

No-Till Soybean Weed Control.

00-11A-E90

OBJECTIVE: Evaluate various no-till soybean weed control management programs in Roundup Ready soybean.

SUMMARY: Little to no soybean injury was observed from any treatment. All treatments controlled at least 93% of giant foxtail at the latest evaluation timing. All preemergence (PRE) and early preplant (EPP) treatments controlled 98% of horseweed (marestail) except Command plus Authority. Velvetleaf control was 95% from all PRE and EPP treatments. Only treatments that included Authority, Steel, Squadron or Command controlled common waterhemp prior to the postemergence application. Common ragweed was controlled by all EPP and PRE treatments except Domain and Command plus sulfentrazone. Overall weed control on August 8 was excellent from all treatments that included a postemergence application of Roundup Ultra.

Soybean yield ranged from 20 bu/A in nontreated plots to 60 bu/A. Soybean yield was similar in all herbicide treated plots except Roundup Ultra followed by Raptor plus Synchrony (36 bu/A), Steel plus Domain (42 bu/A), and Command plus sulfentrazone (26 bu/A). The reduced soybean yield in Roundup Ultra followed by Raptor plus Synchrony and Steel plus Domain treated plots was due to poor common waterhemp control. However, the low soybean yield in Command plus sulfentrazone treated plots was likely due to poor common ragweed control.

HERBICIDES	WEEDS	CROP
AUTHORITY 75 WG	CHICKWEED, COMMON	SOYBEAN
AXIOM 68 WG	FOXTAIL, GIANT	
BACKDRAFT 1.5 SL	GARLIC, WILD	
CANOPY XL 56.3 WG	HORSEWEED	
COMMAND 3 ME	RAGWEED, COMMON	
DOMAIN 60 WG	VELVETLEAF	
FLEXSTAR 1.88 EC	WATERHEMP, COMMON	
GLYPHOMAX PLUS 3 SL		
PROWL 3.3 EC		
PYTHON 80 WG		
RAPTOR 1 AS		
ROUNDUP ULTRA 3 SL		
SENCOR 75 WG		
SQUADRON 2.33 EC		
STEEL 2.57 EC		
SULFENTRAZONE 4 F		
SYNCHRONY STS 42 WG		
WEEDONE 638 2.8 EC		

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

No-Till Soybean Weed Control.

Project Code: 00-11A-E90 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

Weed Code	Common Name	Scientific Name
1. SETFA	FOXTAIL, GIANT	SETARIA FABERI HERRM.
2. AMATA	WATERHEMP, COMMON	AMARANTHUS RUDIS SAUER
3. AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
4. ERICA	HORSEWEED	CONYZA CANADENSIS (L.) CRONG.
5. ALLVI	GARLIC, WILD	ALLIUM VINEALE L.
6. STEME	CHICKWEED, COMMON	STELLARIA MEDIA (L.) VILL./CYR.
7. ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDICUS

Crop 1:	GLXMA SOYBEAN	Variety:	AG 4301 RR/STS
Planting Method:	SEEDED	Planting Date:	May-16-00
Rate:	75 LB/A	Depth:	1.0 IN
Row Spacing:	15 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	26 FT	Reps:	3
Tillage Type:	NO-TILL	Study Design:	RCB		
Previous Crop, Year:	ZEAMX, 1999	Fertilizer applied:	N 0 LB/A,	P ₂ O ₅ 0 LB/A,	K ₂ O 0 LB/A

Soil Name:	WEIR	% OM:	2.2	pH:	6	CEC:	76
Texture:	SILT LOAM	P ₁ :	76 LB/A,	K:	349 LB/A		

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	May-6-00	May-16-00	Jun-13-00	Jun-13-00	Jun-21-00	Jun-13-00
Time of Day:	8:00	17:00	19:45	19:45		19:45
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	EPP,0	PRE	3-4"W-1	3-4"W-2	3-4"W-3	4-6"W
Applic. Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Wind Velocity, Unit:	5 MPH	2-3 MPH	2-3 MPH	2-3 MPH	2-4 MPH	2-3 MPH
Soil Moisture:	DRY	NORMAL	NORMAL	NORMAL	WET	NORMAL
% Cloud Cover:		80				

CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Crop 1 Code, Stage:	NA	GLXMA PRE	GLXMA V2	GLXMA V2	GLXMA V3	GLXMA V2
Height, Unit:	NA	NA	5 IN	5 IN	9-11 IN	5 IN

WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	F
Weed 1 Code:	SETFA	SETFA	SETFA	SETFA	SETFA	SETFA
Stage(leaves):	3-4	3-4	2-4	2-4	3-4	4-6
Height(inches):	1-2	3-4	3-4	3-4	3-4	4-6
Density:	LOW	LOW	HIGH	MEDIUM	LOW	HIGH
Weed 2 Code:			AMATA	AMATA	AMATA	AMATA
Stage(leaves):			4-8	4-8	5-8	4-6
Height(inches):			2-5	2-5	2-4	2-5
Density:			MEDIUM	MEDIUM	MEDIUM	LOW
Weed 3 Code:	AMBEL	AMBEL	AMBEL	AMBEL		AMBEL
Stage(leaves):	3-4	4-6	2-4	2-4		4-10
Height(inches):	3-4	2-5	2-4	2-4		4-8
Density:		MEDIUM	MEDIUM	MEDIUM		MEDIUM
Weed 4 Code:	ERICA	ERICA	ERICA	ERICA	ERICA	ERICA
Stage(leaves):	10+	10+	10+	10+	10+	10+
Height(inches):	4-5	5-8	5-10	5-10	5-6	4-7
Density:	MEDIUM	MEDIUM	LOW	LOW	LOW	LOW
Weed 5 Code:	ALLVI	ALLVI	ALLVI	ALLVI		ALLVI
Stage(leaves):	3-4	3-4	0	0		0
Height(inches):	6-24	10-30	16-18	16-18		16-18
Density:		HIGH	LOW	LOW		LOW
Weed 6 Code:	STEME	STEME				
Stage(leaves):	10+	10+				
Height(inches):	4-6	5-8				
Density:	MEDIUM	MEDIUM				

APPLICATION EQUIPMENT

	A	B	C	D	E	F
Appl. Equipment:	CO ₂ SPRAY	CO ₂ SPRAY	CO ₂ SPRAY	CO ₂ SPRAY	CO ₂ SPRAY	CO ₂ SPRAY
Operating Pressure:	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
Nozzle Size:	8003	8003	8002	8002	8002	8002
Boom Length, Unit:	7.33 FT	7.33 FT	7.33 FT	7.33 FT	7.33 FT	7.33 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA

NOTES:

Harvested Oct-21-00, (5) 30 inch rows by 23 ft.

TABLE. NO-TILL SOYBEAN WEED CONTROL. PROJECT CODE:00-11A-E90

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	YIELD	GLXMA INJURY					CONTROL							
								14	AT	14 DA	14 DA	DA 4-6"W		ALLVI	STEME	SETFA				
								DAP	POST	4-6"W	3-4"W-3	28	56	DAP	DAP	DAP	POST	14	28	56
BU/A	%	%	%	%	%	%	%	%	%	%	%	%	%	%						
1 DOMAIN	60 WG	0.375	LB A/A	10.0 OZ/A	EPP10	A	53	0	0	0		0	0	99	99	58	38	99	99	98
1 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A														
1 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A														
1 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F														
1 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F														
2 DOMAIN	60 WG	0.488	LB A/A	13.0 OZ/A	EPP10	A	50	0	0	0		0	0	99	99	32	10	98	99	99
2 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A														
2 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A														
2 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F														
2 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F														
3 SENCOR	75 WG	0.281	LB A/A	6.0 OZ/A	EPP10	A	54	0	0	0		0	0	99	99	78	57	99	99	99
3 AUTHORITY	75 WG	0.09375	LB A/A	2.0 OZ/A	EPP10	A														
3 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A														
3 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A														
3 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F														
3 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F														
4 SENCOR	75 WG	0.422	LB A/A	9.0 OZ/A	EPP10	A	54	0	0	0		0	0	99	99	90	70	99	99	99
4 AUTHORITY	75 WG	0.141	LB A/A	3.0 OZ/A	EPP10	A														
4 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A														
4 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A														
4 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F														
4 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F														
5 AXIOM	68 WG	0.6375	LB A/A	15.0 OZ/A	EPP10	A	52	0	0	0		0	0	99	99	99	95	93	91	95
5 AUTHORITY	75 WG	0.141	LB A/A	3.0 OZ/A	EPP10	A														
5 CANOPY XL	56.3 WG			3.0 OZ/A	EPP10	A														
5 ->CLASSIC	25 WG	0.01756	LB A/A		EPP10	A														
5 ->AUTHORITY	75 WG	0.08794	LB A/A		EPP10	A														
5 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A														
5 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A														
6 BACKDRAFT	1.5 SL	0.563	LB A/A	3.0 PT/A	EPP10	A	47	0	0	0		0	0	99	99	97	80	90	95	93
6 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A														
6 AMS	100 DRY	1.44	% W/W	12.0 LB/100 GAL	EPP10	A														
6 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25 %V/V	EPP10	A														
6 SYNCHRONY STS	42 WG	0.0131	LB A/A	0.5 OZ/A	3-4"W-2	D														
6 DESTINY MSO	100 LIQ	1.0	% V/V	1.0 %V/V	3-4"W-2	D														
6 28% UAN	100 LIQ	1.0	QT/A	1.0 QT/A	3-4"W-2	D														

(CONTINUED)

TABLE. NO-TILL SOYBEAN WEED CONTROL. PROJECT CODE:00-11A-E90 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	YIELD	GLXMA INJURY						CONTROL						
								14		AT		14 DA		DA 4-6"W		ALLVI	STEME	SETFA		
								DAP	POST	4-6"W	3-4"W-3	28	56	DAP	DAP	DAP	POST	14	28	56
BU/A	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%					
7 STEEL	2.57 EC	0.964 LB A/A	3.0 PT/A	EPP10 A	51	0	0	0			0	0	99	99	99	96	97	94	95	
7 WEEDONE 638	2.8 EC	0.5 LB A/A	1.43 PT/A	EPP10 A																
7 AMS	100 DRY	2.0 % W/W	17.0 LB/100 GAL	EPP10 A																
7 PRIME OIL COC	100 LIQ	1.0 % V/V	1.0 %V/V	EPP10 A																
7 SYNCHRONY STS	42 WG	0.0131 LB A/A	0.5 OZ/A	3-4"W-2 D																
7 DESTINY MSO	100 LIQ	1.0 % V/V	1.0 %V/V	3-4"W-2 D																
7 28% UAN	100 LIQ	1.0 QT/A	1.0 QT/A	3-4"W-2 D																
8 ROUNDUP ULTRA	3 SL	0.75 LB AE/A	2.0 PT/A	PRE B	36	0	0	10			0	0	99	99	96	43	89	98	98	
8 RAPTOR	1 AS	0.039 LB A/A	5.0 OZ/A	3-4"W-1 C																
8 SYNCHRONY STS	42 WG	0.0131 LB A/A	0.5 OZ/A	3-4"W-1 C																
8 ACTIVATOR 90	100 LIQ	0.25 % V/V	0.25 %V/V	3-4"W-1 C																
8 28% UAN	100 LIQ	1.0 QT/A	1.0 QT/A	3-4"W-1 C																
9 STEEL	2.57 EC	0.964 LB A/A	3.0 PT/A	EPP10 A	42	0	0	5			0	0	99	99	99	99	96	96	99	
9 DOMAIN	60 WG	0.375 LB A/A	10.0 OZ/A	EPP10 A																
9 WEEDONE 638	2.8 EC	0.5 LB A/A	1.43 PT/A	EPP10 A																
9 PRIME OIL COC	100 LIQ	1.0 % V/V	1.0 %V/V	EPP10 A																
10 STEEL	2.57 EC	0.964 LB A/A	3.0 PT/A	EPP10 A	57	0	0	8			0	0	99	99	98	96	96	98	98	
10 WEEDONE 638	2.8 EC	0.5 LB A/A	1.43 PT/A	EPP10 A																
10 PRIME OIL COC	100 LIQ	1.0 % V/V	1.0 %V/V	EPP10 A																
10 FLEXSTAR	1.88 EC	0.235 LB A/A	16.0 OZ/A	3-4"W-2 D																
10 DESTINY MSO	100 LIQ	1.0 % V/V	1.0 %V/V	3-4"W-2 D																
11 ROUNDUP ULTRA	3 SL	0.75 LB AE/A	2.0 PT/A	PRE B	54	0	0	0	0	0	0	0	99	99	99	98	99	99	99	
11 STEEL	2.57 EC	0.964 LB A/A	3.0 PT/A	PRE B																
11 ROUNDUP ULTRA	3 SL	0.56 LB AE/A	1.5 PT/A	3-4"W-3 E																
11 AMS	100 DRY	2.0 % W/W	17.0 LB/100 GAL	3-4"W-3 E																
12 SQUADRON	2.33 EC	0.87 LB A/A	3.0 PT/A	EPP10 A	51	0	0	0			0	0	99	99	96	95	93	96	96	
12 COMMAND	3 ME	0.375 LB A/A	1.0 PT/A	EPP10 A																
12 WEEDONE 638	2.8 EC	0.5 LB A/A	1.43 PT/A	EPP10 A																
12 ACTIVATOR 90	100 LIQ	0.25 % V/V	0.25 %V/V	EPP10 A																
13 ROUNDUP ULTRA	3 SL	0.75 LB AE/A	2.0 PT/A	PRE B	58	0	0	0	0	0	0	0	99	99	99	98	97	99	99	
13 SQUADRON	2.33 EC	0.87 LB A/A	3.0 PT/A	PRE B																
13 PROWL	3.3 EC	0.42 LB A/A	1.0 PT/A	PRE B																
13 ROUNDUP ULTRA	3 SL	0.56 LB AE/A	1.5 PT/A	3-4"W-3 E																
13 AMS	100 DRY	2.0 % W/W	17.0 LB/100 GAL	3-4"W-3 E																

(CONTINUED)

TABLE. NO-TILL SOYBEAN WEED CONTROL. PROJECT CODE:00-11A-E90 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	YIELD	GLXMA INJURY						CONTROL								
								14		AT		14 DA		14 DA		DA 4-6"W		ALLVI	STEME	SETFA		
								DAP	POST	4-6"W	3-4"W-3	28	56	DAP	DAP	DAP	POST	14	28	56		
BU/A	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%							
14 PYTHON	80 WG	0.05	LB A/A	1.0 OZ/A	EPP10	A	60	0	0	0		0	0	99	99	37	0	99	99	99		
14 SENCOR	75 WG	0.188	LB A/A	4.0 OZ/A	EPP10	A																
14 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																
14 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A																
14 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0 PT/A	3-4"W-2	D																
15 PYTHON	80 WG	0.05	LB A/A	1.0 OZ/A	EPP10	A	59	0	0	0		0	0	99	99	60	27	99	99	98		
15 GLYPHOMAX PLUS	3 SL	0.75	LB AE/A	2.0 PT/A	EPP10	A																
15 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																
15 AMS	100 DRY	1.5	% W/W	12.5 LB/100 GAL	EPP10	A																
15 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0 PT/A	3-4"W-2	D																
16 COMMAND	3 ME	0.6	LB A/A	1.6 PT/A	PRE	B	26	0	0	0		0	0	99	99	98	94	93	88	95		
16 SULFENTRAZONE	4 F	0.3	LB A/A	9.6 OZ/A	PRE	B																
16 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	PRE	B																
17 COMMAND	3 ME	0.6	LB A/A	1.6 PT/A	PRE	B	51	0	0	2		0	0	99	99	94	94	99	99	99		
17 SULFENTRAZONE	4 F	0.3	LB A/A	9.6 OZ/A	PRE	B																
17 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	PRE	B																
17 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	3-4"W-3	E																
17 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	3-4"W-3	E																
18 NONTREATED							20	0	0	0	0	0	0	0	0	0	0	0	0	0		
LSD							15	0	0	6	0	0	0	0	0	36	29	5	6	4		
P							0.01	1.0	1.0	0.01	1.0	1.0	1.0	1.0	1.0	0.01	0.01	0.01	0.01	0.01		

(CONTINUED)

TABLE. NO-TILL SOYBEAN WEED CONTROL. PROJECT CODE:00-11A-E90 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	CONTROL																														
							ERICA					AMBEL					ABUTH				AMATA																
							14	AT	DA 4-6"W			14	AT	DA 4-6"W			AT	DA 4-6"W			AT	DA 4-6"W															
							DAP	POST	14	28	56	DAP	POST	14	28	56	POST	14	28	56	POST	14	28	56													
																				%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1 DOMAIN	60 WG	0.375	LB A/A	10.0 OZ/A	EPP10	A	99	99	99	99	99	96	73	98	99	99	95	99	99	99	0	99	99	99													
1 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																															
1 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A																															
1 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F																															
1 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F																															
2 DOMAIN	60 WG	0.488	LB A/A	13.0 OZ/A	EPP10	A	99	99	99	99	99	93	65	99	99	99	95	99	99	99	7	99	98	99													
2 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																															
2 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A																															
2 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F																															
2 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F																															
3 SENCOR	75 WG	0.281	LB A/A	6.0 OZ/A	EPP10	A	99	99	99	99	99	98	90	99	99	99	96	99	99	99	96	99	99	99													
3 AUTHORITY	75 WG	0.09375	LB A/A	2.0 OZ/A	EPP10	A																															
3 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																															
3 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A																															
3 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F																															
3 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F																															
4 SENCOR	75 WG	0.422	LB A/A	9.0 OZ/A	EPP10	A	99	99	99	99	99	95	72	96	99	99	99	99	99	99	99	99	99	99													
4 AUTHORITY	75 WG	0.141	LB A/A	3.0 OZ/A	EPP10	A																															
4 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																															
4 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A																															
4 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5 PT/A	4-6"W	F																															
4 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	4-6"W	F																															
5 AXIOM	68 WG	0.6375	LB A/A	15.0 OZ/A	EPP10	A	99	98	99	98	99	99	97	96	98	98	99	99	99	99	98	99	99	98													
5 AUTHORITY	75 WG	0.141	LB A/A	3.0 OZ/A	EPP10	A																															
5 CANOPY XL	56.3 WG			3.0 OZ/A	EPP10	A																															
5 ->CLASSIC	25 WG	0.01756	LB A/A		EPP10	A																															
5 ->AUTHORITY	75 WG	0.08794	LB A/A		EPP10	A																															
5 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																															
5 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP10	A																															
6 BACKDRAFT	1.5 SL	0.563	LB A/A	3.0 PT/A	EPP10	A	99	99	99	99	99	99	96	99	99	99	99	99	99	99	0	10	0	0													
6 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43 PT/A	EPP10	A																															
6 AMS	100 DRY	1.44	% W/W	12.0 LB/100 GAL	EPP10	A																															
6 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25 %V/V	EPP10	A																															
6 SYNCHRONY STS	42 WG	0.0131	LB A/A	0.5 OZ/A	3-4"W-2	D																															
6 DESTINY MSO	100 LIQ	1.0	% V/V	1.0 %V/V	3-4"W-2	D																															
6 28% UAN	100 LIQ	1.0	QT/A	1.0 QT/A	3-4"W-2	D																															

(CONTINUED)

TABLE. NO-TILL SOYBEAN WEED CONTROL. PROJECT CODE:00-11A-E90 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	CONTROL																	
							ERICA					AMBEL					ABUTH				AMATA			
							14 DAP	AT POST	DA 4-6"W			14 DAP	AT POST	DA 4-6"W			AT POST	DA 4-6"W			AT POST	DA 4-6"W		
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%					
7 STEEL	2.57 EC	0.964	LB A/A	3.0	PT/A	EPP10 A	99	99	99	99	99	99	96	99	99	99	99	99	99	99	60	17	13	13
7 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP10 A																		
7 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	EPP10 A																		
7 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	EPP10 A																		
7 SYNCHRONY STS	42 WG	0.0131	LB A/A	0.5	OZ/A	3-4"W-2 D																		
7 DESTINY MSO	100 LIQ	1.0	% V/V	1.0	%V/V	3-4"W-2 D																		
7 28% UAN	100 LIQ	1.0	QT/A	1.0	QT/A	3-4"W-2 D																		
8 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0	PT/A	PRE B	99	99	99	99	99	98	90	99	99	99	99	99	99	99	13	32	27	20
8 RAPTOR	1 AS	0.039	LB A/A	5.0	OZ/A	3-4"W-1 C																		
8 SYNCHRONY STS	42 WG	0.0131	LB A/A	0.5	OZ/A	3-4"W-1 C																		
8 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	%V/V	3-4"W-1 C																		
8 28% UAN	100 LIQ	1.0	QT/A	1.0	QT/A	3-4"W-1 C																		
9 STEEL	2.57 EC	0.964	LB A/A	3.0	PT/A	EPP10 A	98	99	99	99	99	99	99	96	95	98	99	99	99	99	10	33	0	0
9 DOMAIN	60 WG	0.375	LB A/A	10.0	OZ/A	EPP10 A																		
9 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP10 A																		
9 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	EPP10 A																		
10 STEEL	2.57 EC	0.964	LB A/A	3.0	PT/A	EPP10 A	98	99	99	99	99	96	96	99	99	99	99	99	99	99	43	99	99	99
10 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP10 A																		
10 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	EPP10 A																		
10 FLEXSTAR	1.88 EC	0.235	LB A/A	16.0	OZ/A	3-4"W-2 D																		
10 DESTINY MSO	100 LIQ	1.0	% V/V	1.0	%V/V	3-4"W-2 D																		
11 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0	PT/A	PRE B	99	99	99	99	99	95	98	99	99	99	99	99	99	99	96	95	99	98
11 STEEL	2.57 EC	0.964	LB A/A	3.0	PT/A	PRE B																		
11 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5	PT/A	3-4"W-3 E																		
11 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	3-4"W-3 E																		
12 SQUADRON	2.33 EC	0.87	LB A/A	3.0	PT/A	EPP10 A	99	99	96	98	99	96	95	88	89	85	99	98	98	99	53	42	47	37
12 COMMAND	3 ME	0.375	LB A/A	1.0	PT/A	EPP10 A																		
12 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP10 A																		
12 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	%V/V	EPP10 A																		
13 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0	PT/A	PRE B	99	99	99	99	99	96	98	98	98	99	99	99	99	99	97	99	99	99
13 SQUADRON	2.33 EC	0.87	LB A/A	3.0	PT/A	PRE B																		
13 PROWL	3.3 EC	0.42	LB A/A	1.0	PT/A	PRE B																		
13 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5	PT/A	3-4"W-3 E																		
13 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	3-4"W-3 E																		

(CONTINUED)

TABLE. NO-TILL SOYBEAN WEED CONTROL. PROJECT CODE:00-11A-E90 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD	RATE	APPL TIME	APPL CODE	CONTROL																	
								ERICA					AMBEL					ABUTH				AMATA			
								14 DAP	AT POST	DA 4-6"W			14 DAP	AT POST	DA 4-6"W			AT POST	DA 4-6"W			AT POST	DA 4-6"W		
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%						
14 PYTHON	80 WG	0.05	LB A/A	1.0	OZ/A	EPP10	A	99	99	99	99	99	99	99	99	99	99	99	99	99	0	99	99	99	
14 SENCOR	75 WG	0.188	LB A/A	4.0	OZ/A	EPP10	A																		
14 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP10	A																		
14 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	EPP10	A																		
14 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0	PT/A	3-4"W-2	D																		
15 PYTHON	80 WG	0.05	LB A/A	1.0	OZ/A	EPP10	A	99	99	99	99	99	99	98	99	99	99	99	99	7	99	99	99		
15 GLYPHOMAX PLUS	3 SL	0.75	LB AE/A	2.0	PT/A	EPP10	A																		
15 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP10	A																		
15 AMS	100 DRY	1.5	% W/W	12.5	LB/100 GAL	EPP10	A																		
15 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0	PT/A	3-4"W-2	D																		
16 COMMAND	3 ME	0.6	LB A/A	1.6	PT/A	PRE	B	53	30	33	3	0	53	37	37	35	20	99	99	99	99	99	99	99	
16 SULFENTRAZONE	4 F	0.3	LB A/A	9.6	OZ/A	PRE	B																		
16 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	PRE	B																		
17 COMMAND	3 ME	0.6	LB A/A	1.6	PT/A	PRE	B	23	37	96	99	99	32	37	90	99	99	99	99	99	99	99	99	99	
17 SULFENTRAZONE	4 F	0.3	LB A/A	9.6	OZ/A	PRE	B																		
17 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	PRE	B																		
17 ROUNDUP ULTRA	3 SL	0.56	LB AE/A	1.5	PT/A	3-4"W-3	E																		
17 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	3-4"W-3	E																		
18 NONTREATED								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LSD								18	11	7	3	0	16	17	18	15	12	2	0.9	0.9	0	32	18	19	20
P								0.01	0.01	0.01	0.01	1.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.0	0.01	0.01	0.01	0.01

1. PROTOCOL: BAYER TRTS 1-5 (827-00-93307); AMERICAN CYANAMID TRTS 6-13; DOW TRTS 14-15; FMC TRTS 16-17.
2. DAP = DAYS AFTER PLANTING, AT POST= PRIOR TO POSTEMERGENCE APPLICATION.
3. RATING DATES:
 14 DAP WAS ON MAY-30-00.
 AT POST RATINGS FOR 4-6"W, 3-4"W-1, AND 3-4"W-2 APPLICATIONS WERE ON JUN-13-00; AT POST RATINGS FOR 3-4"W-3 APPLICATION WERE ON JUN-21-00.
 14 DA 4-6"W WAS ON JUN-27-00 AND WAS 14 DAYS AFTER 3-4"W-1 AND 3-4"W-2 APPLICATIONS, AND 6 DAYS AFTER THE 3-4"W-3 APPLICATION.
 28 DA 4-6"W WAS ON JUL-11-00 AND WAS 28 DAYS AFTER 3-4"W-1 AND 3-4"W-2 APPLICATIONS, AND 20 DAYS AFTER THE 3-4"W-3 APPLICATION.
 56 DA 4-6"W WAS ON AUG-8-00 AND WAS 56 DAYS AFTER 3-4"W-1 AND 3-4"W-2 APPLICATIONS, AND 48 DAYS AFTER THE 3-4"W-3 APPLICATION.