

# Soybean, Tilled Weed Control Studies

1-25-08 (07-11C-W95)

Southern Illinois University

Weed Management for Conventional Soybean in Reduced-Till.

Project Code: 07-11C-W95 Location: Belleville Research Center  
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA  
Trial Status: Final Updated: 1-23-08

## Objective:

Continue to support growers producing non-GMO soybeans by evaluating potential herbicide programs in conventional soybean.

Weed Code	Common Name	Scientific Name
1. SETFA	foxtail, giant	Setaria faberi Herrm.
2. AMBTR	ragweed, giant	Ambrosia trifida L.
3. ABUTH	velvetleaf	Abutilon theophrasti Medicus
4. AMATA	waterhemp, common	Amaranthus rudis Sauer
5. IPOHE	morningglory, ivyleaf	Ipomoea hederacea (L.) Jacq.
6. IPOLA	morningglory, pitted	Ipomoea lacunosa L.

Crop 1:	GLXMA soybean	Variety:	Asgrow 4404 RR/STS
Planting Method:	Seeded	Planting Date:	6-2-07
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2006				
Field Prep./Maintenance:	N 0 LB/A, P205 0 LB/A, K20 100 LB/A				

Soil Name:	Ebbert	% OM:	2.3	pH:	6.8	CEC:	13
Texture:	Silt loam	Fert. Level:	P1: 83 LB/A, K: 364 LB/A				

## APPLICATION DESCRIPTION

	A	B
Application Date:	6-2-07	6-22-07
Time of Day:	15:30	9:00
Application Method:	Spray	Spray
Application Timing:	PRE	4"W
Applic. Placement:	BROSIO	BROFOL
Air Temp., Unit:	80 F	76 F
% Relative Humidity:	70	92
Wind Velocity, Unit:	6-9 MPH	3-5 MPH
Dew Presence (Y/N):	N	
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	20	0

## CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GLXMA NA	GLXMA V1
Height, Unit:	NA NA	3-4 IN

## WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code:		SETFA
Stage(leaves):		4-6
Height(inches):		2-4
Density:		High
Weed 2 Code:		AMBTR
Stage(leaves):		4-6
Height(inches):		2-4
Density:		Medium
Weed 3 Code:		ABUTH
Stage(leaves):		3-5
Height(inches):		2-4
Density:		Low
Weed 4 Code:		AMATA
Stage(leaves):		4-6
Height(inches):		2-4
Density:		Low
Weed 5 Code:		IPOSS
Stage(leaves):		2-4
Height(inches):		2-4
Density:		Low

## APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 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

NOTES:

Weed Management for Conventional Soybean in Reduced-Till.

Project Code: 07-11C-W95 Location: Belleville Research Center  
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Weed Code  
 Crop Code  
 Rating Data Type  
 Rating Unit  
 Rating Date  
 Trt-Eval Interval

GLXMA GLXMA GLXMA GLXMA GLXMA GLXMA  
 Moisture Yield Injury Injury Injury Injury  
 Percent bu/A Percent Percent Percent Percent  
 10-21-07 10-21-07 6-22-07 7-6-07 7-20-07 8-17-07  
 0 DA-B 14 DA-B 28 DA-B 56 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
1	NONTREATED									11.5 a	15 e	0 a	0 a	0 a	0 a
2	NO RESIDUAL HERB									10.6 c	59 a-d	0 a	0 a	0 a	0 a
2	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
2	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
2	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
2	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
3	SONIC	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	10.9 b	61 a-d	0 a	0 a	0 a	0 a
3	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
3	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
3	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
3	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
4	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	10.7 c	61 a-d	0 a	0 a	0 a	0 a
4	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
4	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
4	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
4	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
5	CANOPY	75	WG	0.14	lb ai/a	3.0	oz/a	PRE	A	10.7 c	61 a-d	0 a	0 a	0 a	0 a
5	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
5	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
5	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
5	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
6	CANOPY	75	WG	0.28	lb ai/a	6.0	oz/a	PRE	A	10.8 bc	58 bcd	0 a	0 a	0 a	0 a
6	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
6	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
6	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
6	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
7	PROWL H2O	3.8	CS	0.594	lb ai/a	1.25	pt/a	PRE	A	10.7 c	60 a-d	0 a	0 a	0 a	0 a
7	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
7	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
7	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
7	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
8	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	10.8 bc	57 cd	0 a	0 a	0 a	0 a
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
8	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
8	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
8	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
9	VALOR XLT	40.3	WG			3.0	oz/a	PRE	A	10.8 bc	57 cd	0 a	0 a	0 a	0 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	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
9	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
9	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
9	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
10	VALOR XLT	40.3	WG			5.0	oz/a	PRE	A	10.8 bc	60 a-d	0 a	0 a	0 a	0 a
10	->VALOR SX	51	WG	0.093	lb ai/a			PRE	A						
10	->CLASSIC	25	WG	0.0322	lb ai/a			PRE	A						
10	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
10	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
10	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
10	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
11	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	10.8 bc	62 ab	0 a	0 a	0 a	0 a
11	SCEPTER	70	WG	0.061	lb ai/a	1.4	oz/a	PRE	A						
11	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
11	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
11	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
11	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						
12	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	10.7 bc	63 a	0 a	0 a	0 a	0 a
12	SCEPTER	70	WG	0.122	lb ai/a	2.8	oz/a	PRE	A						
12	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B						
12	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B						
12	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B						
12	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B						

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GLXMA GLXMA GLXMA GLXMA GLXMA GLXMA  
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 10-21-07 10-21-07 6-22-07 7-6-07 7-20-07 8-17-07  
 0 DA-B 14 DA-B 28 DA-B 56 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code											
13	PREFIX	5.28	EW	0.66	lb ai/a	1.0	pt/a	PRE	A	10.8	bc	62	abc	0	a					
13	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B											
13	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B											
13	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B											
13	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B											
14	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	PRE	A	10.9	b	57	cd	0	a					
14	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B											
14	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B											
14	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B											
14	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B											
15	WEED FREE									10.8	bc	61	a-d	0	a					
15	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A											
15	FIRSTRATE	84	WG	0.0315	lb ai/a	0.6	oz/a	PRE	A											
15	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	B											
15	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	4"W	B											
15	HANDWEED																			
16	DPX-QER54	41.3	WG			3.5	oz/a	PRE	A	10.7	bc	57	d	0	a					
16	->CLASSIC	25	WG	0.02	lb ai/a			PRE	A											
16	->HARMONY GT XP	50	SG	0.00643	lb ai/a			PRE	A											
16	->VALOR SX	51	WG	0.0635	lb ai/a			PRE	A											
16	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B											
16	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B											
16	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B											
16	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B											
LSD (P=.05)										0.22		4.7		0.0		0.0		0.0		
Replicate F										10.869		0.438		0.000		0.000		0.000		0.000
Replicate Prob(F)										0.0003		0.6495		1.0000		1.0000		1.0000		1.0000
Treatment F										6.929		47.468		0.000		0.000		0.000		0.000
Treatment Prob(F)										0.0001		0.0001		1.0000		1.0000		1.0000		1.0000

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

Weed Management for Conventional Soybean in Reduced-Till.

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	SETFA	SETFA	SETFA	SETFA	AMBTR	AMBTR	AMBTR	AMBTR
						Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent
						6-22-07	7-6-07	7-20-07	8-17-07	6-22-07	7-6-07	7-20-07	8-17-07
						0 DA-B	14 DA-B	28 DA-B	56 DA-B	0 DA-B	14 DA-B	28 DA-B	56 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code				
1	NONTREATED									0 d	0 f	0 j	0 i
2	NO RESIDUAL HERB									0 d	97 cd	77 i	77 h
2	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				0 g
2	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
2	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 b
2	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 b
3	SONIC	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	7 cd	98 bc	96 b-e	96 a-d
3	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				17 f
3	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
3	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
3	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
4	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	7 cd	99 a	98 abc	98 ab
4	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				23 def
4	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
4	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
4	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
5	CANOPY	75	WG	0.14	lb ai/a	3.0	oz/a	PRE	A	15 cd	95 e	86 h	83 g
5	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				27 cde
5	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
5	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
5	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
6	CANOPY	75	WG	0.28	lb ai/a	6.0	oz/a	PRE	A	3 cd	98 bc	91 g	89 f
6	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				25 c-f
6	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
6	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
6	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
7	PROWL H2O	3.8	CS	0.594	lb ai/a	1.25	pt/a	PRE	A	18 bc	96 d	94 ef	92 def
7	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				22 ef
7	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
7	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
7	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
8	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	43 a	98 ab	97 a-d	96 abc
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				47 a
8	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
8	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
8	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
9	VALOR XLT	40.3	WG			3.0	oz/a	PRE	A	7 cd	99 a	93 f	92 ef
9	->VALOR SX	51	WG	0.056	lb ai/a			PRE	A				32 bcd
9	->CLASSIC	25	WG	0.0194	lb ai/a			PRE	A				99 a
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				99 a
9	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
9	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
9	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
10	VALOR XLT	40.3	WG			5.0	oz/a	PRE	A	3 cd	99 a	97 a-d	96 a-d
10	->VALOR SX	51	WG	0.093	lb ai/a			PRE	A				40 ab
10	->CLASSIC	25	WG	0.0322	lb ai/a			PRE	A				99 a
10	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				99 a
10	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
10	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
10	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
11	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	33 ab	98 ab	96 c-f	95 b-e
11	SCEPTER	70	WG	0.061	lb ai/a	1.4	oz/a	PRE	A				33 bc
11	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				99 a
11	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
11	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
11	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a
12	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	50 a	99 a	98 abc	98 ab
12	SCEPTER	70	WG	0.122	lb ai/a	2.8	oz/a	PRE	A				43 a
12	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				99 a
12	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				99 a
12	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				99 a
12	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				99 a

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 Investigator: Bryan Young

Weed Code	SETFA	SETFA	SETFA	SETFA	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code	Control	Control	Control	Control	Control	Control	Control	Control
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	6-22-07	7-6-07	7-20-07	8-17-07	6-22-07	7-6-07	7-20-07	8-17-07
Rating Date	0 DA-B	14 DA-B	28 DA-B	56 DA-B	0 DA-B	14 DA-B	28 DA-B	56 DA-B
Trt-Eval Interval								

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code								
13	PREFIX	5.28	EW	0.66	lb ai/a	1.0	pt/a	PRE	A	7 cd	99 a	95 def	95 b-e	23 def	99 a	99 a	99 a
13	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B								
13	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B								
13	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B								
13	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B								
14	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	PRE	A	15 cd	98 ab	98 ab	99 a	20 ef	99 a	99 a	99 a
14	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B								
14	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B								
14	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B								
14	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B								
15	WEED FREE									10 cd	99 a	99 a	99 a	3 g	99 a	99 a	99 a
15	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A								
15	FIRSTRATE	84	WG	0.0315	lb ai/a	0.6	oz/a	PRE	A								
15	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	B								
15	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	4"W	B								
15	HANDWEED																
16	DPX-QER54	41.3	WG			3.5	oz/a	PRE	A	7 cd	98 ab	96 c-f	94 cde	7 g	99 a	99 a	99 a
16	->CLASSIC	25	WG	0.02	lb ai/a			PRE	A								
16	->HARMONY GT XP	50	SG	0.00643	lb ai/a			PRE	A								
16	->VALOR SX	51	WG	0.0635	lb ai/a			PRE	A								
16	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B								
16	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B								
16	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B								
16	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B								
LSD (P=.05)										16.8	1.3	2.5	3.7	9.0	0.0	0.2	0.2
Replicate F										1.159	0.000	3.974	2.152	2.019	0.000	1.000	1.000
Replicate Prob(F)										0.3273	1.0000	0.0294	0.1338	0.1504	1.0000	0.3798	0.3798
Treatment F										6.837	2904.230	760.965	345.980	22.306	0.000	88170.407	88170.407
Treatment Prob(F)										0.0001	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)

Weed Management for Conventional Soybean in Reduced-Till.

Project Code: 07-11C-W95      Location: Belleville Research Center  
 Investigator: Bryan Young

Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	ABUTH	ABUTH	ABUTH	ABUTH	AMATA	AMATA	AMATA	AMATA
						Control Percent 6-22-07 0 DA-B	Control Percent 7-6-07 14 DA-B	Control Percent 7-20-07 28 DA-B	Control Percent 8-17-07 56 DA-B	Control Percent 6-22-07 0 DA-B	Control Percent 7-6-07 14 DA-B	Control Percent 7-20-07 28 DA-B	Control Percent 8-17-07 56 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code				
1	NONTREATED									0 f	0 c	0 d	0 d
2	NO RESIDUAL HERB									0 f	97 b	94 c	93 c
2	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		0 c	99 a	97 a
2	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				96 ab
2	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
2	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
3	SONIC	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	3 f	99 a	99 a	99 a
3	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		0 c	99 a	99 a
3	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				
3	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
3	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
4	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	27 cd	99 a	99 a	99 a
4	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		20 b	99 a	99 a
4	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				
4	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
4	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
5	CANOPY	75	WG	0.14	lb ai/a	3.0	oz/a	PRE	A	23 cd	99 a	98 ab	96 abc
5	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		13 b	99 a	98 a
5	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				95 b
5	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
5	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
6	CANOPY	75	WG	0.28	lb ai/a	6.0	oz/a	PRE	A	7 ef	98 a	96 bc	96 abc
6	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		17 b	99 a	99 a
6	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				98 ab
6	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
6	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
7	PROWL H2O	3.8	CS	0.594	lb ai/a	1.25	pt/a	PRE	A	7 ef	97 b	94 c	94 bc
7	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		13 b	99 a	98 a
7	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				97 ab
7	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
7	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
8	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	47 a	98 a	97 abc	97 ab
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		43 a	99 a	99 a
8	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				
8	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
8	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
9	VALOR XLT	40.3	WG			3.0	oz/a	PRE	A	33 bc	99 a	99 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	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				
9	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				
9	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
9	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
10	VALOR XLT	40.3	WG			5.0	oz/a	PRE	A	40 ab	99 a	99 a	99 a
10	->VALOR SX	51	WG	0.093	lb ai/a			PRE	A				
10	->CLASSIC	25	WG	0.0322	lb ai/a			PRE	A				
10	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				
10	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				
10	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
10	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
11	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	47 a	99 a	99 a	99 a
11	SCEPTER	70	WG	0.061	lb ai/a	1.4	oz/a	PRE	A				
11	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				
11	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				
11	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
11	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				
12	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	50 a	99 a	99 a	99 a
12	SCEPTER	70	WG	0.122	lb ai/a	2.8	oz/a	PRE	A				
12	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B				
12	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B				
12	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B				
12	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B				

Weed Management for Conventional Soybean in Reduced-Till.

Project Code: 07-11C-W95 Location: Belleville Research Center  
 Investigator: Bryan Young

Weed Code	ABUTH	ABUTH	ABUTH	ABUTH	AMATA	AMATA	AMATA	AMATA
Crop Code	Control	Control	Control	Control	Control	Control	Control	Control
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	6-22-07	7-6-07	7-20-07	8-17-07	6-22-07	7-6-07	7-20-07	8-17-07
Rating Date	0 DA-B	14 DA-B	28 DA-B	56 DA-B	0 DA-B	14 DA-B	28 DA-B	56 DA-B
Trt-Eval Interval								

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code															
13	PREFIX	5.28	EW	0.66	lb ai/a	1.0	pt/a	PRE	A	17	de	98	a	97	ab	97	ab							
13	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B															
13	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B															
13	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B															
13	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B															
14	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	PRE	A	7	ef	99	a	97	ab	97	ab							
14	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B															
14	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B															
14	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B															
14	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B															
15	WEED FREE									3	f	99	a	99	a	99	a							
15	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A															
15	FIRSTRATE	84	WG	0.0315	lb ai/a	0.6	oz/a	PRE	A															
15	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	B															
15	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	4"W	B															
15	HANDWEED																							
16	DPX-QER54	41.3	WG			3.5	oz/a	PRE	A	20	d	99	a	98	ab	98	a							
16	->CLASSIC	25	WG	0.02	lb ai/a			PRE	A															
16	->HARMONY GT XP	50	SG	0.00643	lb ai/a			PRE	A															
16	->VALOR SX	51	WG	0.0635	lb ai/a			PRE	A															
16	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B															
16	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B															
16	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B															
16	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B															
LSD (P=.05)										11.1		1.3		2.5		3.3		10.6		0.0		1.7		3.3
Replicate F										0.142		5.571		4.557		4.993		4.794		0.000		1.151		1.350
Replicate Prob(F)										0.8682		0.0088		0.0187		0.0134		0.0156		1.0000		0.3300		0.2744
Treatment F										22.028		3127.293		773.905		443.770		18.309		0.000		1767.439		453.789
Treatment Prob(F)										0.0001		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)

Weed Management for Conventional Soybean in Reduced-Till.

Project Code: 07-11C-W95 Location: Belleville Research Center  
 Investigator: Bryan Young

Weed Code	IPOSS	IPOSS
Crop Code		
Rating Data Type	Control	Control
Rating Unit	Percent	Percent
Rating Date	7-20-07	8-17-07
Trt-Eval Interval	28 DA-B	56 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code		
1	NONTREATED									0 i	0 i
2	NO RESIDUAL HERB									72 h	69 h
2	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
2	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
2	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
2	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
3	SONIC	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A	98 a	97 ab
3	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
3	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
3	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
3	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
4	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	98 a	97 a
4	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
4	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
4	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
4	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
5	CANOPY	75	WG	0.14	lb ai/a	3.0	oz/a	PRE	A	82 ef	79 fg
5	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
5	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
5	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
5	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
6	CANOPY	75	WG	0.28	lb ai/a	6.0	oz/a	PRE	A	89 cd	87 de
6	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
6	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
6	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
6	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
7	PROWL H2O	3.8	CS	0.594	lb ai/a	1.25	pt/a	PRE	A	75 gh	74 gh
7	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
7	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
7	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
7	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
8	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	78 fg	78 g
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
8	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
8	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
8	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
9	VALOR XLT	40.3	WG			3.0	oz/a	PRE	A	96 ab	94 abc
9	->VALOR SX	51	WG	0.056	lb ai/a			PRE	A		
9	->CLASSIC	25	WG	0.0194	lb ai/a			PRE	A		
9	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
9	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
9	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
9	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
10	VALOR XLT	40.3	WG			5.0	oz/a	PRE	A	98 a	97 a
10	->VALOR SX	51	WG	0.093	lb ai/a			PRE	A		
10	->CLASSIC	25	WG	0.0322	lb ai/a			PRE	A		
10	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
10	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
10	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
10	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
11	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	92 bc	91 bcd
11	SCEPTER	70	WG	0.061	lb ai/a	1.4	oz/a	PRE	A		
11	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
11	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
11	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
11	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		
12	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5	pt/a	PRE	A	95 ab	94 abc
12	SCEPTER	70	WG	0.122	lb ai/a	2.8	oz/a	PRE	A		
12	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B		
12	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B		
12	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B		
12	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B		



Weed Management for Conventional Soybean in Reduced-Till.

Project Code: 07-11C-W95 Location: Belleville Research Center  
 Investigator: Bryan Young

Weed Code	IPOSS	IPOSS
Crop Code		
Rating Data Type	Control	Control
Rating Unit	Percent	Percent
Rating Date	7-20-07	8-17-07
Trt-Eval Interval	28 DA-B	56 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code			
13	PREFIX	5.28	EW	0.66	lb ai/a	1.0	pt/a	PRE	A	84	de	84 ef
13	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B			
13	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B			
13	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B			
13	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B			
14	PREFIX	5.28	EW	1.32	lb ai/a	2.0	pt/a	PRE	A	90	c	89 cde
14	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B			
14	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B			
14	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B			
14	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B			
15	WEED FREE									99	a	99 a
15	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A			
15	FIRSTRATE	84	WG	0.0315	lb ai/a	0.6	oz/a	PRE	A			
15	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	4"W	B			
15	N-PAK AMS	100	LIQ	5.0	% v/v	5	% v/v	4"W	B			
15	HANDWEED											
16	DPX-QER54	41.3	WG			3.5	oz/a	PRE	A	96	ab	95 ab
16	->CLASSIC	25	WG	0.02	lb ai/a			PRE	A			
16	->HARMONY GT XP	50	SG	0.00643	lb ai/a			PRE	A			
16	->VALOR SX	51	WG	0.0635	lb ai/a			PRE	A			
16	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	4"W	B			
16	FUSION	2.56	EC	0.24	lb ai/a	12	fl oz/a	4"W	B			
16	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"W	B			
16	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"W	B			
LSD (P=.05)										5.3		6.0
Replicate F										1.641		0.715
Replicate Prob(F)										0.2108		0.4973
Treatment F										174.316		133.802
Treatment Prob(F)										0.0001		0.0001

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

Trial Comments

1. Protocol: ISA.
2. Ratings: CI/WC prior to POST; CI/WC 14, 28 + 56 DA POST.
3. Yield.
4. DA-B = Days after 4"W application.  
Ratings at 0 DA-B were also 20 days after the PRE application.
5. IPOSS was IPOHE (ivyleaf morningglory) and IPOLA (pitted morningglory).
6. Following the PRE application only 0.08 inches of rainfall was recorded during the next 22 days.
7. Harvested 10-21-07, (2) 30 inch rows by 25 feet.