a	0 a
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A		
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
3	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	0 e	0 a
4	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A		
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	20 bcd	0 a
5	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A		
5	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A		
5	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A		
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
5	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	30 ab	0 a
6	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A		
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7-14EPP	A	28 abc	0 a
7	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A		
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
8	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	0 e	0 a
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
9	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	20 bcd	0 a
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A		
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
10	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	28 abc	0 a
10	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A		
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
11	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	12 de	0 a
11	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A		
11	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-DeSoto-BDtankmix Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-19-09 Control Percent -1 DA-B 46 DA-A	AMATA-HR 07-18-09 Control Percent 28 DA-B
12	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	15 cd	0 a
12	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A		
12	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A		
12	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A		
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
13	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	25 a-d	0 a
13	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A		
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
14	IGNITE 280	2.34	EC	0.53	lb ai/a	29	fl oz/a	7-14EPP	A	37 a	0 a
14	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A		
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
15	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	0 e	0 a
15	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
16	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	0 e	0 a
16	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	7-14EPP	A		
16	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
17	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	25 a-d	0 a
17	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	7-14EPP	A		
17	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
17	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
18	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	0 e	0 a
18	SHARPEN	2.85	SC	0.0223	lb ai/a	1	oz/a	7-14EPP	A		
18	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
18	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
19	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	17 bcd	0 a
19	CANOPY EX	29.5	WG			1.1	oz/a	7-14EPP	A		
19	CLASSIC	25	WG	0.0156	lb ai/a			7-14EPP	A		
19	EXPRESS	50	SG	0.00468	lb ai/a			7-14EPP	A		
19	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
20	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	20 bcd	0 a
20	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	7-14EPP	A		
20	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
21	GRAMOXONE INTEON	2	SL	0.625	lb ai/a	2.5	pt/a	7-14EPP	A	13 de	0 a
21	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	7-14EPP	A		
21	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	7-14EPP	A		
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	7-14EPP	A		
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B		
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B		
22	NONTREATED									0 e	0 a

No-Till Burndown Tank-Mixtures for Soybean.

Trial ID: 09-DeSoto-BDtankmix Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
Pest Code										AMATA-HR	AMATA-HR
Crop Code											
Rating Date										06-19-09	07-18-09
Rating Data Type										Control	Control
Rating Unit										Percent	Percent
Rating Timing										-1 DA-B	
Trt-Eval Interval										46 DA-A	28 DA-B
LSD (P=.05)										13.4	0.0
Replicate F										1.126	0.000
Replicate Prob(F)										0.3338	1.0000
Treatment F										7.989	0.000
Treatment Prob(F)										0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: ISA.
2. Ratings: WC at 14 da A and CI/WC at 0 + 28 da B.
3. DA-A = Days after 7-14EPP application.
4. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
5. Harvested 11-6-09, (2) 30 inch rows by 27 ft.

Encapsulated Acetochlor in Soybean.

Trial ID: 09-DeSoto-Aceto Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-23-09

Objectives: Evalaute soybean tolerance and weed control from postemergence applications of encapsulated acetochlor formulations.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-23-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A	B	C
Application Date:	05-23-09	06-17-09	06-26-09
Time of Day:	8:15	10:00	10:30
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	V2-3	V5-6
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKP	NVH	DKT
Air Temperature, Unit:	73 F	82 F	92 F
% Relative Humidity:	87	85	34
Wind Velocity, Unit:	1 MPH	2 MPH	2 MPH
Wind Direction:	NW	SW	N
Dew Presence (Y/N):	N	N	N
Soil Temperature, Unit:	70 F	78 F	88 F
Soil Moisture:	ABONOR	ABONOR	NORMAL
% Cloud Cover:	85	30	75
	05-23-09	06-17-09	06-26-09
Crop stage at application:	NA	V3	V5
Height Min, Max (inch):		7 9	9 12

Pest Stage At Each Application

Application Date:	05-23-09	06-17-09	06-26-09
Weed Code:	AMATA	AMATA	AMATA
Stage Majority (leaves):	4	4	4
Stage Min, Max:	2 6	2 8	2 8
Height Majority:	2 IN	4 IN	4 IN
Height Min, Max:	1 3	2 5	2 5
Density, Unit:	0.1 FT2	0.1 FT2	0.1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Encapsulated Acetochlor in Soybean.

Trial ID: 09-DeSoto-Aceto Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA 06-17-09 Injury Percent 25 DA-A 0 DA-B	GLXMA 06-26-09 Injury Percent 9 DA-B 0 DA-C	GLXMA 07-08-09 Injury Percent 12 DA-C 21 DA-B	GLXMA 07-17-09 Injury Percent 21 DA-C
1	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	11.1 a	53.5 a	50 a	0 a	0 a	6 bcd	0 b
1	VALOR SX	51	WG	0.028	lb ai/a			PRE	A							
1	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A							
1	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B							
1	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B							
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B							
2	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.4 a	54.3 a	46 ab	0 a	0 a	5 cd	0 b
2	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
2	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
2	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B							
2	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B							
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B							
3	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	11.8 a	52.8 a	50 a	0 a	0 a	4 d	0 b
3	VALOR SX	51	WG	0.028	lb ai/a			PRE	A							
3	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A							
3	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C							
3	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C							
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C							
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.5 a	52.4 a	47 a	0 a	0 a	5 cd	0 b
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
4	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C							
4	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C							
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C							
5	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	11.8 a	53.2 a	48 a	0 a	0 a	9 b	0 b
5	VALOR SX	51	WG	0.028	lb ai/a			PRE	A							
5	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A							
5	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B							
5	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B							
5	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C							
5	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C							
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C							
6	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.5 a	53.9 a	49 a	0 a	0 a	8 bc	0 b
6	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
6	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
6	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B							
6	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B							
6	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C							
6	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C							
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C							
7	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	11.4 a	52.9 a	49 a	0 a	0 a	6 bcd	0 b
7	VALOR SX	51	WG	0.028	lb ai/a			PRE	A							
7	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A							
7	MON 63410	3	CS	1.5	lb ai/a	2	qt/a	V2-3	B							
7	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B							
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B							
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.3 a	53.4 a	41 b	0 a	0 a	6 bcd	0 b
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
8	MON 63410	3	CS	1.5	lb ai/a	2	qt/a	V5-6	C							
8	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C							
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C							
9	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	11.1 a	53.4 a	47 a	0 a	0 a	0 e	0 b
9	VALOR SX	51	WG	0.028	lb ai/a			PRE	A							
9	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A							
9	DUAL II MAGNUM	7.64	EC	1.25	lb ai/a	1.31	pt/a	V2-3	B							
9	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B							
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B							

Encapsulated Acetochlor in Soybean.

Trial ID: 09-DeSoto-Aceto Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA 06-17-09 Injury Percent 25 DA-A 0 DA-B	GLXMA 06-26-09 Injury Percent 9 DA-B 0 DA-C	GLXMA 07-08-09 Injury Percent 12 DA-C 21 DA-B	GLXMA 07-17-09 Injury Percent 21 DA-C
10	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.2 a	53.5 a	46 ab	0 a	0 a	0 e	0 b
10	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
10	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
10	DUAL II MAGNUM	7.64	EC	1.25	lb ai/a	1.31	pt/a	V2-3	B							
10	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B							
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B							
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.5 a	53.5 a	48 a	0 a	0 a	29 a	4 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
11	COBRA	2	EC	0.195	lb ai/a	12.5	fl oz/a	V5-6	C							
11	PRIME OIL COC	100	SL	0.25	% v/v	0.25	% v/v	V5-6	C							
12	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.7 a	54.2 a	46 ab	0 a	0 a	29 a	5 a
12	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
12	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
12	COBRA	2	EC	0.195	lb ai/a	12.5	fl oz/a	V5-6	C							
12	PRIME OIL COC	100	SL	0.25	% v/v	0.25	% v/v	V5-6	C							
12	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C							
LSD (P=.05)										0.81	2.12	5.7	0.0	0.0	3.7	1.1
Replicate F										0.678	2.204	1.107	0.000	0.000	3.119	1.803
Replicate Prob(F)										0.5721	0.1074	0.3610	1.0000	1.0000	0.0391	0.1659
Treatment F										0.714	0.551	1.639	0.000	0.000	56.919	18.391
Treatment Prob(F)										0.7161	0.8525	0.1362	1.0000	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Encapsulated Acetochlor in Soybean.

Trial ID: 09-DeSoto-Aceto Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-17-09 Control Percent 25 DA-A 0 DA-B	AMATA-HR 06-26-09 Control Percent 9 DA-B 0 DA-C	AMATA-HR 07-08-09 Control Percent 12 DA-C 21 DA-B	AMATA-HR 07-17-09 Control Percent 21 DA-C
1	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	99 a	98 ab	98 ab	98 ab
1	VALOR SX	51	WG	0.028	lb ai/a			PRE	A				
1	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A				
1	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B				
1	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B				
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B				
2	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	99 a	99 a	99 a
2	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
2	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
2	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B				
2	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B				
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B				
3	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	99 a	98 b	95 ab	95 ab
3	VALOR SX	51	WG	0.028	lb ai/a			PRE	A				
3	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A				
3	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C				
3	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C				
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	98 ab	96 ab	96 ab
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
4	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C				
4	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C				
5	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	99 a	98 ab	99 a	99 a
5	VALOR SX	51	WG	0.028	lb ai/a			PRE	A				
5	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A				
5	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B				
5	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B				
5	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C				
5	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C				
6	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	99 a	99 a	99 a
6	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
6	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
6	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V2-3	B				
6	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B				
6	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C				
6	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C				
7	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	99 a	98 ab	98 ab	97 ab
7	VALOR SX	51	WG	0.028	lb ai/a			PRE	A				
7	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A				
7	MON 63410	3	CS	1.5	lb ai/a	2	qt/a	V2-3	B				
7	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B				
8	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	99 a	96 ab	96 ab
8	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
8	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
8	MON 63410	3	CS	1.5	lb ai/a	2	qt/a	V5-6	C				
8	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V5-6	C				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V5-6	C				
9	VALOR XLT	40.3	WG			1.5	oz/a	PRE	A	99 a	98 ab	95 b	94 b
9	VALOR SX	51	WG	0.028	lb ai/a			PRE	A				
9	CLASSIC	25	WG	0.0097	lb ai/a			PRE	A				
9	DUAL II MAGNUM	7.64	EC	1.25	lb ai/a	1.31	pt/a	V2-3	B				
9	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B				

Encapsulated Acetochlor in Soybean.

Trial ID: 09-DeSoto-Aceto Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-17-09 Control Percent 25 DA-A 0 DA-B	AMATA-HR 06-26-09 Control Percent 9 DA-B 0 DA-C	AMATA-HR 07-08-09 Control Percent 12 DA-C 21 DA-B	AMATA-HR 07-17-09 Control Percent 21 DA-C
10	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	99 a	99 ab	98 ab
10	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
10	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
10	DUAL II MAGNUM	7.64	EC	1.25	lb ai/a	1.31	pt/a	V2-3	B				
10	ROUNDUP POWERMAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	V2-3	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	V2-3	B				
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	99 a	99 a	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
11	COBRA	2	EC	0.195	lb ai/a	12.5	fl oz/a	V5-6	C				
11	PRIME OIL COC	100	SL	0.25	% v/v	0.25	% v/v	V5-6	C				
12	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	98 ab	98 ab	98 ab
12	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
12	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
12	COBRA	2	EC	0.195	lb ai/a	12.5	fl oz/a	V5-6	C				
12	PRIME OIL COC	100	SL	0.25	% v/v	0.25	% v/v	V5-6	C				
12	MON 63410	3	CS	1.125	lb ai/a	1.5	qt/a	V5-6	C				
LSD (P=.05)										0.8	1.0	4.5	4.7
Replicate F										1.833	0.268	0.600	1.032
Replicate Prob(F)										0.1603	0.8478	0.6193	0.3911
Treatment F										0.722	1.712	1.123	1.220
Treatment Prob(F)										0.7094	0.1140	0.3756	0.3127

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Monsanto (04-08).
2. Ratings: CI/WC at 21 da B (or prior to C) and at 21 da C.
3. Yield, destroy grain.
4. Blanket burndown application of Roundup PowerMax (32 floz/A) + 2,4-D (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
5. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
6. Harvested 11-6-09, (2) 30 inch rows by 26.7 ft.

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-23-09

Objectives: Determine the effect of Boundary, application timing and Flexstar GT rate on control of glyphosate-resistant waterhemp.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-23-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A	B	C	D	E	F
Application Date:	05-23-09	06-20-09	06-23-09	06-23-09	06-26-09	06-30-09
Time of Day:	9:00	8:00	8:00	8:00	10:00	8:30
Application Method:	Spray	Spray	Spray	Spray	Spray	Spray
Application Timing:	PRE	1-2"WH-1	1-2"WH-2	4-6"WH-1	4-6"WH-2	4-6"RG
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	DKP	DKP	DKT	DKT	DKT	DKT
Air Temperature, Unit:	73 F	85 F	91 F	91 F	92 F	84 F
% Relative Humidity:	87	59	65	65	34	34
Wind Velocity, Unit:	1 MPH	1 MPH	2 MPH	2 MPH	2 MPH	1 MPH
Wind Direction:	NW	W	NW	NW	N	SE
Dew Presence (Y/N):	N	N	Y	Y	N	N
Soil Temperature, Unit:	70 F	77 F	82 F	82 F	88 F	80 F
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
% Cloud Cover:	90	10	0	0	75	20
	05-23-09	06-20-09	06-23-09	06-23-09	06-26-09	06-30-09
Crop stage at application:	NA	V2	V4	V4	V5	V5
Height Min, Max (inch):		7 9	8 10	8 10	9 12	10 12

Pest Stage At Each Application

Application Date:	05-23-09	06-20-09	06-23-09	06-23-09	06-26-09	06-30-09
Weed Code:	AMATA	AMATA	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	4	6	10	10	8	14
Stage Min, Max:	COTY 7	2 10	COTY 18	COTY 18	4 16	4 22
Height Majority:	0.5 IN	3 IN	6 IN	6 IN	5 IN	6 IN
Height Min, Max:	0.5 3	1 9	0.5 12	0.5 12	2 8	3 12
Density, Unit:	25 FT2	2.5 FT2	2.5 FT2	2.5 FT2	2.5 FT2	2 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code															
Crop Code										GLXMA		GLXMA		GLXMA	
Rating Date										11-06-09		11-06-09		11-06-09	
Rating Data Type										Moisture		Test wt.		Yield	
Rating Unit										Percent		lb/bu		bu/A	
Rating Timing															
Trt-Eval Interval															
1	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	10.2	ab	48.4	abc	43	a-d
1	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
1	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F						
1	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	4-6"RG	F						
2	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.5	abc	49.0	abc	37	d
2	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
2	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
2	COBRA	2	EC	0.156	lb ai/a	10	fl oz/a	1-2"WH-2	C						
2	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C						
3	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.5	abc	48.4	abc	43	a-d
3	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
3	ULTRA BLAZER	2	EC	0.25	lb ai/a	1	pt/a	1-2"WH-2	C						
3	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C						
4	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.7	abc	49.1	ab	44	a-d
4	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
4	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
4	RESOURCE	0.86	EC	0.0202	lb ai/a	3	fl oz/a	1-2"WH-2	C						
4	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C						
5	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	10.2	ab	49.1	ab	47	ab
5	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
5	FLEXSTAR	1.88	EC	0.25	lb ai/a	1.06	pt/a	1-2"WH-2	C						
5	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C						
6	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	9.8	abc	48.1	bc	43	a-d
6	CLASSIC	25	WG	0.02	lb ai/a			PRE	A						
6	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A						
6	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A						
6	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
6	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-2	C						
7	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.5	abc	48.8	abc	49	a
7	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
7	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-2	C						
8	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	10.0	abc	49.1	ab	47	ab
8	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
8	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
8	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	1-2"WH-2	C						
9	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.7	abc	49.1	ab	45	abc
9	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
9	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
9	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	1-2"WH-2	C						
10	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.4	abc	49.1	ab	49	a
10	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
10	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E						
10	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	4-6"WH-2	E						

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent		GLXMA 11-06-09 Test wt. lb/bu		GLXMA 11-06-09 Yield bu/A	
11	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	10.0	abc	49.0	abc	44	a-d
11	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E						
11	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	4-6"WH-2	E						
12	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.6	abc	48.8	abc	46	ab
12	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
12	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E						
12	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	4-6"WH-2	E						
13	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	9.6	abc	48.3	bc	41	bcd
13	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B						
13	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-1	B						
14	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	9.5	abc	47.8	c	39	cd
14	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B						
14	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	1-2"WH-1	B						
15	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	10.0	abc	49.3	ab	42	a-d
15	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B						
15	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	1-2"WH-1	B						
16	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	10.0	abc	48.7	abc	43	a-d
16	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
16	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D						
16	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	4-6"WH-1	D						
17	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	9.5	abc	48.6	abc	43	a-d
17	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
17	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D						
17	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	4-6"WH-1	D						
18	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	9.4	bc	49.1	ab	45	abc
18	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
18	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D						
18	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	4-6"WH-1	D						
19	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	10.3	a	48.8	abc	43	a-d
19	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B						
19	FLEXSTAR GT	3.31	SL	0.93	lb ae/a	2.25	pt/a	1-2"WH-1	B						
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F						
19	FLEXSTAR GT	3.31	SL	0.93	lb ae/a	2.25	pt/a	4-6"RG	F						
20	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.3	c	49.0	abc	45	abc
20	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
20	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
20	28% UAN	100	SL	2	% v/v	2	%v/v	1-2"WH-2	C						
20	FLEXSTAR	1.88	EC	0.352	lb ai/a	1.5	pt/a	1-2"WH-2	C						
20	MSO (DESTINY)	100	SL	1	% v/v	1	%v/v	1-2"WH-2	C						
21	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	9.5	abc	49.0	abc	43	a-d
21	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
21	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
21	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
21	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C						
22	PREFIX	5.29	EC	1.72	lb ai/a	2.6	pt/a	PRE	A	9.6	abc	49.6	a	49	a
22	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A						
22	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A						
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C						
22	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C						
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F						
22	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	4-6"RG	F						
LSD (P=.05)										0.92		1.26		7.2	

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code												
Crop Code										GLXMA	GLXMA	GLXMA
Rating Date										11-06-09	11-06-09	11-06-09
Rating Data Type										Moisture	Test wt.	Yield
Rating Unit										Percent	lb/bu	bu/A
Rating Timing												
Trt-Eval Interval												
Replicate F										1.774	8.499	5.628
Replicate Prob(F)										0.1821	0.0008	0.0068
Treatment F										0.867	0.907	1.415
Treatment Prob(F)										0.6293	0.5844	0.1663

Means followed by same letter do not significantly differ (P=.05, LSD)

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 06-20-09 Injury Percent 28 DA-A 0 DA-B	GLXMA 06-23-09 Injury Percent 3 DA-B 0 DA-C	GLXMA 06-26-09 Injury Percent 3 DA-C+D 0 DA-E	GLXMA 07-03-09 Injury Percent 10 DA-C+D 7 DA-E	GLXMA 07-17-09 Injury Percent 17 DA-F 21 DA-E
1	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	0 g	0 e	0 a
1	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
1	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
1	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C					
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F					
1	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	4-6"RG	F					
2	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	17 a	17 a	0 a
2	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
2	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
2	COBRA	2	EC	0.156	lb ai/a	10	fl oz/a	1-2"WH-2	C					
2	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C					
3	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	17 a	17 a	0 a
3	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
3	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
3	ULTRA BLAZER	2	EC	0.25	lb ai/a	1	pt/a	1-2"WH-2	C					
3	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C					
4	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	8 cde	8 cd	0 a
4	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
4	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
4	RESOURCE	0.86	EC	0.0202	lb ai/a	3	fl oz/a	1-2"WH-2	C					
4	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C					
5	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	12 bc	12 bc	0 a
5	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
5	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
5	FLEXSTAR	1.88	EC	0.25	lb ai/a	1.06	pt/a	1-2"WH-2	C					
5	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C					
6	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	2 a	0 c	7 de	7 cd	0 a
6	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
6	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
6	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
6	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
6	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
6	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-2	C					
7	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	9 cd	9 bcd	0 a
7	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
7	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
7	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-2	C					
8	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	7 de	7 d	0 a
8	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
8	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
8	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	1-2"WH-2	C					
9	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	9 cd	9 bcd	0 a
9	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
9	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
9	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	1-2"WH-2	C					
10	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	0 g	2 e	0 a
10	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
10	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E					
10	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	4-6"WH-2	E					

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 06-20-09 Injury Percent 28 DA-A 0 DA-B	GLXMA 06-23-09 Injury Percent 3 DA-B 0 DA-C	GLXMA 06-26-09 Injury Percent 3 DA-C+D 0 DA-E	GLXMA 07-03-09 Injury Percent 10 DA-C+D 7 DA-E	GLXMA 07-17-09 Injury Percent 17 DA-F 21 DA-E
11	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	0 g	0 e	0 a
11	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
11	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E					
11	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	4-6"WH-2	E					
12	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	0 g	6 d	0 a
12	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
12	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E					
12	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	4-6"WH-2	E					
13	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	0 b	7 a	7 de	0 e	0 a
13	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B					
13	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-1	B					
14	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	0 b	6 a	6 de	0 e	0 a
14	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B					
14	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	1-2"WH-1	B					
15	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	0 b	7 a	7 de	2 e	0 a
15	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B					
15	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	1-2"WH-1	B					
16	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	0 b	0 c	7 de	7 d	0 a
16	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
16	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D					
16	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	4-6"WH-1	D					
17	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	0 b	0 c	12 bc	12 bc	0 a
17	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
17	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D					
17	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	4-6"WH-1	D					
18	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	0 b	0 c	8 cde	8 cd	0 a
18	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
18	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D					
18	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	4-6"WH-1	D					
19	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	0 b	4 b	4 ef	0 e	0 a
19	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B					
19	FLEXSTAR GT	3.31	SL	0.93	lb ae/a	2.25	pt/a	1-2"WH-1	B					
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F					
19	FLEXSTAR GT	3.31	SL	0.93	lb ae/a	2.25	pt/a	4-6"RG	F					
20	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	13 ab	13 ab	0 a
20	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
20	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
20	28% UAN	100	SL	2	% v/v	2	%v/v	1-2"WH-2	C					
20	FLEXSTAR	1.88	EC	0.352	lb ai/a	1.5	pt/a	1-2"WH-2	C					
20	MSO (DESTINY)	100	SL	1	% v/v	1	%v/v	1-2"WH-2	C					
21	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	0 b	0 c	0 g	0 e	0 a
21	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
21	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
21	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
21	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C					
22	PREFIX	5.29	EC	1.72	lb ai/a	2.6	pt/a	PRE	A	0 b	0 c	2 fg	2 e	0 a
22	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A					
22	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A					
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C					
22	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C					
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F					
22	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	4-6"RG	F					
LSD (P=.05)										1.0	1.4	4.2	4.5	0.0

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code														
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										06-20-09	06-23-09	06-26-09	07-03-09	07-17-09
Rating Data Type										Injury	Injury	Injury	Injury	Injury
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										28 DA-A	3 DA-B	3 DA-C+D	10 DA-C+D	17 DA-F
Trt-Eval Interval										0 DA-B	0 DA-C	0 DA-E	7 DA-E	21 DA-E
Replicate F										1.000	0.532	3.978	6.763	0.000
Replicate Prob(F)										0.3765	0.5914	0.0262	0.0028	1.0000
Treatment F										1.000	27.538	12.194	12.688	0.000
Treatment Prob(F)										0.4832	0.0001	0.0001	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 07-03-09 Control Percent 10 DA-C+D 7 DA-E	AMATA-HR 07-17-09 Control Percent 17 DA-F 21 DA-E	AMATA-HR 07-31-09 Control Percent 31 DA-F 35 DA-E
1	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	91 a-e	91 a-e	90 a-e
1	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
1	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
1	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C			
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F			
1	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	4-6"RG	F			
2	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	95 a-d	90 a-e	77 ef
2	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
2	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
2	COBRA	2	EC	0.156	lb ai/a	10	fl oz/a	1-2"WH-2	C			
2	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C			
3	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	95 a-d	93 a-e	92 a-d
3	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
3	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
3	ULTRA BLAZER	2	EC	0.25	lb ai/a	1	pt/a	1-2"WH-2	C			
3	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C			
4	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	98 abc	93 a-e	93 a-d
4	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
4	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
4	RESOURCE	0.86	EC	0.0202	lb ai/a	3	fl oz/a	1-2"WH-2	C			
4	ROUNDUP POWERMAX	4.5	SL	1	lb ae/a	28.4	fl oz/a	1-2"WH-2	C			
5	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	97 abc	97 ab	97 abc
5	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
5	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
5	FLEXSTAR	1.88	EC	0.25	lb ai/a	1.06	pt/a	1-2"WH-2	C			
5	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C			
6	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	99 a	99 a	99 a
6	CLASSIC	25	WG	0.02	lb ai/a			PRE	A			
6	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A			
6	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A			
6	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
6	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
6	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-2	C			
7	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	98 ab	97 ab	97 abc
7	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
7	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
7	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-2	C			
8	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	99 a	98 a	98 ab
8	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
8	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
8	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	1-2"WH-2	C			
9	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	97 abc	95 abc	93 a-d
9	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
9	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
9	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	1-2"WH-2	C			
10	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	91 a-e	93 a-e	93 a-d
10	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
10	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E			
10	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	4-6"WH-2	E			

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 07-03-09 Control Percent 10 DA-C+D 7 DA-E	AMATA-HR 07-17-09 Control Percent 17 DA-F 21 DA-E	AMATA-HR 07-31-09 Control Percent 31 DA-F 35 DA-E
11	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	90 a-e	95 a-d	95 a-d
11	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
11	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E			
11	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	4-6"WH-2	E			
12	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	95 a-d	95 abc	95 abc
12	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
12	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-2	E			
12	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	4-6"WH-2	E			
13	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	86 de	83 ef	82 def
13	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B			
13	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	1-2"WH-1	B			
14	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	88 a-e	87 b-f	86 b-f
14	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
14	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B			
14	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	1-2"WH-1	B			
15	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	87 cde	87 b-f	87 a-f
15	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
15	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B			
15	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	1-2"WH-1	B			
16	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	89 a-e	85 def	84 c-f
16	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
16	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D			
16	FLEXSTAR GT	3.31	SL	1.24	lb ae/a	3	pt/a	4-6"WH-1	D			
17	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	91 a-e	89 a-e	86 a-f
17	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
17	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D			
17	FLEXSTAR GT	3.31	SL	1.55	lb ae/a	3.75	pt/a	4-6"WH-1	D			
18	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	88 b-e	86 c-f	85 c-f
18	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
18	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"WH-1	D			
18	FLEXSTAR GT	3.31	SL	1.86	lb ae/a	4.5	pt/a	4-6"WH-1	D			
19	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A	88 b-e	91 a-e	90 a-e
19	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-1	B			
19	FLEXSTAR GT	3.31	SL	0.93	lb ae/a	2.25	pt/a	1-2"WH-1	B			
19	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F			
19	FLEXSTAR GT	3.31	SL	0.93	lb ae/a	2.25	pt/a	4-6"RG	F			
20	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	97 abc	96 abc	96 abc
20	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
20	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
20	28% UAN	100	SL	2	% v/v	2	%v/v	1-2"WH-2	C			
20	FLEXSTAR	1.88	EC	0.352	lb ai/a	1.5	pt/a	1-2"WH-2	C			
20	MSO (DESTINY)	100	SL	1	% v/v	1	%v/v	1-2"WH-2	C			
21	BOUNDARY	6.5	EC	1.42	lb ai/a	1.75	pt/a	PRE	A	82 e	78 f	75 f
21	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
21	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
21	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
21	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C			
22	PREFIX	5.29	EC	1.72	lb ai/a	2.6	pt/a	PRE	A	99 a	99 a	99 a
22	GRAMOXONE INTEON	2	SL	0.875	lb ai/a	3.5	pt/a	PRE	A			
22	COC (PRIME OIL)	100	SL	1	% v/v	1	%v/v	PRE	A			
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	1-2"WH-2	C			
22	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	1-2"WH-2	C			
22	N-PAK AMS	100	SL	2.5	% v/v	2.5	%v/v	4-6"RG	F			
22	TOUCHDOWN TOTAL	4.17	SL	1	lb ae/a	30.7	fl oz/a	4-6"RG	F			
LSD (P=.05)										10.7	10.3	13.2

PRE/POST Programs with Flexstar GT.

Trial ID: 09-DeSoto-FlexGT Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										AMATA-HR	AMATA-HR	AMATA-HR
Crop Code												
Rating Date										07-03-09	07-17-09	07-31-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing										10 DA-C+D	17 DA-F	31 DA-F
Trt-Eval Interval										7 DA-E	21 DA-E	35 DA-E
Replicate F										4.196	5.227	6.548
Replicate Prob(F)										0.0218	0.0094	0.0033
Treatment F										1.862	2.362	2.286
Treatment Prob(F)										0.0429	0.0088	0.0112

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Syngenta (FM050B4).
2. Ratings: CI at 0 da B, C + E and 7 da E; WC at 7, 21 + 35 da E.
3. Yield not necessary.
4. The F application timing should be approximately 2-3 weeks after the B application timing.
5. Blanket burndown application of Touchdown Total (36 floz/A) + 2,4-D LV4 (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
6. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
7. Harvested 11-6-09, (2) 30 inch rows by 27 ft.

ISA POST Tank-Mix Study.

Trial ID: 09-DeSoto-ISA-TM Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-23-09

Objectives: Identify any positive or negative interactions when tank-mixing other broadleaf herbicides with glyphosate to achieve consistent and broad-spectrum weed control.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-23-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A	B	C	D
Application Date:	05-23-09	06-22-09	06-26-09	06-30-09
Time of Day:	8:45	12:45	10:00	8:15
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	MPOST	LPOST	4"W
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NRJ	DKP	DKT	DKT
Air Temperature, Unit:	73 F	99 F	92 F	84 F
% Relative Humidity:	87	41	34	34
Wind Velocity, Unit:	1 MPH	1 MPH	2 MPH	1 MPH
Wind Direction:	NW	NW	N	SE
Dew Presence (Y/N):	N	N	N	N
Soil Temperature, Unit:	70 F	80 F	88 F	80 F
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL
% Cloud Cover:	90	50	75	20
	05-23-09	06-22-09	06-26-09	06-30-09
Crop stage at application:	NA	V3	V5	V5
Height Min, Max (inch):		10 12	10 12	10 12

Pest Stage At Each Application

Application Date:	05-23-09	06-22-09	06-26-09	06-30-09
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	6	18	8
Stage Min, Max:		COTY 14	4 26	2 12
Height Majority:		6 IN	10 IN	4 IN
Height Min, Max:		0.25 14	3 14	2 8
Density, Unit:		20 FT2	20 FT2	4 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

ISA POST Tank-Mix Study.

Trial ID: 09-DeSoto-ISA-TM Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent		GLXMA 11-06-09 Test wt. lb/bu		GLXMA 11-06-09 Yield bu/A		GLXMA Injury Percent 7 DAT		GLXMA Injury Percent 14 DAT		GLXMA Injury Percent 28 DAT	
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.2	a-e	53.1	a-e	38	ghi	0	i	0	g	0	d
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	11.0	de	53.4	a-d	45	a-f	0	i	0	g	0	d
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B	10.7	e	52.8	a-e	42	c-h	1	hi	0	g	0	d
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.0	de	53.3	a-e	47	abc	0	i	0	g	0	d
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C												
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C												
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B	11.5	a-e	53.3	a-e	46	a-d	0	i	0	g	0	d
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C												
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C												
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	12.2	abc	53.0	a-e	44	a-f	32	b	15	ab	3	c
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B												
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.7	a-e	52.0	de	40	e-h	38	a	18	a	5	b
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B												
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.5	a-e	53.6	a-d	47	a-d	2	ghi	1	fg	0	d
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B												
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.1	b-e	53.5	a-d	49	a	11	de	4	def	0	d
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B												
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.6	a-e	53.5	a-d	38	hi	0	i	0	g	0	d
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B												
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.8	a-e	52.8	a-e	46	a-e	5	fg	3	efg	0	d
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B												
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	12.3	a	52.2	b-e	45	a-f	4	fgh	1	fg	0	d
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B												
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	12.3	ab	51.8	e	44	a-h	9	de	4	de	0	d
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B												
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.7	a-e	52.5	a-e	39	f-i	0	i	0	g	0	d
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B												
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B	11.4	a-e	52.4	a-e	46	a-d	0	i	0	g	0	d
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B												
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B												
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B												
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B												
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.4	a-e	53.7	abc	47	a-d	0	i	0	g	0	d
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C												
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C	11.5	a-e	53.9	a	42	b-h	0	i	0	g	0	d
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C												
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C	12.1	a-d	52.4	a-e	42	c-h	0	i	0	g	0	d
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C												

ISA POST Tank-Mix Study.

Trial ID: 09-DeSoto-ISA-TM Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA Injury 7 DAT	GLXMA Injury 14 DAT	GLXMA Injury 28 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	10.9 e	53.7 abc	45 a-f	30 b	12 c	7 a
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C						
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.5 a-e	53.5 a-d	46 a-d	38 a	13 bc	4 bc
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C						
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.5 a-e	53.5 a-d	47 abc	8 ef	3 ef	0 d
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C						
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.4 a-e	53.3 a-e	45 a-f	13 cd	6 de	0 d
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C						
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.5 a-e	53.5 a-d	45 a-f	0 i	0 g	0 d
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C						
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.4 a-e	52.1 cde	41 d-h	4 fgh	1 fg	0 d
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C						
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.1 cde	53.8 ab	48 ab	12 cd	5 de	0 d
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C						
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.2 a-e	53.5 a-d	44 a-g	15 c	7 d	0 d
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C						
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	12.1 a-d	52.4 a-e	44 a-h	0 i	0 g	0 d
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C						
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C	11.5 a-e	53.0 a-e	45 a-f	0 i	0 g	0 d
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C						
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C						
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C						
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C						
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	10.9 e	52.5 a-e	46 a-d	0 i	0 g	0 d
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D						
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D						
30	NONTREATED									11.4 a-e	53.7 abc	34 i	0 i	0 g	0 d
LSD (P=.05)										1.15	1.66	6.0	3.4	3.1	1.2
Replicate F										1.128	1.911	0.528	4.756	1.761	0.554
Replicate Prob(F)										0.3306	0.1572	0.5928	0.0122	0.1810	0.5776
Treatment F										1.038	1.074	2.658	97.225	20.193	18.217
Treatment Prob(F)										0.4397	0.3981	0.0008	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

ISA POST Tank-Mix Study.

Trial ID: 09-DeSoto-ISA-TM Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR Control Percent 30 DA-A 0 DA-B	AMATA-HR Control Percent 14 DAT	AMATA-HR Control Percent 28 DAT	AMATA-HR Control Percent 56 DAT
1	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		43 j	35 i	25 jk
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
2	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		55 g-j	53 f-i	37 ij
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
3	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	MPOST	B		48 hij	47 ghi	38 hij
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		80 a-f	78 a-e	73 a-e
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
4	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	MPOST	B		88 a-d	87 ab	85 a-d
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
5	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
6	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		96 a	94 a	89 ab
6	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	MPOST	B				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
7	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		94 ab	93 a	87 abc
7	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	MPOST	B				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
8	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		75 a-g	71 a-f	67 a-g
8	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	MPOST	B				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
9	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		92 abc	88 ab	85 a-d
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	MPOST	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
10	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		62 f-j	56 e-i	39 f-j
10	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	MPOST	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
11	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		45 ij	42 hi	39 g-j
11	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	MPOST	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
12	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		76 a-g	71 a-f	59 c-i
12	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	MPOST	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
13	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		65 d-j	63 c-h	42 f-j
13	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	MPOST	B				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
14	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		60 f-j	55 e-i	40 f-j
14	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	MPOST	B				
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
15	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	MPOST	B		78 a-g	80 a-d	68 a-f
15	SYNCHRONY XP	28.4	WG			0.375	oz/a	MPOST	B				
15	CLASSIC	25	WG	0.00504	lb ai/a			MPOST	B				
15	HARMONY SG	50	SG	0.00162	lb ai/a			MPOST	B				
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	MPOST	B				
16	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		69 c-i	66 b-g	61 c-i
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
17	ROUNDUP P-MAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	LPOST	C		67 d-j	66 b-g	58 d-i
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
18	ROUNDUP P-MAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	LPOST	C		65 d-j	65 b-h	63 b-i
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				

ISA POST Tank-Mix Study.

Trial ID: 09-DeSoto-ISA-TM Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR Control Percent 30 DA-A 0 DA-B	AMATA-HR Control Percent 14 DAT	AMATA-HR Control Percent 28 DAT	AMATA-HR Control Percent 56 DAT
19	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		86 a-e	82 abc	74 a-e
19	COBRA	2	EC	0.094	lb ai/a	6	fl oz/a	LPOST	C				
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
20	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		78 a-g	73 a-f	72 a-e
20	COBRA	2	EC	0.188	lb ai/a	12	fl oz/a	LPOST	C				
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
21	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		83 a-f	80 a-d	79 a-e
21	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	LPOST	C				
21	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
22	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		87 a-e	86 abc	85 a-d
22	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	LPOST	C				
22	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
23	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		68 c-i	64 b-h	55 e-i
23	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	LPOST	C				
23	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
24	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		70 b-h	68 b-g	60 c-i
24	RESOURCE	0.86	EC	0.027	lb ai/a	4	fl oz/a	LPOST	C				
24	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
25	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		67 d-j	65 b-h	65 a-h
25	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	LPOST	C				
25	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
26	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		63 e-j	57 d-i	57 e-i
26	CADET	0.91	EC	0.00427	lb ai/a	0.6	fl oz/a	LPOST	C				
26	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
27	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		68 c-i	67 b-g	63 b-i
27	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	LPOST	C				
27	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
28	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	LPOST	C		83 a-f	78 a-e	77 a-e
28	SYNCHRONY XP	28.4	WG			0.375	oz/a	LPOST	C				
28	CLASSIC	25	WG	0.00504	lb ai/a			LPOST	C				
28	HARMONY SG	50	SG	0.00162	lb ai/a			LPOST	C				
28	N-PAK AMS	100	SL	5	% v/v	5	% v/v	LPOST	C				
29	AUTHORITY FIRST	70	WG	0.131	lb ai/a	3	oz/a	PRE	A	94 a	95 a	93 a	93 a
29	ROUNDUP P-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	D				
29	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4"W	D				
30	NONTREATED									0 b	0 k	0 j	0 k
LSD (P=.05)										2.9	24.3	23.9	28.3
Replicate F										1.000	16.972	16.648	10.910
Replicate Prob(F)										0.5000	0.0001	0.0001	0.0001
Treatment F										20022.252	5.135	5.477	4.566
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: ISA.
2. Ratings: Visual crop response estimates at 7, 14, and 28 DAT.
   Visual estimates of control, by species, at 14 and 28 DAT (rate all plots at 28 days after the LPOST timing);
   late-season rating of all plots at 56 DAT or at crop harvest.
   Evaluate the PRE/POST treatment prior to the POST application and again based on DAT from the respective POST timing in that treatment.
3. MPOST = 3-5"W; LPOST = 6-10"W.

ISA POST Tank-Mix Study.

Trial ID: 09-DeSoto-ISA-TM Location: De Soto, IL

4. Take weed counts in nontreated at the "B" application timing (No./0.5 m2).
5. Yield.
6. Blanket burndown application of Roundup PowerMax (32 floz/A) + 2,4-D (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
7. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
8. AMATA-HR plants per 0.5 square meter in the nontreated plots on 6-22-09 at the MPOST (B) application were 142, 158, and 74 in plots 130, 209, and 316, respectively.
9. DAT = Days after various POST applications. For treatments 4 and 5 ratings are after the last application.
   Ratings at 30 DA-A were on 6-22-09.
   Ratings at 7 days after the MPOST, LPOST and 4"W applications were on 6-29-09, 7-3-09, and 7-7-09, respectively.
   Ratings at 14 days after the MPOST, LPOST and 4"W applications were on 7-6-09, 7-10-09, and 7-14-09, respectively.
   Ratings at 28 days after the MPOST, LPOST and 4"W applications were on 7-20-09, 7-24-09, and 7-28-09, respectively.
   Ratings at 56 days after the MPOST, LPOST and 4"W applications were on 8-17-09, 8-21-09, and 8-25-09, respectively.
10. Harvested 11-6-09, (2) 30 inch rows by 26.7 ft.

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp.

Trial ID: 09-DeSoto-LLsoy Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-22-09

Objectives: Determine which soil residual herbicide provides the greatest benefit for control of glyphosate-resistant waterhemp in a Liberty Link soybean system.

Crop 1: GLXMA Soybean **Variety:** AG 3905 **Description:** RR
Planting Method: SEEDED **Planting Date:** 05-22-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A	B	C	D
Application Date:	05-23-09	06-17-09	06-17-09	07-02-09
Time of Day:	7:45	9:15	9:15	9:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	3"W	22DAE	44DAE
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NRJ	NVH	NVH	DKT
Air Temperature, Unit:	73 F	82 F	82 F	77 F
% Relative Humidity:	87	85	85	39
Wind Velocity, Unit:	1 MPH	2 MPH	2 MPH	2 MPH
Wind Direction:	NW	SW	SW	W
Dew Presence (Y/N):	N	Y	Y	N
Soil Temperature, Unit:	70 F	78 F	78 F	80 F
Soil Moisture:	NORMAL	ABONOR	ABONOR	NORMAL
% Cloud Cover:	80	30	30	60
	05-23-09	06-17-09	06-17-09	07-02-09
Crop stage at application:	NA	V3	V3	V5
Height Min, Max (inch):		7 9	7 9	12 15

Pest Stage At Each Application

Application Date:	05-23-09	06-17-09	06-17-09	07-02-09
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	6	6	8
Stage Min, Max:		3 8	3 8	4 12
Height Majority:		3 IN	3 IN	3 IN
Height Min, Max:		1 3.5	1 3.5	2 5
Density, Unit:		0.5 FT2	0.5 FT2	0.5 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp.

Trial ID: 09-DeSoto-LLsoy Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Test wt. lb/bu	GLXMA 11-06-09 Yield bu/A	GLXMA 06-17-09 Injury Percent 0 DA-C 0 DA-B	GLXMA 07-01-09 Injury Percent 14 DA-C 14 DA-B
1	NONTREATED									10.1 a	46.4 bc	36 b	0 a	0 a
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	10.5 a	47.9 abc	44 ab	0 a	0 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	11.0 a	47.8 abc	42 ab	0 a	0 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	10.2 a	48.5 ab	46 ab	0 a	0 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	10.8 a	47.7 abc	42 ab	0 a	0 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C	10.6 a	48.1 ab	44 ab		0 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B	10.4 a	45.6 c	37 b		0 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	9.9 a	47.7 abc	47 ab	0 a	0 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	10.0 a	47.6 abc	49 ab	0 a	0 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	10.2 a	49.1 a	50 a	0 a	0 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	10.5 a	48.0 ab	44 ab	0 a	0 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	10.6 a	48.0 ab	44 ab	0 a	0 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	10.5 a	48.0 ab	38 ab	0 a	0 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp.

Trial ID: 09-DeSoto-LLsoy Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code														
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										11-06-09	11-06-09	11-06-09	06-17-09	07-01-09
Rating Data Type										Moisture	Test wt.	Yield	Injury	Injury
Rating Unit										Percent	lb/bu	bu/A	Percent	Percent
Rating Timing													0 DA-C	14 DA-C
Trt-Eval Interval													0 DA-B	14 DA-B
LSD (P=.05)										1.21	2.38	12.2	0.0	0.0
Replicate F										0.256	1.646	1.340	0.000	0.000
Replicate Prob(F)										0.7765	0.2138	0.2807	1.0000	1.0000
Treatment F										0.556	1.149	0.975	0.000	0.000
Treatment Prob(F)										0.8553	0.3701	0.4972	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp.

Trial ID: 09-DeSoto-LLsoy Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-17-09 Control Percent 0 DA-C 0 DA-B	AMATA-HR 07-01-09 Control Percent 14 DA-C 14 DA-B	AMATA-HR 07-22-09 Control Percent 35 DA-C 35 DA-B
1	NONTREATED									0 c	0 d	0 d
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98 ab	96 abc	96 ab
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98 ab	94 bc	89 c
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	99 a	99 a	99 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	99 a	98 a	97 ab
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C		93 c	93 bc
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B		95 abc	95 ab
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B			
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	96 ab	98 ab	98 ab
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	99 a	96 abc	96 ab
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	99 a	98 a	98 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	97 ab	97 ab
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A			
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A			
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	99 a	98 ab	98 ab
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A			
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A			
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A			
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	94 b	95 abc	95 ab
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C			
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C			
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D			
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D			

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp.

Trial ID: 09-DeSoto-LLsoy Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
Pest Code										AMATA-HR	AMATA-HR	AMATA-HR
Crop Code												
Rating Date										06-17-09	07-01-09	07-22-09
Rating Data Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing										0 DA-C	14 DA-C	35 DA-C
Trt-Eval Interval										0 DA-B	14 DA-B	35 DA-B
LSD (P=.05)										3.8	3.9	5.2
Replicate F										0.115	0.316	0.524
Replicate Prob(F)										0.8920	0.7322	0.5988
Treatment F										523.760	396.918	228.411
Treatment Prob(F)										0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (MRC).
2. Ratings: CI/WC at 0 + 14 da B and C; WC at 35 da C.
3. All POST applications should be 3-4"W or less, the D application is only if necessary.
4. Blanket burndown application of Roundup PowerMax (32 floz/A) + 2,4-D (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
5. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
6. Ratings on 7-1-09 at 14 DA-B and 14 DA-C were -1 DA-D (prior to D).
   Ratings on 7-22-09 at 35 DA-B and 35 DA-C were also 20 DA-D.
7. Harvested 11-6-09, (2) 30 inch rows by 27 ft.

Waterhemp Screen for Postemergence Herbicides.

Trial ID: 09-DeSoto-POSTScreen Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 06-06-09

Objectives: Determine the sensitivity of a waterhemp population to various postemergence herbicides.

Crop 1: YACKR Arable land **Variety:** NON-CROP

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description	A
Application Date:	06-06-09
Time of Day:	9:00
Application Method:	Spray
Application Timing:	4-6"WH
Application Placement:	BROFOL
Applied By:	DKP
Air Temperature, Unit:	74 F
% Relative Humidity:	33
Wind Velocity, Unit:	4 MPH
Wind Direction:	SE
Dew Presence (Y/N):	N
Soil Temperature, Unit:	70 F
Soil Moisture:	NORMAL
% Cloud Cover:	40
	06-06-09
Crop stage at application:	NA

Pest Stage At Each Application	
Application Date:	06-06-09
Weed Code:	AMATA
Stage Majority (leaves):	8
Stage Min, Max:	4 16
Height Majority:	5 IN
Height Min, Max:	2 10
Density, Unit:	40 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	6.67 FT
Spray Volume, Unit:	15 GPA

Waterhemp Screen for Postemergence Herbicides.

Trial ID: 09-DeSoto-POSTScreen Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-20-09 Control Percent 14 DA-A	AMATA-HR 07-04-09 Control Percent 28 DA-A	AMATA-HR 06-13-09 Plant-Total 0.5 m2 7 DA-A	AMATA-HR 06-13-09 Plant-Dead 0.5 m2 7 DA-A	AMATA-HR 06-13-09 PlntInjured 0.5 m2 7 DA-A	AMATA-HR 06-27-09 Plant-Alive 0.5 m2 21 DA-A
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"WH	A	22 f	19 g	263 b-e	12 de	32 bc	263 b
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
2	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	4-6"WH	A	46 e	28 efg	283 b-e	40 b-e	30 bc	146 c
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
3	ROUNDUP POWERMAX	4.5	SL	3.1	lb ae/a	88	fl oz/a	4-6"WH	A	62 cd	36 d-g	229 cde	70 b-e	45 bc	116 cd
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
4	ROUNDUP POWERMAX	4.5	SL	6.2	lb ae/a	176	fl oz/a	4-6"WH	A	83 ab	63 bc	200 e	83 bcd	45 bc	65 cd
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
5	ROUNDUP POWERMAX	4.5	SL	12.4	lb ae/a	352	fl oz/a	4-6"WH	A	87 a	67 b	256 b-e	90 bc	75 ab	105 cd
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
6	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	4-6"WH	A	5 g	2 h	323 bcd	0 e	0 c	323 b
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4-6"WH	A						
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
7	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"WH	A	53 de	25 fg	350 b	21 cde	57 bc	112 cd
7	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4-6"WH	A						
8	FLEXSTAR	1.88	EC	0.353	lb ai/a	24	fl oz/a	4-6"WH	A	91 a	66 b	287 b-e	114 ab	92 ab	115 cd
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	4-6"WH	A						
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"WH	A	60 cde	38 def	215 de	25 cde	65 abc	92 cd
9	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	4-6"WH	A						
9	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"WH	A						
9	PRIME OIL COC	100	SL	0.25	% v/v	0.25	% v/v	4-6"WH	A						
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4-6"WH	A	97 a	91 a	293 b-e	171 a	75 ab	20 d
10	PURSUIT	2	SL	0.0625	lb ai/a	4	fl oz/a	4-6"WH	A						
10	AATREX	4	SC	1	lb ai/a	1	qt/a	4-6"WH	A						
10	FLEXSTAR	1.88	EC	0.353	lb ai/a	24	fl oz/a	4-6"WH	A						
10	PRIME OIL COC	100	SL	0.25	% v/v	0.25	% v/v	4-6"WH	A						
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	4-6"WH	A	70 bc	67 b	352 b	0 e	0 c	52 cd
12	2,4-D LV 4	3.8	EC	0.95	lb ae/a	2	pt/a	4-6"WH	A	86 a	85 a	330 bc	0 e	0 c	22 d
13	CLARITY	4	SL	0.25	lb ae/a	8	fl oz/a	4-6"WH	A	57 cde	47 cd	357 b	0 e	0 c	134 c
14	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	4-6"WH	A	89 a	43 de	296 b-e	105 ab	133 a	113 cd
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	4-6"WH	A						
15	NONTREATED									0 g	0 h	502 a	0 e	0 c	502 a
LSD (P=.05)										15.5	17.2	111.3	76.1	71.9	102.6
Replicate F										0.236	2.307	0.482	0.087	0.313	0.999
Replicate Prob(F)										0.7914	0.1182	0.6223	0.9172	0.7336	0.3810
Treatment F										33.756	21.823	3.708	4.170	2.651	12.948
Treatment Prob(F)										0.0001	0.0001	0.0015	0.0006	0.0136	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU.
2. Ratings: WC at 14 + 28 DAT.
3. Blanket burndown application of Roundup PowerMax (32 floz/A) + 2,4-D (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
4. AMATA-HR = Herbicide-resistant waterhemp (glyphosate). 0.5 m2 = 0.5 square meter.
5. Not harvested.

Waterhemp Control with Residual Herbicides - Valent.

Trial ID: 09-DeSoto-ValentPre Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 05-23-09

Objectives: Evaluate Valent and competitive residual herbicides applied preemergence for control of glyphosate-resistant waterhemp in soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-23-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A	B
Application Date:	05-23-09	06-29-09
Time of Day:	9:00	10:00
Application Method:	Spray	Spray
Application Timing:	PRE	28DAP
Application Placement:	BROFOL	BROFOL
Applied By:	NRJ	DKT
Air Temperature, Unit:	73 F	91 F
% Relative Humidity:	87	31
Wind Velocity, Unit:	1 MPH	2 MPH
Wind Direction:	NW	SW
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	70 F	80 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	90	0
	5/23/09	6/29/09
Crop stage at application:	NA	V5
Height Min, Max (inch):		10 11

Pest Stage At Each Application

Application Date:	05-23-09	06-29-09
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA	12
Stage Min, Max:		6 18
Height Majority:		7 IN
Height Min, Max:		3 10
Density, Unit:		6 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA

Waterhemp Control with Residual Herbicides - Valent.

Trial ID: 09-DeSoto-ValentPre Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code														
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										06-06-09	06-20-09	07-04-09	07-13-09	07-27-09
Rating Data Type										Injury	Injury	Injury	Injury	Injury
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing												5 DA-B	14 DA-B	28 DA-B
Trt-Eval Interval										14 DA-A	28 DA-A	42 DA-A	51 DA-A	65 DA-A
1	NONTREATED									0 a	0 a	0 b	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			0 b	0 a	0 a
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
3	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
5	VALOR XLT	40.3	WG			4	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
5	VALOR SX	51	WG	0.075	lb ai/a			PRE	A					
5	CLASSIC	25	WG	0.0258	lb ai/a			PRE	A					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
6	GANGSTER (CO-PACK)					3.6	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
6	GANGSTER FR	84	WG	0.0315	lb ai/a	0.6	oz/a	PRE	A					
6	GANGSTER V	51	WG	0.096	lb ai/a	3	oz/a	PRE	A					
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
7	V-10233	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
8	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
9	AUTHORITY FIRST	70	WG	0.153	lb ai/a	3.5	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
10	V-10233	76	WG	0.214	lb ai/a	4.5	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
11	ENVIVE	41.3	WG			4	oz/a	PRE	A	0 a	0 a	0 b	0 a	0 a
11	CLASSIC	25	WG	0.023	lb ai/a			PRE	A					
11	HARMONY SG	50	SG	0.00725	lb ai/a			PRE	A					
11	VALOR SX	51	WG	0.073	lb ai/a			PRE	A					
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
12	PREFIX	5.29	EC	1.1	lb ai/a	1.67	pt/a	PRE	A	0 a	0 a	0 b	0 a	0 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
13	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	PRE	A	0 a	0 a	7 a	0 a	0 a
13	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	28DAP	B					
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B					
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B					
LSD (P=.05)										0.0	0.0	1.2	0.0	0.0
Replicate F										0.000	0.000	1.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	0.3827	1.0000	1.0000
Treatment F										0.000	0.000	25.474	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Waterhemp Control with Residual Herbicides - Valent.

Trial ID: 09-DeSoto-ValentPre Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 06-06-09 Control Percent 14 DA-A	AMATA-HR 06-20-09 Control Percent 28 DA-A	AMATA-HR 07-04-09 Control Percent 5 DA-B 42 DA-A	AMATA-HR 07-18-09 Control Percent 19 DA-B 56 DA-A
1	NONTREATED									0 b	0 c	0 e	0 f
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B			32 d	30 e
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
3	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	PRE	A	99 a	99 a	84 b	83 c
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
4	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	99 a	91 ab	88 abc
4	VALOR SX	51	WG	0.056	lb ai/a			PRE	A				
4	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
5	VALOR XLT	40.3	WG			4	oz/a	PRE	A	99 a	99 a	94 a	94 a
5	VALOR SX	51	WG	0.075	lb ai/a			PRE	A				
5	CLASSIC	25	WG	0.0258	lb ai/a			PRE	A				
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
6	GANGSTER (CO-PACK)					3.6	oz/a	PRE	A	99 a	99 a	95 a	94 a
6	GANGSTER FR	84	WG	0.0315	lb ai/a	0.6	oz/a	PRE	A				
6	GANGSTER V	51	WG	0.096	lb ai/a	3	oz/a	PRE	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
7	V-10233	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	99 a	99 a	89 ab	87 abc
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
8	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99 a	96 b	70 c	65 d
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
9	AUTHORITY FIRST	70	WG	0.153	lb ai/a	3.5	oz/a	PRE	A	99 a	99 a	93 ab	93 ab
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
10	V-10233	76	WG	0.214	lb ai/a	4.5	oz/a	PRE	A	99 a	99 a	94 ab	92 abc
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
11	ENVIVE	41.3	WG			4	oz/a	PRE	A	99 a	99 a	93 ab	92 abc
11	CLASSIC	25	WG	0.023	lb ai/a			PRE	A				
11	HARMONY SG	50	SG	0.00725	lb ai/a			PRE	A				
11	VALOR SX	51	WG	0.073	lb ai/a			PRE	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
12	PREFIX	5.29	EC	1.1	lb ai/a	1.67	pt/a	PRE	A	99 a	99 a	88 ab	83 bc
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
13	VALOR SX	51	WG	0.08	lb ai/a	2.5	oz/a	PRE	A	99 a	98 a	91 ab	90 abc
13	RESOURCE	0.86	EC	0.054	lb ai/a	8	fl oz/a	28DAP	B				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	28DAP	B				
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	28DAP	B				
LSD (P=.05)										0.0	0.9	9.8	10.0
Replicate F										0.000	2.069	0.479	0.594
Replicate Prob(F)										1.0000	0.1502	0.6251	0.5604
Treatment F										0.000	9535.238	74.972	70.977
Treatment Prob(F)										1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Waterhemp Control with Residual Herbicides - Valent.

Trial ID: 09-DeSoto-ValentPre Location: De Soto, IL

Trial Comments

1. Protocol: Valent (MD64.07).
2. Ratings: CI 14 + 28 DAT; WC 28, 42 + 56 DAT (PRE).
3. Yield not necessary.
4. Blanket burndown application at 7-14 EPP of Roundup PowerMax (32 floz/A) + 2,4-D (1 pt/A) + AMS (1% w/w) was applied on 4-26-09.
5. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
6. Not harvested.

Soybean Herbicide Program: Cost-Based Solution.

Trial ID: 09-DeSoto-Cost Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: De Soto IL 62924 USA
Trial Status: FINAL **Initiation Date:** 06-02-09

Objectives: Determine the success of herbicide programs within three different cost ranges that may be used by growers during the herbicide selection process.

Crop 1: GLXMA Soybean **Variety:** AG 3905 **Description:** RR
Planting Method: SEEDED **Planting Date:** 06-02-09
Rate, Unit: 180000 S/A **Depth, Unit:** 1.25 IN
Row Spacing, Unit: 30 IN
Soil Moisture: ABOVE NORMAL

Pest 1 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. GLXMA	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.5 **Texture:** SILT LOAM
pH: 6.8 **Soil Name:** OKAW
CEC: 12 **Fert. Level:** P1 88 LB/A, K 207 LB/A

Application Description

	A	B	C	D
Application Date:	06-02-09	07-06-09	07-13-09	07-31-09
Time of Day:	16:15	9:00	15:00	12:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	POST1	POST2	POST3
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	DKT	NVH	DKP	DKT
Air Temperature, Unit:	82 F	78 F	86 F	81 F
% Relative Humidity:	65	43	48	50
Wind Velocity, Unit:	3 MPH	2 MPH	2 MPH	3 MPH
Wind Direction:	S	N	NE	W
Dew Presence (Y/N):	N	Y	N	N
Soil Temperature, Unit:	86 F	74 F	90 F	78 F
Soil Moisture:	NORMAL	ABONOR	ABONOR	NORMAL
% Cloud Cover:	70	15	20	60
	06-02-09	07-06-09	07-13-09	07-31-09
Crop stage at application:	NA	V5	R1	R3
Height Min, Max (inch):		8 15	8 22	30 36

Pest Stage At Each Application

Application Date:	06-02-09	07-06-09	07-13-09	07-31-09
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	6	6	10
Stage Min, Max:		2 14	2 10	4 28
Height Majority:		4 IN	4 IN	10 IN
Height Min, Max:		1 10	1 7	2 38
Density, Unit:		8 FT2	1 FT2	1 FT2

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Soybean Herbicide Program: Cost-Based Solution.

Trial ID: 09-DeSoto-Cost Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Pest Code										AMATA-HR	
										Crop Code		GLXMA		GLXMA		GLXMA		GLXMA			
										Rating Date		11-06-09		11-06-09		11-06-09		07-27-09		07-27-09	
										Rating Data Type		Moisture		Test wt.		Yield		Injury		Plants	
										Rating Unit		Percent		lb/bu		bu/A		Percent		0.5 m2	
										Rating Timing								14 DA-C		14 DA-C	
										Trt-Eval Interval								21 DA-B		21 DA-B	
1	$22 TO $24 PROGRAMS										10.7	ab	52.3	a-d	45	ab	0	d	57.7	cde
1	AUTHORITY FIRST	70	WG	0.141	lb ai/a	3.2	oz/a	PRE	A												
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												
2	$22 TO $24 PROGRAMS										10.7	ab	51.8	bcd	46	ab	0	d	13.7	de
2	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A												
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												
3	$22 TO $24 PROGRAMS										10.4	ab	52.2	a-d	45	ab	0	d	29.3	cde
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5.0	fl oz/a	PRE	A												
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												
4	$22 TO $24 PROGRAMS										10.3	ab	53.6	a	44	abc	2	bc	91.3	bcd
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B												
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B												
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D												
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D												
5	$22 TO $24 PROGRAMS										10.9	a	52.3	a-d	41	bcd	0	d	159.3	b
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B												
5	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST1	B												
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST1	B												
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B												
6	$22 TO $24 PROGRAMS										10.8	a	52.5	abc	42	a-d	0	d	38.0	cde
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B												
6	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	POST1	B												
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST1	B												
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B												
7	$22 TO $24 PROGRAMS										10.1	b	52.0	bcd	50	a	0	d	4.0	e
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B												
7	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	POST1	B												
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B												
8	$34 TO $36 PROGRAMS										10.5	ab	52.0	bcd	47	ab	0	d	10.0	de
8	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.4	oz/a	PRE	A												
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												
9	$34 TO $36 PROGRAMS										10.5	ab	51.0	d	48	ab	0	d	40.7	cde
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A												
9	PROWL H2O	3.8	CS	0.95	lb ai/a	2.0	pt/a	PRE	A												
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												
10	$34 TO $36 PROGRAMS										10.5	ab	52.0	bcd	48	ab	0	d	5.3	e
10	CANOPY	75	WG	0.14	lb ai/a	3.0	oz/a	PRE	A												
10	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	PRE	A												
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												
11	$34 TO $36 PROGRAMS										10.6	ab	52.4	a-d	48	ab	3	ab	5.7	de
11	AUTHORITY FIRST	70	WG	0.141	lb ai/a	3.2	oz/a	PRE	A												
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
11	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST2	C												
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST2	C												
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												
12	$34 TO $36 PROGRAMS										10.7	ab	52.4	abc	43	a-d	4	a	0.0	e
12	AUTHORITY FIRST	70	WG	0.141	lb ai/a	3.2	oz/a	PRE	A												
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C												
12	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	POST2	C												
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C												

Soybean Herbicide Program: Cost-Based Solution.

Trial ID: 09-DeSoto-Cost Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code										
	Pest Code																	AMATA-HR	
	Crop Code									GLXMA		GLXMA		GLXMA		GLXMA			
	Rating Date									11-06-09		11-06-09		11-06-09		07-27-09		07-27-09	
	Rating Data Type									Moisture		Test wt.		Yield		Injury		Plants	
	Rating Unit									Percent		lb/bu		bu/A		Percent		0.5 m2	
	Rating Timing															14 DA-C		14 DA-C	
	Trt-Eval Interval															21 DA-B		21 DA-B	
13	$34 TO $36 PROGRAMS									10.9	a	52.5	abc	47	ab	0	d	4.0	e
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B										
13	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	POST1	B										
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	POST1	B										
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B										
14	$34 TO $36 PROGRAMS									10.9	a	52.3	a-d	36	cd	0	d	76.7	b-e
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B										
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B										
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D										
14	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST3	D										
14	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST3	D										
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D										
15	$34 TO $36 PROGRAMS									10.5	ab	52.3	a-d	42	a-d	1	cd	106.3	bc
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B										
15	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST1	B										
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST1	B										
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B										
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D										
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D										
16	$34 TO $36 PROGRAMS									10.7	ab	52.7	ab	48	ab	0	d	6.0	de
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B										
16	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	POST1	B										
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B										
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D										
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D										
17	$46 TO $48 PROGRAMS									10.6	ab	52.5	abc	47	ab	0	d	9.7	de
17	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.4	oz/a	PRE	A										
17	PROWL H2O	3.8	CS	0.95	lb ai/a	2.0	pt/a	PRE	A										
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C										
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C										
18	$46 TO $48 PROGRAMS									10.5	ab	52.2	a-d	46	ab	1	cd	8.3	de
18	AUTHORITY FIRST	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A										
18	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A										
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C										
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C										
19	$46 TO $48 PROGRAMS									10.7	ab	52.6	abc	45	ab	4	a	3.0	e
19	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.4	oz/a	PRE	A										
19	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C										
19	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST2	C										
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST2	C										
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C										
20	$46 TO $48 PROGRAMS									10.4	ab	51.8	bcd	40	bcd	0	d	7.3	de
20	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B										
20	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	POST1	B										
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B										
20	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D										
20	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST3	D										
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST3	D										
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D										
21	NONTREATED									10.6	ab	51.2	cd	35	d	0	d	303.3	a
22	WEED FREE									10.4	ab	52.6	abc	47	ab	0	d	0.0	e
22	AUTHORITY FIRST	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A										
22	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A										
22	HANDWEED AS NEEDED																		
LSD (P=.05)										0.70		1.45		8.7		1.4		85.74	
Replicate F										1.760		2.062		0.689		2.260		1.466	
Replicate Prob(F)										0.1846		0.1398		0.5077		0.1169		0.2424	
Treatment F										0.733		1.094		1.658		7.080		5.673	
Treatment Prob(F)										0.7752		0.3903		0.0809		0.0001		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Soybean Herbicide Program: Cost-Based Solution.

Trial ID: 09-DeSoto-Cost Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 07-27-09 Control Percent 14 DA-C 21 DA-B	AMATA-HR 08-10-09 Control Percent 28 DA-C 35 DA-B
	Pest Code									AMATA-HR	AMATA-HR
	Crop Code										
	Rating Date									07-27-09	08-10-09
	Rating Data Type									Control	Control
	Rating Unit									Percent	Percent
	Rating Timing									14 DA-C	28 DA-C
	Trt-Eval Interval									21 DA-B	35 DA-B
1	$22 TO $24 PROGRAMS									92 bc	78 cd
1	AUTHORITY FIRST	70	WG	0.141	lb ai/a	3.2	oz/a	PRE	A		
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
1	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
2	$22 TO $24 PROGRAMS									96 ab	89 abc
2	AUTHORITY MTZ	45	WG	0.31	lb ai/a	11	oz/a	PRE	A		
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
2	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
3	$22 TO $24 PROGRAMS									94 abc	89 abc
3	AUTHORITY ASSIST	4	SL	0.156	lb ai/a	5.0	fl oz/a	PRE	A		
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
3	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
4	$22 TO $24 PROGRAMS									78 f	70 de
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D		
4	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D		
5	$22 TO $24 PROGRAMS									83 ef	63 e
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
5	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST1	B		
5	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST1	B		
5	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
6	$22 TO $24 PROGRAMS									90 cd	83 bc
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
6	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	POST1	B		
6	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST1	B		
6	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
7	$22 TO $24 PROGRAMS									98 a	97 a
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
7	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	POST1	B		
7	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
8	$34 TO $36 PROGRAMS									98 ab	98 a
8	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.4	oz/a	PRE	A		
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
8	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
9	$34 TO $36 PROGRAMS									95 abc	95 ab
9	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
9	PROWL H2O	3.8	CS	0.95	lb ai/a	2.0	pt/a	PRE	A		
9	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
9	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
10	$34 TO $36 PROGRAMS									98 a	98 a
10	CANOPY	75	WG	0.14	lb ai/a	3.0	oz/a	PRE	A		
10	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	PRE	A		
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
10	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
11	$34 TO $36 PROGRAMS									98 a	98 a
11	AUTHORITY FIRST	70	WG	0.141	lb ai/a	3.2	oz/a	PRE	A		
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
11	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST2	C		
11	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST2	C		
11	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
12	$34 TO $36 PROGRAMS									99 a	99 a
12	AUTHORITY FIRST	70	WG	0.141	lb ai/a	3.2	oz/a	PRE	A		
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
12	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	POST2	C		
12	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		

Soybean Herbicide Program: Cost-Based Solution.

Trial ID: 09-DeSoto-Cost Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 07-27-09 Control Percent 14 DA-C 21 DA-B	AMATA-HR 08-10-09 Control Percent 28 DA-C 35 DA-B
13	$34 TO $36 PROGRAMS									98 a	98 a
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
13	FIRSTRATE	84	WG	0.0158	lb ai/a	0.3	oz/a	POST1	B		
13	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	POST1	B		
13	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
14	$34 TO $36 PROGRAMS									85 de	99 a
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D		
14	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST3	D		
14	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST3	D		
14	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D		
15	$34 TO $36 PROGRAMS									90 cd	90 abc
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
15	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST1	B		
15	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST1	B		
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D		
15	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D		
16	$34 TO $36 PROGRAMS									98 a	98 a
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
16	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	POST1	B		
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D		
16	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D		
17	$46 TO $48 PROGRAMS									98 a	98 a
17	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.4	oz/a	PRE	A		
17	PROWL H2O	3.8	CS	0.95	lb ai/a	2.0	pt/a	PRE	A		
17	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
17	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
18	$46 TO $48 PROGRAMS									98 a	98 a
18	AUTHORITY FIRST	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A		
18	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5	pt/a	PRE	A		
18	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
18	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
19	$46 TO $48 PROGRAMS									98 a	98 a
19	AUTHORITY FIRST	70	WG	0.282	lb ai/a	6.4	oz/a	PRE	A		
19	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST2	C		
19	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST2	C		
19	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST2	C		
19	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST2	C		
20	$46 TO $48 PROGRAMS									98 a	99 a
20	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST1	B		
20	PREFIX	5.29	EC	1.32	lb ai/a	2.0	pt/a	POST1	B		
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST1	B		
20	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST3	D		
20	COBRA	2	EC	0.125	lb ai/a	8	fl oz/a	POST3	D		
20	SUPERB HC	100	SL	0.5	% v/v	0.5	% v/v	POST3	D		
20	N-PAK AMS	100	SL	5	% v/v	5	% v/v	POST3	D		
21	NONTREATED									0 g	0 f
22	WEED FREE									99 a	99 a
22	AUTHORITY FIRST	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A		
22	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A		
22	HANDWEED AS NEEDED										
LSD (P=.05)										5.7	11.7
Replicate F										2.813	6.095
Replicate Prob(F)										0.0714	0.0047
Treatment F										110.537	28.878
Treatment Prob(F)										0.0001	0.0001

Soybean Herbicide Program: Cost-Based Solution.

Trial ID: 09-DeSoto-Cost Location: De Soto, IL

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMATA-HR 07-27-09	AMATA-HR 08-10-09
	Pest Code									AMATA-HR	AMATA-HR
	Crop Code										
	Rating Date									07-27-09	08-10-09
	Rating Data Type									Control	Control
	Rating Unit									Percent	Percent
	Rating Timing									14 DA-C	28 DA-C
	Trt-Eval Interval									21 DA-B	35 DA-B

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU-BGY.
2. Ratings: CI/WC prior to C, 14 + 28 da C, and EOS.
3. Yield.
4. Blanket burndown application of Gramoxone Inteon (4 pt/A) was applied to all plots 10 ft wide on 6-1-09.
5. Plants 0.5 m2 = Plants per 0.5 square meter.
   AMATA-HR = Herbicide-resistant waterhemp (glyphosate). GLY-RES = Glyphosate-resistant biotype.
6. Harvested 11-6-09, (2) 30 inch rows by 27 ft.

Fall Envoke for Marestail Management.

Trial ID: 09-YRC-SYN-Fall Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 11-18-08

Objectives: Compare the efficacy and utility of fall applications of Envoke compared with competitive standards for control of glyphosate-resistant marestail in soybean.

Crop 1: GLXMA Soybean **Variety:** AG 4404 **Description:** RR/STS
Planting Method: SEEDED **Planting Date:** 05-19-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** ERICA Conyza canadensis (L.) Crong. horseweed
Pest Description: glyphosate-resistant marestail
Pest 2 Type: W **Code:** LAMAM Lamium amplexicaule L. henbit
Pest 3 Type: D **Code:** AMATA Amaranthus rudis Sauer waterhemp, common
Pest 4 Type: W **Code:** AMBEL Ambrosia artemisiifolia L. ragweed, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year	
1. ZEAMD	2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 2.1 **Texture:** VERY FINE SANDY LOAM
pH: 5 **Soil Name:** ALVIN
CEC: 9 **Fert. Level:** P1 133 LB/A, K 209 LB/A

Application Description

	A
Application Date:	11-18-08
Time of Day:	16:00
Application Method:	Spray
Application Timing:	FALL
Application Placement:	BROFOL
Applied By:	TGM
Air Temperature, Unit:	37 F
% Relative Humidity:	40
Wind Velocity, Unit:	1 MPH
Wind Direction:	W
Dew Presence (Y/N):	N
Soil Temperature, Unit:	39 F
Soil Moisture:	NORMAL
% Cloud Cover:	10
	11-18-08
Crop stage at application:	NA

Pest Stage At Each Application

Application Date:	11-18-08
Weed Code:	ERICA
Stage Majority (leaves):	2
Stage Min, Max:	COTY 2
Height Majority:	0.25 IN
Height Min, Max:	0.25 0.5
Density, Unit:	0.1 FT2
Weed Code:	LAMAM
Stage Majority (leaves):	NA
Weed Code:	AMATA
Stage Majority (leaves):	NA
Weed Code:	AMBEL
Stage Majority (leaves):	NA

Application Equipment

Appl. Equipment:	CO2 sprayer
Operating Pressure:	30 PSI
Nozzle Type:	Flat fan
Nozzle Size:	XR 8002
Boom Length, Unit:	6.67 FT
Spray Volume, Unit:	15 GPA

Fall Envoke for Marestail Management.

Trial ID: 09-YRC-SYN-Fall Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-06-09 Moisture Percent	GLXMA 11-06-09 Yield bu/A	GLXMA 06-06-09 Injury Percent 14 DAE	GLXMA 06-20-09 Injury Percent 28 DAE	GLXMA 07-04-09 Injury Percent 42 DAE	GLXMA 07-25-09 Injury Percent 63 DAE
1	NONTREATED									10.9 bc	50 ab	0 a	0 a	0 a	0 a
2	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	11.0 bc	48 ab	0 a	0 a	0 a	0 a
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
3	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	10.9 bc	47 ab	0 a	0 a	0 a	0 a
3	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A						
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
4	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A	10.9 bc	53 ab	0 a	0 a	0 a	0 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
5	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	11.0 bc	47 ab	0 a	0 a	0 a	0 a
5	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
6	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A	11.0 bc	46 b	0 a	0 a	0 a	0 a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
7	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	10.8 bc	48 ab	0 a	0 a	0 a	0 a
7	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
8	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A	11.0 bc	55 ab	0 a	0 a	0 a	0 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
9	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	10.9 bc	47 ab	0 a	0 a	0 a	0 a
9	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A						
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
9	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
10	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A	10.8 bc	51 ab	0 a	0 a	0 a	0 a
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
10	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
11	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	11.2 ab	55 a	0 a	0 a	0 a	0 a
11	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A						
11	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
11	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A	10.7 c	51 ab	0 a	0 a	0 a	0 a
12	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A						
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
13	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	11.6 a	46 b	0 a	0 a	0 a	0 a
13	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A						
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
13	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
14	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A	11.1 bc	47 ab	0 a	0 a	0 a	0 a
14	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
LSD (P=.05)										0.40	9.2	0.0	0.0	0.0	0.0
Replicate F										2.578	2.853	0.000	0.000	0.000	0.000
Replicate Prob(F)										0.0675	0.0496	1.0000	1.0000	1.0000	1.0000
Treatment F										2.084	0.944	0.000	0.000	0.000	0.000
Treatment Prob(F)										0.0386	0.5200	1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Envoke for Marestail Management.

Trial ID: 09-YRC-SYN-Fall Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 06-06-09 Stunt Percent 14 DAE	GLXMA 06-20-09 Stunt Percent 28 DAE	GLXMA 07-04-09 Stunt Percent 42 DAE	GLXMA 07-25-09 Stunt Percent 63 DAE
1	NONTREATED									0 a	0 a	0 a	0 a
2	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 a	0 a	0 a	0 a
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
3	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 a	0 a	0 a	0 a
3	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A				
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
4	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A	0 a	0 a	0 a	0 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
5	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 a	0 a	0 a	0 a
5	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A				
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
6	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A	0 a	0 a	0 a	0 a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
7	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 a	0 a	0 a	0 a
7	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A				
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
8	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A	0 a	0 a	0 a	0 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
9	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 a	0 a	0 a	0 a
9	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A				
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
9	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A				
10	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A	0 a	0 a	0 a	0 a
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
10	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
11	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 a	0 a	0 a	0 a
11	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A				
11	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A				
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
11	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A				
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A	0 a	0 a	0 a	0 a
12	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A				
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
13	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 a	0 a	0 a	0 a
13	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A				
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
13	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A				
14	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A	0 a	0 a	0 a	0 a
14	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
LSD (P=.05)										0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Envoke for Marestail Management.

Trial ID: 09-YRC-SYN-Fall Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
	Pest Code									ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
	Crop Code														
	Rating Date									12-14-08	04-01-09	05-20-09	07-01-09	08-04-09	10-21-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing										At Spring				
	Trt-Eval Interval									26 DA-A	Greenup	1 DAP	0 DA-C	35 DA-C	EOS
1	NONTREATED									0	0 c	0 d	85 b	99 a	99 a
2	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A		74 b	54 c	84 b	99 a	99 a
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
3	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A		99 a	98 a	97 a	99 a	99 a
3	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A						
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
4	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A		99 a	97 ab	97 a	99 a	99 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
5	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A		99 a	92 ab	94 a	99 a	99 a
5	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
6	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A		99 a	95 ab	94 a	99 a	99 a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
7	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A		99 a	98 a	96 a	99 a	99 a
7	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
8	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A		99 a	99 a	97 a	99 a	99 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
9	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A		99 a	99 a	98 a	99 a	99 a
9	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A						
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
9	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
10	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A		99 a	99 a	97 a	99 a	99 a
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
10	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
11	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A		99 a	97 ab	98 a	99 a	99 a
11	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A						
11	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
11	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A		99 a	99 a	98 a	99 a	99 a
12	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A						
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
13	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A		99 a	87 b	93 a	99 a	99 a
13	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A						
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
13	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
14	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A		99 a	90 ab	96 a	99 a	99 a
14	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
	LSD (P=.05)									.	18.9	10.5	8.3	0.3	0.0
	Replicate F										1.000	2.082	3.974	3.545	0.000
	Replicate Prob(F)										0.4031	0.1184	0.0145	0.0231	1.0000
	Treatment F										16.385	56.127	2.452	1.000	0.000
	Treatment Prob(F)										0.0001	0.0001	0.0154	0.4697	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Envoke for Marestail Management.

Trial ID: 09-YRC-SYN-Fall Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	LAMAM	LAMAM	AMASS	AMATA	AMASS	AMASS
	Pest Code									LAMAM	LAMAM	AMASS	AMATA	AMASS	AMASS
	Crop Code														
	Rating Date									12-14-08	04-01-09	10-21-09	05-20-09	07-01-09	08-04-09
	Rating Data Type									Control	Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent
	Rating Timing										At Spring				
	Trt-Eval Interval									26 DA-A	Greenup	EOS	1 DAP	0 DA-C	35 DA-C
1	NONTREATED									0 b	0 b	99 a	0 e	91 b	99 a
2	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	0 e	98 a	99 a
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
3	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	53 bc	99 a	99 a
3	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A						
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
4	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A	99 a	99 a	99 a	20 de	99 a	99 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
5	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	40 cd	98 a	99 a
5	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A						
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
6	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A	99 a	99 a	99 a	0 e	97 ab	99 a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
7	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	48 c	99 a	99 a
7	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A						
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A						
8	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A	99 a	99 a	99 a	78 ab	98 a	99 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
9	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	80 ab	98 a	99 a
9	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A						
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
9	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
10	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A	99 a	99 a	99 a	86 a	99 a	99 a
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
10	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
11	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	0 e	99 a	99 a
11	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A						
11	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A						
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
11	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A	99 a	99 a	99 a	15 de	99 a	99 a
12	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A						
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
13	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	97 a	96 ab	99 b
13	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A						
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
13	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A						
14	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A	99 a	99 a	99 a	93 a	99 a	99 a
14	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A						
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A						
	LSD (P=.05)									0.0	0.0	0.0	27.3	5.8	0.4
	Replicate F									0.000	0.000	0.000	1.295	1.293	1.000
	Replicate Prob(F)									1.0000	1.0000	1.0000	0.2909	0.2904	0.4031
	Treatment F									0.000	0.000	0.000	15.731	1.007	1.000
	Treatment Prob(F)									1.0000	1.0000	1.0000	0.0001	0.4635	0.4697

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Envoke for Marestail Management.

Trial ID: 09-YRC-SYN-Fall Location: Young Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBEL 05-20-09 Control Percent 1 DAP	AMBEL 07-01-09 Control Percent 0 DA-C	AMBEL 08-04-09 Control Percent 35 DA-C	AMBEL 10-21-09 Control Percent EOS
1	NONTREATED									0 d	99 a	99 a	99 a
2	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	0 d	99 a	99 a	99 a
2	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
2	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
3	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	97 ab	99 a	99 a	99 a
3	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A				
3	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
3	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
4	ENVOKE	75	WG	0.0047	lb ai/a	0.1	oz/a	FALL	A	96 ab	99 a	99 a	99 a
4	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
4	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
5	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	98 a	99 a	99 a	99 a
5	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A				
5	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
5	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
6	ENVOKE	75	WG	0.00586	lb ai/a	0.125	oz/a	FALL	A	98 a	99 a	99 a	99 a
6	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
6	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
7	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	98 ab	99 a	99 a
7	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A				
7	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
7	TOUCHDOWN TOTAL	4.17	SL	0.78	lb ae/a	24	fl oz/a	FALL	A				
8	ENVOKE	75	WG	0.007	lb ai/a	0.15	oz/a	FALL	A	99 a	99 a	99 a	99 a
8	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
8	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
9	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	99 a	99 a	99 a	99 a
9	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A				
9	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
9	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A				
10	ENVOKE	75	WG	0.014	lb ai/a	0.3	oz/a	FALL	A	99 a	99 a	99 a	99 a
10	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
10	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
11	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	92 abc	99 a	99 a	99 a
11	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A				
11	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A				
11	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
11	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A				
12	CLASSIC	25	WG	0.0156	lb ai/a	1	oz/a	FALL	A	89 bc	97 b	99 a	99 a
12	EXPRESS	50	SG	0.00313	lb ai/a	0.1	oz/a	FALL	A				
12	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
12	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
13	N-PAK AMS	100	SL	3.33	% v/v	3.33	% v/v	FALL	A	88 c	99 a	99 a	99 a
13	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A				
13	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
13	TOUCHDOWN TOTAL	4.17	SL	0.52	lb ae/a	16	fl oz/a	FALL	A				
14	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	FALL	A	94 abc	99 a	99 a	99 a
14	2,4-D LV 4	3.8	EC	0.475	lb ae/a	16	fl oz/a	FALL	A				
14	PRIME OIL COC	100	SL	1	% v/v	1	% v/v	FALL	A				
LSD (P=.05)										8.1	1.9	0.0	0.0
Replicate F										4.530	0.739	0.000	0.000
Replicate Prob(F)										0.0081	0.5355	1.0000	1.0000
Treatment F										152.159	0.925	0.000	0.000
Treatment Prob(F)										0.0001	0.5368	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Fall Envoke for Marestail Management.

Trial ID: 09-YRC-SYN-Fall Location: Young Res. Center

Trial Comments

1. Protocol: Syngenta (TF050A).
2. Ratings: WC 14-21 DAT, April 1, at planting, at "C" application, 35-42 DA-"C", and at harvest.
   CI and stunting at 14, 28, 42 and 63 DAE.
3. Yield (bu/A).
4. Blanket PRE and POST applications;
   A. If there is no suspicion of glyphosate-resistant amaranthus species,
   Gramoxone Inteon (40 floz/A) + Prefix (32 floz/A) applied PRE 10 ft wide to all plots including the nontreated at planting.
   Plus Touchdown Total (24 floz/A) + AMS applied POST 10 ft wide to all plots including the nontreated when escaped weeds from the PRE reach 2-4 inch.
   B. If there iEOSs suspicion of glyphosate-resistant amaranthus species,
   Gramoxone Inteon (40 floz/A) + Boundary (max label rate for soil type) applied PRE 10 ft wide to all plots including the nontreated at planting.
   Plus A16918A: fomesafen + glyphosate premix (1402 g ae/ha) applied POST 10 ft wide to all plots including the nontreated when escaped weeds from the PRE reach 2-4 inch.
5. Plant each plot with 2 rows of STS and 2 rows of GAT soybean.
6. On 12-14-08, not enough ERICA to rate all plots.
7. ERICA-HR = Herbicide-resistant marestail (glyphosate).
   AMASS = Amaranth species including AMATA (common waterhemp) and AMARE (redroot pigweed).
   EOS = End of season.
8. Stand reduction due to deer feeding was observed and recorded by plot.
9. Harvested 11-6-09, (2) 30 inch rows by 26.7 ft.

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-30-09

Objectives: Determine which soil residual herbicide provides the greatest benefit for control of glyphosate-resistant waterhemp in a Liberty Link soybean system.

Crop 1: GLXMA Soybean **Variety:** SO80122 **Description:** LL
Planting Method: SEEDED **Planting Date:** 06-30-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	**Code:** GGGAN			grasses, annual
Pest 2 Type: W	**Code:** AMATA	Amaranthus rudis Sauer		waterhemp, common
Pest 3 Type: W	**Code:** IPOHE	Ipomoea hederacea (L.) Jacq.		morningglory, ivyleaf
Pest 4 Type: W	**Code:** ABUTH	Abutilon theophrasti Medicus		velvetleaf
Pest 5 Type: W	**Code:** AMBEL	Ambrosia artemisiifolia L.		ragweed, common
Pest 6 Type: W	**Code:** AMBTR	Ambrosia trifida L.		ragweed, giant

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 28 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A

% OM: 1.6 **Texture:** SILT LOAM
pH: 6.2 **Soil Name:** PIERRON
CEC: 7 **Fert. Level:** P1:93 LB/A, K:448 LB/A

Application Description

	A	B	C	D
Application Date:	07-01-09	07-17-09	07-27-09	08-17-09
Time of Day:	6:00	6:00	8:30	11:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	3"W	22DAE	44DAE
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	DKP	DKP	NVH	DKP
Air Temperature, Unit:	70 F	68 F	70 F	85 F
% Relative Humidity:	92	82	92	92
Wind Velocity, Unit:	2 MPH	8 MPH	1 MPH	3 MPH
Wind Direction:	W	N	W	SW
Dew Presence (Y/N):	N	N	Y	N
Soil Moisture:	NORMAL	NORMAL	NORMAL	ABONOR
% Cloud Cover:	20	20	5	80
	07-01-09	07-17-09	07-27-09	08-17-09
Crop stage at application:	NA	V1	V4	R1
Height Min, Max (inch):		3 6	6 8	20 22

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Pest Stage At Each Application

Application Date:	07-01-09	07-17-09	07-27-09	08-17-09
Weed Code:	GGGAN	GGGAN	GGGAN	GGGAN
Stage Majority (leaves):	NA	4	4	6
Stage Min, Max:		1 5	3 6	3 8
Height Majority:		3 IN	6 IN	8 IN
Height Min, Max:		0.5 4	3 9	4 13
Density, Unit:		4 FT2	0.8 FT2	0.5 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	COTY	5	6
Stage Min, Max:		COTY 2	3 8	4 8
Height Majority:		0.5 IN	3.5 IN	4 IN
Height Min, Max:		0.5 1	1 5	2 8
Density, Unit:		0.1 FT2	.001 FT2	.001 FT2
Weed Code:	IPOHE	IPOHE	IPOHE	IPOHE
Stage Majority (leaves):	NA	2	4	NA
Stage Min, Max:		COTY 2	2 6	
Height Majority:		3 IN	3.5 IN	
Height Min, Max:		1 3	2 4.5	
Density, Unit:		0.2 FT2	.001 FT2	
Weed Code:	ABUTH	ABUTH	ABUTH	ABUTH
Stage Majority (leaves):	NA	COTY	2	2
Stage Min, Max:		COTY 2	1 4	1 8
Height Majority:		1 IN	2 IN	2 IN
Height Min, Max:		0.5 2	1 3	1 16
Density, Unit:		0.2 FT2	.001 FT2	0.01 FT2
Weed Code:	AMBEL	AMBEL	AMBEL	AMBEL
Stage Majority (leaves):	NA	2	5	NA
Stage Min, Max:		COTY 4	2 8	
Height Majority:		3 IN	4.5 IN	
Height Min, Max:		0.5 4	3 7	
Density, Unit:		1.5 FT2	0.7 FT2	
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	2	4	NA
Stage Min, Max:		COTY 4	2 6	
Height Majority:		3 IN	4 IN	
Height Min, Max:		1 5	2.5 6	
Density, Unit:		0.1 FT2	.001 FT2	

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-07-09 Moisture Percent	GLXMA 11-07-09 Yield bu/A	GLXMA 07-17-09 Injury Percent 16 DA-A 0 DA-B	GLXMA 07-27-09 Injury Percent 10 DA-B 0 DA-C	GLXMA 07-31-09 Injury Percent 4 DA-C 14 DA-B	GLXMA 08-10-09 Injury Percent 14 DA-C
1	NONTREATED									12.1 a	20 b	0 c	0 c	0 c	0 a
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	11.8 abc	46 a	5 a	2 ab	3 b	0 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	11.7 abc	45 a	5 a	3 a	4 b	0 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	11.7 bc	45 a	0 c	0 c	3 b	0 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	11.7 abc	42 a	0 c	0 c	5 a	0 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C	11.7 abc	46 a			6 a	0 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B	11.7 abc	41 a		3 a	4 b	0 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B						
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	12.0 ab	42 a	0 c	0 c	3 b	0 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	11.7 abc	44 a	1 c	1 bc	3 b	0 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	11.7 abc	44 a	6 a	2 ab	3 b	0 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	11.6 c	46 a	3 b	2 abc	3 b	0 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A						
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	11.6 bc	47 a	5 a	2 abc	3 b	0 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A						
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A						
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A						
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	11.9 abc	46 a	0 c	0 c	3 b	0 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code															
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										11-07-09	11-07-09	07-17-09	07-27-09	07-31-09	08-10-09
Rating Data Type										Moisture	Yield	Injury	Injury	Injury	Injury
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent
Rating Timing												16 DA-A	10 DA-B	4 DA-C	
Trt-Eval Interval												0 DA-B	0 DA-C	14 DA-B	14 DA-C
LSD (P=.05)										0.41	7.3	1.6	2.1	0.9	0.0
Replicate F										0.262	3.347	1.617	0.239	1.000	0.000
Replicate Prob(F)										0.7718	0.0522	0.2234	0.7896	0.3827	1.0000
Treatment F										1.130	7.784	20.059	3.199	16.500	0.000
Treatment Prob(F)										0.3829	0.0001	0.0001	0.0098	0.0001	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
	Pest Code									GGGAN	GGGAN	GGGAN	GGGAN	GGGAN
	Crop Code													
	Rating Date									07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
	Rating Data Type									Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent
	Rating Timing									16 DA-A	10 DA-B	4 DA-C		
	Trt-Eval Interval									0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
1	NONTREATED									0 d	0 d	0 e	0 e	0 e
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	97 a	93 b	97 a	97 c	97 abc
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	97 a	97 ab	97 a	98 bc	97 abc
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	96 abc	93 b	96 a	97 bc	98 abc
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	97 ab	94 b	96 a	97 c	96 c
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			58 d	98 ab	97 bc
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B		98 a	99 a	96 d	94 d
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 d	0 d	58 d	98 ab	98 ab
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	93 c	87 c	93 b	97 bc	98 abc
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	97 a	95 ab	97 a	99 a	99 ab
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	97 ab	96 ab	98 a	97 c	98 abc
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	97 ab	96 ab	98 a	97 c	97 abc
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	94 bc	89 c	82 c	99 a	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										GGGAN	GGGAN	GGGAN	GGGAN	GGGAN
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										3.0	3.6	2.9	0.8	1.8
Replicate F										1.681	0.870	0.327	0.117	0.826
Replicate Prob(F)										0.2114	0.4328	0.7241	0.8905	0.4499
Treatment F										1473.080	910.222	806.318	9969.477	1960.918
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
	Pest Code									AMATA	AMATA	AMATA	AMATA	AMATA
	Crop Code													
	Rating Date									07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
	Rating Data Type									Control	Control	Control	Control	Control
	Rating Unit									Percent	Percent	Percent	Percent	Percent
	Rating Timing									16 DA-A	10 DA-B	4 DA-C		
	Trt-Eval Interval									0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
1	NONTREATED									0 d	0 d	0 e	0 c	0 b
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	99 a	98 a	98 a	99 a	99 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	99 a	98 a	99 a	99 a	99 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			70 d	97 b	99 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B		99 a	99 a	99 a	99 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	57 c	40 c	73 d	98 b	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	90 a	63 b	91 b	98 ab	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	99 a	99 a	99 a	99 a	99 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	77 b	63 b	82 c	98 ab	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMATA	AMATA	AMATA	AMATA	AMATA
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										12.3	13.2	5.4	1.0	0.4
Replicate F										0.749	1.805	1.984	2.012	2.182
Replicate Prob(F)										0.4856	0.1880	0.1595	0.1557	0.1347
Treatment F										54.758	51.226	224.063	6291.606	48061.005
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code									
Pest Code										IPOHE		IPOHE		IPOHE		IPOHE		IPOHE
Crop Code																		
Rating Date										07-17-09		07-27-09		07-31-09		08-10-09		08-31-09
Rating Data Type										Control		Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent		Percent
Rating Timing										16 DA-A		10 DA-B		4 DA-C				
Trt-Eval Interval										0 DA-B		0 DA-C		14 DA-B		14 DA-C		35 DA-C
1	NONTREATED									0	f	0	e	0	d	0	c	0 b
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99	a	98	a	99	a	99	a	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98	a	98	a	98	a	99	a	99 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C									
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	99	a	98	a	99	a	98	ab	99 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	99	a	99	a	99	a	99	a	98 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C									
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					77	bc	99	a	99 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B			99	a	99	a	98	ab	98 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B									
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	35	d	33	cd	70	c	99	a	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	80	b	60	b	81	b	98	ab	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	47	c	35	c	73	bc	97	b	99 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99	a	99	a	99	a	99	a	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A									
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A									
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	99	a	99	a	99	a	99	a	98 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A									
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A									
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A									
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	23	e	20	d	72	c	99	a	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										IPOHE	IPOHE	IPOHE	IPOHE	IPOHE
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										8.1	13.7	8.9	1.1	1.0
Replicate F										2.567	2.395	2.949	2.114	0.270
Replicate Prob(F)										0.1030	0.1156	0.0716	0.1426	0.7659
Treatment F										187.938	66.855	81.107	5011.115	5920.641
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
Pest Code										ABUTH		ABUTH		ABUTH		ABUTH	
Crop Code																	
Rating Date										07-17-09		07-27-09		07-31-09		08-10-09	08-31-09
Rating Data Type										Control		Control		Control		Control	Control
Rating Unit										Percent		Percent		Percent		Percent	Percent
Rating Timing										16 DA-A		10 DA-B		4 DA-C			
Trt-Eval Interval										0 DA-B		0 DA-C		14 DA-B		14 DA-C	35 DA-C
1	NONTREATED									0	c	0	c	0	e	0 d	0 b
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98	a	97	a	99	a	98 abc	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	91	a	92	a	98	a	99 ab	99 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C								
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	97	a	98	a	99	a	98 abc	99 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	98	a	98	a	99	a	99 a	99 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C								
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					72	d	97 c	99 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B			99	a	99	a	98 abc	98 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B								
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0	c	33	b	78	bc	98 abc	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	99	a	96	a	99	a	99 ab	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	58	b	47	b	82	b	98 abc	99 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	98	a	98	a	99	a	98 abc	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A								
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A								
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	99	a	99	a	99	a	98 ab	99 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A								
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A								
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A								
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	0	c	0	c	77	c	98 bc	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C								
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C								
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D								
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D								

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										17.3	31.7	4.9	1.1	0.7
Replicate F										1.851	2.849	1.066	8.313	1.000
Replicate Prob(F)										0.1830	0.0794	0.3601	0.0018	0.3827
Treatment F										58.282	13.690	270.320	5416.313	12566.715
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBEL	AMBEL	AMBEL	AMBEL	AMBEL
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
1	NONTREATED									0 d	0 c	0 d	0 c	0 c
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	95 a	92 a	98 a	99 a	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	98 a	95 a	97 a	99 a	99 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	98 a	97 a	99 a	99 a	99 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	97 a	96 a	99 a	99 a	99 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			72 c	99 b	99 b
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B		99 a	99 a	99 a	99 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	5 d	41 b	75 c	99 a	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	40 c	37 b	82 b	99 a	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	60 b	50 b	86 b	99 a	99 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99 a	98 a	99 a	99 a	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	98 a	98 a	99 a	99 a	99 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	3 d	3 c	72 c	99 a	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBEL	AMBEL	AMBEL	AMBEL	AMBEL
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										8.4	25.1	3.8	0.3	0.3
Replicate F										1.557	1.434	0.321	1.000	1.000
Replicate Prob(F)										0.2353	0.2598	0.7285	0.3827	0.3827
Treatment F										229.268	20.518	443.608	88160.509	88160.509
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
1	NONTREATED									0 b	0 c	0 d	0 c	0 c
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	93 a	92 a	94 a	99 a	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	91 a	89 a	96 a	99 a	99 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	99 a	97 a	99 a	99 a	99 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	95 a	93 a	98 a	98 a	98 b
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			70 c	99 a	99 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B		99 a	99 a	99 a	99 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 b	33 b	70 c	99 a	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	0 b	0 c	70 c	99 a	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	7 b	7 bc	83 b	99 a	99 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	95 a	95 a	98 a	99 a	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	97 a	96 a	97 a	99 a	99 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	0 b	0 c	68 c	97 b	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 1.

Trial ID: 09-2A-W70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code														
Rating Date										07-17-09	07-27-09	07-31-09	08-10-09	08-31-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing										16 DA-A	10 DA-B	4 DA-C		
Trt-Eval Interval										0 DA-B	0 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										9.4	29.8	6.9	0.9	0.5
Replicate F										3.030	1.414	0.362	2.282	1.000
Replicate Prob(F)										0.0709	0.2644	0.7000	0.1238	0.3827
Treatment F										234.732	19.985	133.113	7418.902	22028.502
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (MRC).
2. Ratings: CI/WC at 0 + 14 da B and C; WC at 35 da C.
3. All POST applications should be 3-4"W or less, the D application is only if necessary.
4. Stand reduction due to standing water was observed and recorded by plot.
5. GGGAN = Annual grasses including SETFA (giant foxtail) and PANDI (fall panicum).
   Crop injury was chlorosis and stunting.
6. Harvested 11-7-09, (2) 30 inch rows by 25 ft.

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Belleville IL 62221 USA
Trial Status: FINAL **Initiation Date:** 06-28-09

Objectives: Determine which soil residual herbicide provides the greatest benefit for control of glyphosate-resistant waterhemp in a Liberty Link soybean system.

Crop 1: GLXMA Soybean **Variety:** SO80122 **Description:** LL
Planting Method: SEEDED **Planting Date:** 06-28-09
Rate, Unit: 75 LB/A **Depth, Unit:** 1.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W **Code:** SETFA Setaria faberi Herrm. foxtail, giant
Pest 2 Type: W **Code:** AMBTR Ambrosia trifida L. ragweed, giant
Pest 3 Type: W **Code:** IPOSS morningglory, species
Pest 4 Type: W **Code:** AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 27 FT **Tillage Type:** REDUCED-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. ZEAMD 2008

Field Prep./Maintenance: N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

% OM: 2.2 **Texture:** SILT LOAM
pH: 6.3 **Soil Name:** PIERRON
CEC: 11 **Fert. Level:** P1: 67 LB/A, K: 376 LB/A

Application Description

	A	B	C	D
Application Date:	06-28-09	07-16-09	07-24-09	08-14-09
Time of Day:	18:45	9:45	10:45	9:40
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	3"W	22DAE	44DAE
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	NVH	DKP	NVH	NVH
Air Temperature, Unit:	81 F	80 F	80 F	80 F
% Relative Humidity:	50	80	92	76
Wind Velocity, Unit:	4 MPH	2 MPH	1 MPH	2 MPH
Wind Direction:	N	N	W	W
Dew Presence (Y/N):	N	Y	Y	Y
Soil Moisture:	NORMAL	ABONOR	NORMAL	NORMAL
% Cloud Cover:	0	60	10	5
	06-28-09	07-16-09	07-24-09	08-14-09
Crop stage at application:	NA	V1-V2	V3-V4	R1
Height Min, Max (inch):		3 7	6 8	22 26

Pest Stage At Each Application

Application Date:	06-28-09	07-16-09	07-24-09	08-14-09
Weed Code:	SETFA	SETFA	SETFA	SETFA
Stage Majority (leaves):	NA	2	3	NA
Stage Min, Max:		1 2	2 5	
Height Majority:		1 IN	3 IN	
Height Min, Max:		0.75 1	2 5	
Density, Unit:		0.8 FT2	0.8 FT2	
Weed Code:	AMBTR	AMBTR	AMBTR	AMBTR
Stage Majority (leaves):	NA	2	4	4
Stage Min, Max:		COTY 2	1 6	3 6
Height Majority:		3 IN	3 IN	6 IN
Height Min, Max:		1 3	2 5	4 8
Density, Unit:		0.7 FT2	0.7 FT2	0.01 FT2
Weed Code:	IPOSS	IPOSS	IPOSS	IPOSS
Stage Majority (leaves):	NA	1	4	6
Stage Min, Max:		COTY 2	2 6	5 8
Height Majority:		2 IN	3 IN	4 IN
Height Min, Max:		1 3	2 4	3 6
Density, Unit:		0.4 FT2	0.4 FT2	0.03 FT2
Weed Code:	AMATA	AMATA	AMATA	AMATA
Stage Majority (leaves):	NA	COTY	1	NA
Stage Min, Max:		COTY 1	1 2	
Height Majority:		0.5 IN	1 IN	
Height Min, Max:		0.5 1	0.5 1	
Density, Unit:		0.01 FT2	0.01 FT2	

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	GLXMA 11-08-09 Moisture Percent	GLXMA 11-08-09 Yield bu/A	GLXMA 07-16-09 Injury Percent 0 DA-B	GLXMA 07-22-09 Injury Percent 6 DA-B -2 DA-C	GLXMA 07-30-09 Injury Percent 14 DA-B	GLXMA 08-07-09 Injury Percent 14 DA-C
1	NONTREATED									12.3 abc	30 b	0 a	0 b	0 a	0 a
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	12.5 abc	41 a	0 a	0 b	0 a	0 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	12.2 bc	44 a	0 a	0 b	0 a	0 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	12.3 abc	44 a	0 a	0 b	0 a	0 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	12.2 bc	44 a	0 a	0 b	0 a	0 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C	12.5 abc	42 a			0 a	0 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B	12.3 abc	43 a		9 a	0 a	0 a
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B						
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	12.4 abc	44 a	0 a	0 b	0 a	0 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	12.5 abc	41 a	0 a	0 b	0 a	0 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	12.5 abc	40 a	0 a	0 b	0 a	0 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	12.6 a	39 a	0 a	0 b	0 a	0 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A						
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	12.2 c	42 a	0 a	0 b	0 a	0 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A						
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A						
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A						
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	12.5 ab	43 a	0 a	0 b	0 a	0 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C						
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D						
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D						

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
Pest Code															
Crop Code										GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date										11-08-09	11-08-09	07-16-09	07-22-09	07-30-09	08-07-09
Rating Data Type										Moisture	Yield	Injury	Injury	Injury	Injury
Rating Unit										Percent	bu/A	Percent	Percent	Percent	Percent
Rating Timing													6 DA-B		
Trt-Eval Interval												0 DA-B	-2 DA-C	14 DA-B	14 DA-C
LSD (P=.05)										0.34	5.5	0.0	0.8	0.0	0.0
Replicate F										3.126	4.739	0.000	1.000	0.000	0.000
Replicate Prob(F)										0.0621	0.0184	1.0000	0.3840	1.0000	1.0000
Treatment F										1.408	4.204	0.000	81.000	0.000	0.000
Treatment Prob(F)										0.2293	0.0013	1.0000	0.0001	1.0000	1.0000

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	SETFA 07-16-09 Control Percent 0 DA-B	SETFA 07-22-09 Control Percent 6 DA-B -2 DA-C	SETFA 07-30-09 Control Percent 14 DA-B	SETFA 08-07-09 Control Percent 14 DA-C	SETFA 08-28-09 Control Percent 35 DA-C
1	NONTREATED									0 d	0 d	0 c	0 e	0 c
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	95 ab	95 a	99 a	98 abc	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	95 ab	95 a	99 a	99 ab	97 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	95 abc	83 b	99 a	98 a-d	98 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	95 ab	92 a	99 a	97 a-d	95 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			99 a	96 cd	95 a
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B		99 a	99 a	95 d	88 b
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	0 d	0 d	98 b	97 a-d	98 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	91 c	73 c	99 a	99 a	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	97 ab	92 a	99 a	98 a-d	99 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	97 ab	96 a	99 a	96 bcd	98 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	98 a	97 a	99 a	97 a-d	98 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	93 bc	92 a	99 a	98 abc	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										SETFA	SETFA	SETFA	SETFA	SETFA
Crop Code														
Rating Date										07-16-09	07-22-09	07-30-09	08-07-09	08-28-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing											6 DA-B			
Trt-Eval Interval										0 DA-B	-2 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										4.0	7.7	0.6	2.9	4.9
Replicate F										1.406	2.099	0.235	1.486	1.155
Replicate Prob(F)										0.2683	0.1464	0.7921	0.2464	0.3319
Treatment F										797.055	189.508	20710.707	751.420	255.399
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	AMBTR 07-16-09 Control Percent 0 DA-B	AMBTR 07-22-09 Control Percent 6 DA-B -2 DA-C	AMBTR 07-30-09 Control Percent 14 DA-B	AMBTR 08-07-09 Control Percent 14 DA-C	AMBTR 08-28-09 Control Percent 35 DA-C
1	NONTREATED									0 e	0 h	0 d	0 c	0 d
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	87 bc	48 fg	96 bc	97 ab	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	93 a	57 ef	97 abc	97 ab	96 abc
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	95 a	82 bc	99 a	99 a	98 ab
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	97 a	87 ab	98 ab	98 ab	93 c
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			96 c	98 a	98 ab
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B		98 a	97 abc	98 a	95 bc
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B					
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	93 ab	63 de	98 ab	99 a	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	93 ab	43 g	97 abc	97 ab	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	80 d	37 g	98 ab	97 ab	98 ab
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	94 a	63 de	97 abc	98 ab	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	94 a	72 cd	97 abc	96 b	99 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A					
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A					
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	83 cd	40 g	98 ab	99 a	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C					
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D					
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D					

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code														
Rating Date										07-16-09	07-22-09	07-30-09	08-07-09	08-28-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing											6 DA-B			
Trt-Eval Interval										0 DA-B	-2 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										6.1	13.3	1.9	2.3	3.8
Replicate F										2.191	0.379	8.049	0.372	0.191
Replicate Prob(F)										0.1380	0.6890	0.0021	0.6930	0.8277
Treatment F										180.593	34.165	1799.648	1187.524	444.630
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code									
Pest Code										IPOSS		IPOSS		IPOSS		IPOSS		IPOSS
Crop Code																		
Rating Date										07-16-09		07-22-09		07-30-09		08-07-09		08-28-09
Rating Data Type										Control		Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent		Percent
Rating Timing												6 DA-B						
Trt-Eval Interval										0 DA-B		-2 DA-C		14 DA-B		14 DA-C		35 DA-C
1	NONTREATED									0	e	0	f	0	d	0	b	0 d
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	91	ab	67	c	99	a	97	a	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	87	bc	58	cd	97	abc	96	a	93 bc
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C									
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	95	a	88	ab	98	ab	96	a	97 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	97	a	85	b	99	a	97	a	93 bc
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C									
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C					95	bc	94	a	90 c
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B			98	a	99	a	96	a	94 b
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B									
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	94	ab	53	de	98	a	96	a	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	91	ab	53	de	97	abc	96	a	98 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	80	c	42	e	98	ab	97	a	98 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	95	a	85	b	98	a	97	a	98 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A									
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A									
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	95	a	80	b	98	ab	96	a	98 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A									
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A									
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A									
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	68	d	43	e	94	c	95	a	97 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C									
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C									
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D									
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D									

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
Pest Code										IPOSS	IPOSS	IPOSS	IPOSS	IPOSS
Crop Code														
Rating Date										07-16-09	07-22-09	07-30-09	08-07-09	08-28-09
Rating Data Type										Control	Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent	Percent
Rating Timing											6 DA-B			
Trt-Eval Interval										0 DA-B	-2 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										8.1	12.6	3.2	3.1	3.0
Replicate F										2.972	0.662	1.549	4.135	4.917
Replicate Prob(F)										0.0741	0.5258	0.2329	0.0286	0.0162
Treatment F										105.327	40.106	613.063	621.092	693.745
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
Pest Code										AMATA		AMATA		AMATA		AMATA
Crop Code																
Rating Date										07-22-09		07-30-09		08-07-09		08-28-09
Rating Data Type										Control		Control		Control		Control
Rating Unit										Percent		Percent		Percent		Percent
Rating Timing										6 DA-B						
Trt-Eval Interval										-2 DA-C		14 DA-B		14 DA-C		35 DA-C
1	NONTREATED									0	d	0	c	0	d	0 c
2	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99	a	99	a	99	a	99 a
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							
3	VALOR SX	51	WG	0.064	lb ai/a	2	oz/a	PRE	A	99	a	99	a	99	a	99 a
3	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C							
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
4	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	97	ab	99	a	97	bc	99 a
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
4	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							
5	AUTHORITY FIRST	70	WG	0.175	lb ai/a	4	oz/a	PRE	A	93	ab	99	a	99	a	99 a
5	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C							
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
6	IGNITE 280	2.34	EC	0.66	lb ai/a	36	fl oz/a	22DAE	C			97	b	97	c	94 b
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	3"W	B	98	a	99	a	99	a	95 b
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	3"W	B							
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
8	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	27	c	99	a	98	ab	99 a
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
8	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							
9	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	27	c	99	a	96	c	99 a
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
9	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							
10	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	98	a	99	a	99	a	99 a
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
10	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							
11	VALOR XLT	40.3	WG			3	oz/a	PRE	A	99	a	99	a	99	a	99 a
11	VALOR SX	51	WG	0.056	lb ai/a			PRE	A							
11	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A							
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
11	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							
12	ENVIVE	41.3	WG			3.5	oz/a	PRE	A	99	a	99	a	99	a	99 a
12	CLASSIC	25	WG	0.02	lb ai/a			PRE	A							
12	HARMONY SG	50	SG	0.00643	lb ai/a			PRE	A							
12	VALOR SX	51	WG	0.0635	lb ai/a			PRE	A							
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
12	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
12	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							
13	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	91	b	99	a	99	a	99 a
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	22DAE	C							
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	22DAE	C							
13	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	44DAE	D							
13	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	44DAE	D							

Liberty Link Soybean Programs - Glyphosate-Resistant Waterhemp - BRC Site 2.

Trial ID: 09-50W-S70 Location: Belleville Res. Center

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code													
Rating Date										07-22-09	07-30-09	08-07-09	08-28-09
Rating Data Type										Control	Control	Control	Control
Rating Unit										Percent	Percent	Percent	Percent
Rating Timing										6 DA-B			
Trt-Eval Interval										-2 DA-C	14 DA-B	14 DA-C	35 DA-C
LSD (P=.05)										6.3	1.0	1.3	3.0
Replicate F										0.056	1.565	1.565	0.032
Replicate Prob(F)										0.9459	0.2296	0.2296	0.9686
Treatment F										286.430	6554.323	3794.457	696.246
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer (MRC).
2. Ratings: CI/WC at 0 + 14 da B and C; WC at 35 da C.
3. All POST applications should be 3-4"W or less, the D application is only if necessary.
4. IPOSS = Morningglory species including IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
5. Harvested 11-8-09, (2) 30 inch rows by 24 ft.

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