

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, P205 0 LB/A, K20 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:	BROSIO	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

	06-28-09	08-18-09
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

	06-28-09	08-18-09
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.

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Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
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Trt-Eval Interval

GLXMA 11-07-09 Moisture Percent	GLXMA 11-07-09 Yield bu/A	GLXMA 07-12-09 Injury Percent	GLXMA 07-12-09 Necrosis Percent	GLXMA 07-26-09 Injury Percent	GLXMA 07-26-09 Necrosis Percent
		14 DA-A	14 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
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						

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GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
11-07-09	11-07-09	07-12-09	07-12-09	07-26-09	07-26-09
Moisture	Yield	Injury	Necrosis	Injury	Necrosis
Percent	bu/A	Percent	Percent	Percent	Percent
		14 DA-A	14 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code											
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	11.3	bc	40	ab	8	a					
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A					8	a					
14	VALOR SX	51	WG	0.056	lb ai/a			PRE	A					3	a					
14	CLASSIC	25	WG	0.0194	lb ai/a			PRE	A						0	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)

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GLXMA 08-18-09 Injury Percent 0 DA-B 51 DA-A	GLXMA 08-18-09 Necrosis Percent 0 DA-B 51 DA-A	GLXMA 09-20-09 Injury Percent 33 DA-B 84 DA-A	GLXMA 09-20-09 Necrosis Percent 33 DA-B 84 DA-A
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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
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					

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Trt-Eval Interval

GLXMA	GLXMA	GLXMA	GLXMA
08-18-09	08-18-09	09-20-09	09-20-09
Injury	Necrosis	Injury	Necrosis
Percent	Percent	Percent	Percent
0 DA-B	0 DA-B	33 DA-B	33 DA-B
51 DA-A	51 DA-A	84 DA-A	84 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
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)

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Trial ID: 09-50W-MS80

Location: Belleville Res. Center

									CYPES	CYPES	CYPES	CYPES
Pest Code									07-12-09	07-26-09	08-18-09	09-20-09
Crop Code									Control	Control	Control	Control
Rating Date									Percent	Percent	Percent	Percent
Rating Data Type											0 DA-B	33 DA-B
Rating Unit												
Rating Timing												
Trt-Eval Interval									14 DA-A	28 DA-A	51 DA-A	84 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
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

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
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

Pest Code Crop Code Rating Date Rating Data Type Rating Unit Rating Timing Trt-Eval Interval									AMBTR	AMBTR	AMBTR	AMBTR	
									07-12-09 Control Percent	07-26-09 Control Percent	08-18-09 Control Percent	09-20-09 Control Percent	
									14 DA-A	28 DA-A	51 DA-A	84 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
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

Pest Code	AMBTR	AMBTR	AMBTR	AMBTR
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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	82	b	83	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

Pest Code Crop Code Rating Date Rating Data Type Rating Unit Rating Timing Trt-Eval Interval									IPOSS	IPOSS	IPOSS	IPOSS	
									07-12-09 Control Percent	07-26-09 Control Percent	08-18-09 Control Percent	09-20-09 Control Percent	
									14 DA-A	28 DA-A	51 DA-A	84 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
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

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
14	SHARPEN	2.85	SC	0.0223	lb ai/a	1	fl oz/a	PRE	A	88	ab	88	a
14	VALOR XLT	40.3	WG			3	oz/a	PRE	A			85	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

Pest Code										AMATA	AMATA	AMATA	AMATA
Crop Code										07-12-09	07-26-09	08-18-09	09-20-09
Rating Date										Control	Control	Control	Control
Rating Data Type										Percent	Percent	Percent	Percent
Rating Unit												0 DA-B	33 DA-B
Rating Timing													
Trt-Eval Interval										14 DA-A	28 DA-A	51 DA-A	84 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
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

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
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.