

## Fall Applied Herbicides in Soybean.

00-31-W170

**OBJECTIVE:** Evaluate fall versus spring applied herbicides in fall tilled and no-till soybean.

**SUMMARY:** In no-till Basis, Canopy, and Python plus Sencor applied in the fall, controlled henbit, purple dead nettle, and mouseear chickweed 93 to 100% at planting. In no-till Canopy XL applied in the fall, controlled henbit and purple dead nettle, 100%, but controlled mouseear chickweed, 50%, at planting. In no-till Harmony Extra controlled winter annuals 73 to 88%. Fall tillage alone controlled mouseear chickweed, 90%, at planting. Canopy, Canopy XL, and Python plus Sencor applied in the fall, after fall tillage, controlled winter annuals, 100%. Basis, Canopy, and Canopy XL applied 30 days before planting, controlled winter annuals 93 to 100%, regardless of tillage. In no-till Canopy XL applied in the fall, controlled giant foxtail, 90%, and common lambsquarters, 100%, at planting. In no-till herbicides applied 30 days before planting, controlled giant foxtail, 93 to 98%, and common lambsquarters, 100%, at planting. Glyphosate applied at the V3 growth stage of soybean, controlled 100% of the weeds. Soybean yield ranged from 0 to 61 bu/A.

### HERBICIDES

BASIS 75 WG  
CANOPY 75 WG  
CANOPY XL 56.3 WG  
HARMONY EXTRA 75 WG  
PYTHON 80 WG  
ROUNDUP ULTRA 3 SL  
SENCOR 75 WG  
WEEDONE 638 2.8 EC

### WEEDS

BINDWEED, HEDGE  
CHICKWEED, COMMON  
CHICKWEED, MOUSEEAR  
DEADNETTLE, PURPLE  
FOXTAIL, GIANT  
GARLIC, WILD  
GERANIUM, CAROLINA  
GROUNDCHERRY, CUTLEAF  
HENBIT  
HORSENETTLE  
HORSEWEED  
LAMBSQUARTERS, COMMON  
MILKWEED, HONEYVINE  
NUTSEDGE, YELLOW  
PLANTAIN, BROADLEAF  
RAGWEED, COMMON  
SIDA, PRICKLY  
SMARTWEED, PENNSYLVANIA  
TRUMPETCREEPER  
WATERHEMP, COMMON  
WOODSORREL, YELLOW

### CROP

SOYBEAN

Ronald Krausz

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

## Fall Applied Herbicides in Soybean.

Project Code: 00-31-W170 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

Weed Code	Common Name	Scientific Name
1. LAMAM	HENBIT	LAMIUM AMPLEXICAULE L.
2. LAMPU	DEADNETTLE, PURPLE	LAMIUM PURPUREUM L.
3. CERVU	CHICKWEED, MOUSEEAR	CERASTIUM VULGATUM L.
4. SETFA	FOXTAIL, GIANT	SETARIA FABERI HERRM.
5. CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
6. STEME	CHICKWEED, COMMON	STELLARIA MEDIA (L.) VILL.
7. ERICA	HORSEWEED	CONYZA CANADENSIS (L.) CRONG.
8. PHYAN	GROUNDCHERRY, CUTLEAF	PHYSALIS ANGULATA L.
9. OXAST	WOODSORREL, YELLOW	OXALIS STRICTA L.
10. CAGSE	BINDWEED, HEDGE	CALYSTEGIA SEPIUM (L.) R.BR.
11. AMATA	WATERHEMP, COMMON	AMARANTHUS RUDIS SAUER
12. CYPES	NUTSEDGE, YELLOW	CYPERUS ESCULENTUS L.
13. PLAMA	PLANTAIN, BROADLEAF	PLANTAGO MAJOR L.
14. SIDSP	SIDA, PRICKLY	SIDA SPINOSA L.
15. AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
16. AMPAL	MILKWEED, HONEYVINE	AMPELAMUS ALBIDUS (NUTT.) BRITT.
17. SOLCA	HORSENETTLE	SOLANUM CAROLINENSE L.
18. GERCA	GERANIUM, CAROLINA	GERANIUM CAROLINIANUM L.
19. ALLVI	GARLIC, WILD	ALLIUM VINEALE L.
20. CMIRA	TRUMPETCREEPER	CAMPISIS RADICANS (L.) SEEM. EX BUREAU
21. POLPY	SMARTWEED, PENNSYLVANIA	POLYGONUM PENNSYLVANICUM L.

Crop 1:	GLXMA SOYBEAN	Variety:	B-T 369CR
Planting Method:	SEDED	Planting Date:	May-17-00
Rate:	75 LB/A	Depth:	1.0 IN
Row Spacing:	15 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	30 FT	Reps:	4
Tillage Type:	SEE NOTE	Study Design:	SPLIT-PLOT		
Previous Crop, Year:	GLXMA, 1999	Fertilizer applied:	N 0 LB/A,	P <sub>2</sub> O <sub>5</sub>	50 LB/A, K <sub>2</sub> O 150 LB/A

Soil Name:	HOSMER	% OM:	2.1	pH:	6.3	CEC:	12
Texture:	SILT LOAM	P <sub>i</sub> :	51 LB/A,	K:	217 LB/A		

## APPLICATION DESCRIPTION

	A	B	C
Application Date:	Nov-18-99	Apr-18-00	May-10-00
Time of Day:	9:00	11:00	10:00
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	FALL EPP	EPP30	EPP7
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	60 F	60 F	64 F
% Relative Humidity:	40	74	84
Wind Velocity, Unit:	7 MPH	0 MPH	0 MPH
Soil Temp., Unit:	50		
Soil Moisture:	DRY	NORMAL	NORMAL

## CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	NA	NA	NA
Height, Unit:	NA	NA	NA

## WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code:	LAMAM	LAMAM	LAMAM
Stage(leaves):	8-10	10+	10+
Height(inches):	0-1	4-6	5-10
Density:	HIGH	MEDIUM	MEDIUM
Weed 2 Code:	LAMPU	LAMPU	LAMPU
Stage(leaves):	8-10	10+	10+
Height(inches):	0-1	4-6	4-8
Density:	LOW	HIGH	MEDIUM
Weed 3 Code:	CERVU	CERVU	CERVU
Stage(leaves):	5-8	10+	10+
Height(inches):	0-1	3-4	4-6
Density:	MEDIUM	MEDIUM	MEDIUM
Weed 4 Code:			SETFA
Stage(leaves):			3-4
Height(inches):			1-4
Density:			MEDIUM

(continued)

Fall Applied Herbicides in Soybean.

Project Code: 00-31-W170      Location: Belleville Research Center

(continued)

Weed 5 Code:	CHEAL	CHEAL
Stage(leaves):	5-8	10+
Height(inches):	2-3	4-8
Density:	LOW	MEDIUM

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	CO <sub>2</sub> SPRAY	CO <sub>2</sub> SPRAY	CO <sub>2</sub> SPRAY
Operating Pressure:	40 PSI	40 PSI	40 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	8004	8004	8004
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	24.2 GPA	24.2 GPA	24.2 GPA

NOTES:

TILLAGES ARE NO-TILL AND FALL TILLAGE, SEE TREATMENT LIST.

Harvested Oct-13-00, (5) 30 inch rows by 27 ft.

TABLE. FALL APPLIED HERBICIDES IN SOYBEAN. PROJECT CODE:00-31-W170

TREATMENT	FORM.	RATE	UNIT	PROD	RATE	APPL	APPL	YIELD	CONTROL												GLXMA			CONTROL					
									LAMAM				LAMPU				CERVU				INJURY			SETFA			CHEAL		
									DAT	AT	AT	PLANT	DAT	AT	AT	PLANT	DAT	AT	AT	PLANT	DAP	AUG		AT	AT	AUG	AT	AT	AUG
									14	28	EPP30	PLANT	14	28	EPP30	PLANT	14	28	EPP30	PLANT	14	28	1	PLANT	POST	1	PLANT	POST	1
BU/A	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%								
1 NO-TILL								50	0	83	93	93	0	83	95	98	0	83	100	100	0	0	0	83		100	88	100	
1 BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP	A																					
1 PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																					
1 28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A																					
2 NO-TILL								57	0	85	98	100	0	85	98	100	0	85	98	95	0	0	0	58		100	98	100	
2 CANOPY	75	WG	0.14	LB A/A	3.0	OZ/A	FALL EPP	A																					
2 WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																					
2 PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																					
3 NO-TILL								48	0	90	100	100	0	90	100	100	0	75	86	50	0	0	0	90	84	100	100	100	100
3 CANOPY XL	56.3	WG			4.5	OZ/A	FALL EPP	A																					
3 ->AUTHORITY	75	WG	0.13	LB A/A			FALL EPP	A																					
3 ->CLASSIC	25	WG	0.027	LB A/A			FALL EPP	A																					
3 WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																					
3 PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																					
4 NO-TILL								56	0	66	96	93	0	66	95	93	0	66	99	98	0	0	0	80		100	93	100	
4 PYTHON	80	WG	0.05	LB A/A	1.0	OZ/A	FALL EPP	A																					
4 SENCOR	75	WG	0.188	LB A/A	4.0	OZ/A	FALL EPP	A																					
4 PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																					
4 28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A																					
5 NO-TILL								51	0	50	81	73	0	50	63	80	0	50	100	88	0	0	0	68		100	79	100	
5 HARMONY EXTRA	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP	A																					
5 ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	FALL EPP	A																					
6 NO-TILL								42				100				100				79	0	0	0	100	88	100	100	100	100
6 ROUNDUP ULTRA	3	SL	0.38	LB AE/A	1.0	PT/A	EPP7	C																					
6 WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	EPP7	C																					
7 NO-TILL								34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	93	93	100	99	99
7 NONTREATED																													
8 NO-TILL								53	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100	100	100	100
8 HANDWEEDED																													
9 FALL TILLAGE								51	100	100	94	83	100	100	100	100	100	100	100	100	0	0	0	0		100	0	100	
9 BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP	A																					
9 PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																					
9 28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A																					
10 FALL TILLAGE								55	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	34		100	100	100	
10 CANOPY	75	WG	0.14	LB A/A	3.0	OZ/A	FALL EPP	A																					
10 WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																					
10 PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																					
11 FALL TILLAGE								60	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	88		100	96	100	
11 CANOPY XL	56.3	WG			4.5	OZ/A	FALL EPP	A																					
11 ->AUTHORITY	75	WG	0.13	LB A/A			FALL EPP	A																					
11 ->CLASSIC	25	WG	0.027	LB A/A			FALL EPP	A																					
11 WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																					
11 PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																					

(CONTINUED)

TABLE. FALL APPLIED HERBICIDES IN SOYBEAN. PROJECT CODE:00-31-W170 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	YIELD	CONTROL												GLXMA			CONTROL					
								LAMAM				LAMPU				CERVU				INJURY			SETFA			CHEAL		
								DAT		AT	AT	DAT		AT	AT	DAT		AT	AT	DAP	AUG		AT	AT	AUG	AT	AT	AUG
								14	28	EPP30	PLANT	14	28	EPP30	PLANT	14	28	EPP30	PLANT	14	28	1	PLANT	POST	1	PLANT	POST	1
BU/A							%	%	%	%	%	%	%	%	%	%	%	%	%	%	%							
12 FALL TILLAGE							55	100	100	99	100	100	99	100	100	100	100	0	0	0	0	100	98	100				
12 PYTHON	80 WG	0.05 LB A/A		1.0 OZ/A	FALL EPP	A																						
12 SENCOR	75 WG	0.188 LB A/A		4.0 OZ/A	FALL EPP	A																						
12 PRIME OIL COC	100 LIQ	1.0 % V/V		1.0 % V/V	FALL EPP	A																						
12 28% UAN	100 LIQ	2.5 % V/V		2.5 % V/V	FALL EPP	A																						
13 FALL TILLAGE							54	100	100	85	58	100	100	95	100	100	100	0	0	0	0	100	0	100				
13 HARMONY EXTRA	75 WG	0.0234 LB A/A		0.5 OZ/A	FALL EPP	A																						
13 ACTIVATOR 90	100 LIQ	0.25 % V/V		0.25 % V/V	FALL EPP	A																						
14 FALL TILLAGE							53				50						50	0	0	0	99	83	100	50	100	100		
14 ROUNDUP ULTRA	3 SL	0.38 LB AE/A		1.0 PT/A	EPP7	C																						
14 WEEDONE 638	2.8 EC	0.5 LB A/A		1.43 PT/A	EPP7	C																						
15 FALL TILLAGE							0	100	100	80	0	100	100	83	0	100	100	98	90	0	0	0	0	0	0			
15 NONTREATED																												
16 FALL TILLAGE							60	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100			
16 HANDWEEDED																												
17 NO-TILL							51	80	100		100	80	100		100	80	100		100	0	0	0	98	89	100	100	100	
17 BASIS	75 WG	0.0234 LB A/A		0.5 OZ/A	EPP30	B																						
17 PRIME OIL COC	100 LIQ	1.0 % V/V		1.0 % V/V	EPP30	B																						
17 28% UAN	100 LIQ	2.5 % V/V		2.5 % V/V	EPP30	B																						
18 NO-TILL							52	99	100		100	99	100		100	99	100		100	0	0	0	95	88	100	100	100	
18 CANOPY	75 WG	0.14 LB A/A		3.0 OZ/A	EPP30	B																						
18 WEEDONE 638	2.8 EC	0.5 LB A/A		1.43 PT/A	EPP30	B																						
18 PRIME OIL COC	100 LIQ	1.0 % V/V		1.0 % V/V	EPP30	B																						
19 NO-TILL							56	90	100		100	90	100		100	90	90		93	0	0	0	98	93	100	100	100	
19 CANOPY XL	56.3 WG			4.5 OZ/A	EPP30	B																						
19 ->AUTHORITY	75 WG	0.13 LB A/A			EPP30	B																						
19 ->CLASSIC	25 WG	0.027 LB A/A			EPP30	B																						
19 WEEDONE 638	2.8 EC	0.5 LB A/A		1.43 PT/A	EPP30	B																						
19 PRIME OIL COC	100 LIQ	1.0 % V/V		1.0 % V/V	EPP30	B																						
20 NO-TILL							55	90	100		100	90	100		100	90	100		100	0	0	0	93	81	100	100	100	
20 PYTHON	80 WG	0.05 LB A/A		1.0 OZ/A	EPP30	B																						
20 SENCOR	75 WG	0.188 LB A/A		4.0 OZ/A	EPP30	B																						
20 PRIME OIL COC	100 LIQ	1.0 % V/V		1.0 % V/V	EPP30	B																						
20 28% UAN	100 LIQ	2.5 % V/V		2.5 % V/V	EPP30	B																						
21 NO-TILL							52	58	100		100	58	100		100	58	100		100	0	0	0	95	81	100	100	100	
21 HARMONY EXTRA	75 WG	0.0234 LB A/A		0.5 OZ/A	EPP30	B																						
21 ACTIVATOR 90	100 LIQ	0.25 % V/V		0.25 % V/V	EPP30	B																						
22 NO-TILL							57				100							90	0	0	0	100	58	100	100	100	100	
22 ROUNDUP ULTRA	3 SL	0.38 LB AE/A		1.0 PT/A	EPP7	C																						
22 WEEDONE 638	2.8 EC	0.5 LB A/A		1.43 PT/A	EPP7	C																						
23 NO-TILL							25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	81	81	100	97	97
23 NONTREATED																												

(CONTINUED)

TABLE. FALL APPLIED HERBICIDES IN SOYBEAN. PROJECT CODE:00-31-W170 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD	RATE	APPL	APPL	CONTROL												GLXMA			CONTROL						
								YIELD	LAMAM			LAMPU			CERVU			INJURY			SETFA			CHEAL					
									DAT	AT	AT	DAT	AT	AT	DAT	AT	AT	DAP	AUG	1	AT	AT	AUG	AT	AT	AUG			
									14	28	EPP30	PLANT	14	28	EPP30	PLANT	14	28	EPP30	PLANT	14	28	1	PLANT	POST	1	PLANT	POST	1
BU/A	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%								
24 NO-TILL								61	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100	100	100	100		
24 HANDWEEDED																													
25 FALL TILLAGE								53	95	100		100	95	100		100	95	100	0	0	0	50		100	100		100		
25 BASIS	75 WG	0.0234	LB A/A	0.5	OZ/A	EPP30	B																						
25 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30	B																						
25 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	EPP30	B																						
26 FALL TILLAGE								57	100	100		100	100	100		100	100	100	0	0	0	13		100	100		100		
26 CANOPY	75 WG	0.14	LB A/A	3.0	OZ/A	EPP30	B																						
26 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP30	B																						
26 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30	B																						
27 FALL TILLAGE								60	100	100		100	100	100		100	100	100	0	0	0	0		100	100		100		
27 CANOPY XL	56.3 WG			4.5	OZ/A	EPP30	B																						
27 ->AUTHORITY	75 WG	0.13	LB A/A			EPP30	B																						
27 ->CLASSIC	25 WG	0.027	LB A/A			EPP30	B																						
27 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP30	B																						
27 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30	B																						
28 FALL TILLAGE								56	95	85		85	95	100		100	95	100	0	0	0	23		100	100		100		
28 PYTHON	80 WG	0.05	LB A/A	1.0	OZ/A	EPP30	B																						
28 SENCOR	75 WG	0.188	LB A/A	4.0	OZ/A	EPP30	B																						
28 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30	B																						
28 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	EPP30	B																						
29 FALL TILLAGE								60	50	85		85	50	100		100	50	100	0	0	0	0		100	100		100		
29 HARMONY EXTRA	75 WG	0.0234	LB A/A	0.5	OZ/A	EPP30	B																						
29 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	% V/V	EPP30	B																						
30 FALL TILLAGE								50				50				50			0	0	0	99	60	100	50	100	100		
30 ROUNDUP ULTRA	3 SL	0.38	LB AE/A	1.0	PT/A	EPP7	C																						
30 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP7	C																						
31 FALL TILLAGE								6	100	100	73	0	100	100	75	0	100	100	100	95	0	0	0	0	0	0	0	0	
31 NONTREATED																													
32 FALL TILLAGE								53	100	100	100	100	100	100	100	100	100	100	100	0	0	0	100	100	100	100	100	100	
32 HANDWEEDED																													
LSD								7	5	7	9	12	5	6	11	6	5	6	5	16	0	0	0	22	20	2	4	2	1
P								0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.0	1.0	1.0	0.01	0.01	0.01	0.01	0.01	0.01

(CONTINUED)

TABLE. FALL APPLIED HERBICIDES IN SOYBEAN. PROJECT CODE:00-31-W170 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	PLANTS PER 1.0 SQUARE METER, MAY-17																
							SETFA	CHEAL	STEME	ERICA	PHYAN	OXAST	CAGSE	AMATA	CYPES	PLAMA	LAMAM	AMBEL	AMPAL	SOLCA	GERCA	ALLVI	CMIRA
1 NO-TILL							8	1	1	0	2	5	0	1	1	0	2	0	1	0	0	0	0
1 BASIS	75 WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP	A																
1 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																
1 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A																
2 NO-TILL							8	0	0	0	0	1	0	3	6	0	0	0	0	0	0	0	0
2 CANOPY	75 WG	0.14	LB A/A	3.0	OZ/A	FALL EPP	A																
2 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																
2 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																
3 NO-TILL							5	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0
3 CANOPY XL	56.3 WG			4.5	OZ/A	FALL EPP	A																
3 ->AUTHORITY	75 WG	0.13	LB A/A			FALL EPP	A																
3 ->CLASSIC	25 WG	0.027	LB A/A			FALL EPP	A																
3 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																
3 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																
4 NO-TILL							15	0	1	2	2	1	0	2	0	0	0	0	0	0	0	0	0
4 PYTHON	80 WG	0.05	LB A/A	1.0	OZ/A	FALL EPP	A																
4 SENCOR	75 WG	0.188	LB A/A	4.0	OZ/A	FALL EPP	A																
4 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																
4 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A																
5 NO-TILL							9	1	1	0	1	8	0	1	0	0	0	1	0	0	0	0	0
5 HARMONY EXTRA	75 WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP	A																
5 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	% V/V	FALL EPP	A																
6 NO-TILL							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 ROUNDUP ULTRA	3 SL	0.38	LB AE/A	1.0	PT/A	EPP7	C																
6 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP7	C																
7 NO-TILL							3	0	3	0	1	1	0	0	0	0	1	0	0	1	0	0	1
7 NONTREATED																							
8 NO-TILL							3	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	3
8 HANDWEDED																							
9 FALL TILLAGE							55	3	2	0	7	17	0	1	0	3	3	0	1	0	0	0	0
9 BASIS	75 WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP	A																
9 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																
9 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A																
10 FALL TILLAGE							19	0	0	0	5	0	0	1	0	0	0	0	0	0	0	0	0
10 CANOPY	75 WG	0.14	LB A/A	3.0	OZ/A	FALL EPP	A																
10 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																
10 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																
11 FALL TILLAGE							10	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0
11 CANOPY XL	56.3 WG			4.5	OZ/A	FALL EPP	A																
11 ->AUTHORITY	75 WG	0.13	LB A/A			FALL EPP	A																
11 ->CLASSIC	25 WG	0.027	LB A/A			FALL EPP	A																
11 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A																
11 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A																

(CONTINUED)

TABLE. FALL APPLIED HERBICIDES IN SOYBEAN. PROJECT CODE:00-31-W170 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	PLANTS PER 1.0 SQUARE METER, MAY-17																	
							SETFA	CHEAL	STEME	ERICA	PHYAN	OXAST	CAGSE	AMATA	CYPES	PLAMA	LAMAM	AMBEL	AMPAL	SOLCA	GERCA	ALLVI	CMIRA	POLPY
12 FALL TILLAGE							47	1	1	0	2	3	0	2	1	0	0	0	1	0	0	0	0	0
12 PYTHON	80 WG	0.05	LB A/A	1.0	OZ/A	FALL EPP A																		
12 SENCOR	75 WG	0.188	LB A/A	4.0	OZ/A	FALL EPP A																		
12 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A																		
12 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A																		
13 FALL TILLAGE							21	5	3	0	1	22	0	0	0	3	3	7	0	0	0	0	0	0
13 HARMONY EXTRA	75 WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP A																		
13 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	% V/V	FALL EPP A																		
14 FALL TILLAGE							0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
14 ROUNDUP ULTRA	3 SL	0.38	LB AE/A	1.0	PT/A	EPP7 C																		
14 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP7 C																		
15 FALL TILLAGE							21	8	2	0	6	11	0	0	0	0	1	0	0	0	0	0	1	0
15 NONTREATED																								
16 FALL TILLAGE							38	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0	1	0
16 HANDWEDED																								
17 NO-TILL							2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
17 BASIS	75 WG	0.0234	LB A/A	0.5	OZ/A	EPP30 B																		
17 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30 B																		
17 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	EPP30 B																		
18 NO-TILL							1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18 CANOPY	75 WG	0.14	LB A/A	3.0	OZ/A	EPP30 B																		
18 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP30 B																		
18 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30 B																		
19 NO-TILL							3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 CANOPY XL	56.3 WG			4.5	OZ/A	EPP30 B																		
19 ->AUTHORITY	75 WG	0.13	LB A/A			EPP30 B																		
19 ->CLASSIC	25 WG	0.027	LB A/A			EPP30 B																		
19 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP30 B																		
19 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30 B																		
20 NO-TILL							5	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0
20 PYTHON	80 WG	0.05	LB A/A	1.0	OZ/A	EPP30 B																		
20 SENCOR	75 WG	0.188	LB A/A	4.0	OZ/A	EPP30 B																		
20 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30 B																		
20 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	EPP30 B																		
21 NO-TILL							6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
21 HARMONY EXTRA	75 WG	0.0234	LB A/A	0.5	OZ/A	EPP30 B																		
21 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	% V/V	EPP30 B																		
22 NO-TILL							26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 ROUNDUP ULTRA	3 SL	0.38	LB AE/A	1.0	PT/A	EPP7 C																		
22 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP7 C																		
23 NO-TILL							7	0	5	0	1	1	0	0	0	0	0	0	1	0	0	0	0	1
23 NONTREATED																								

(CONTINUED)



TABLE. FALL APPLIED HERBICIDES IN SOYBEAN. PROJECT CODE:00-31-W170 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	PLANTS PER 1.0 SQUARE METER, MAY-17																	
							SETFA	CHEAL	STEME	ERICA	PHYAN	OXAST	CAGSE	AMATA	CYPES	PLAMA	LAMAM	AMBEL	AMPAL	SOLCA	GERCA	ALLVI	CMIRA	POLPY
24 NO-TILL							6	0	0	0	0	0	0	1	3	0	0	0	0	0	0	1	0	
24 HANDWEEDED																								
25 FALL TILLAGE							12	1	0	0	8	12	0	0	1	0	1	0	1	0	0	0	0	
25 BASIS	75 WG	0.0234	LB A/A	0.5	OZ/A	EPP30																		
25 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30																		
25 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	EPP30																		
26 FALL TILLAGE							26	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
26 CANOPY	75 WG	0.14	LB A/A	3.0	OZ/A	EPP30																		
26 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP30																		
26 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30																		
27 FALL TILLAGE							22	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
27 CANOPY XL	56.3 WG			4.5	OZ/A	EPP30																		
27 ->AUTHORITY	75 WG	0.13	LB A/A			EPP30																		
27 ->CLASSIC	25 WG	0.027	LB A/A			EPP30																		
27 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP30																		
27 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30																		
28 FALL TILLAGE							19	0	0	0	2	0	0	0	2	0	6	0	0	0	0	0	0	
28 PYTHON	80 WG	0.05	LB A/A	1.0	OZ/A	EPP30																		
28 SENCOR	75 WG	0.188	LB A/A	4.0	OZ/A	EPP30																		
28 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	% V/V	EPP30																		
28 28% UAN	100 LIQ	2.5	% V/V	2.5	% V/V	EPP30																		
29 FALL TILLAGE							64	0	0	0	1	18	0	2	2	0	10	1	1	0	0	0	0	
29 HARMONY EXTRA	75 WG	0.0234	LB A/A	0.5	OZ/A	EPP30																		
29 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	% V/V	EPP30																		
30 FALL TILLAGE							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30 ROUNDUP ULTRA	3 SL	0.38	LB AE/A	1.0	PT/A	EPP7																		
30 WEEDONE 638	2.8 EC	0.5	LB A/A	1.43	PT/A	EPP7																		
31 FALL TILLAGE							18	10	2	0	3	8	0	0	1	0	5	0	1	1	0	0	0	
31 NONTREATED																								
32 FALL TILLAGE							13	0	0	0	0	1	0	1	2	0	0	0	0	0	0	1	0	
32 HANDWEEDED																								
LSD							25	3	2	0.8	4	7	0.10	2	3	2	3	3	1	0.5	0.20	0.10	2	0.40
P							0.01	0.01	0.01	0.5	0.01	0.01	0.5	0.1	0.6	0.5	0.01	0.4	0.4	0.4	0.01	0.5	0.5	0.5

1. PROTOCOL: RFK AND BGY.
2. PLOTS SCOUTED AT PLANTING AND THOSE WITH LESS THAN 85% CONTROL OF MODERATE WEED PRESSURE WERE TREATED WITH ROUNDUP ULTRA AT 0.75 LB AE/A PLUS AMS AT 2.0% ON 5-17-00. TREATMENTS THAT REQUIRED ROUNDUP ULTRA AT PLANTING WERE 1,2,4,5,9-13, AND 25-29.
3. ALL PLOTS EXCEPT THE NONTREATED RECEIVED A POSTEMERGENCE APPLICATION OF ROUNDUP ULTRA AT 0.75 LB AE/A PLUS AMS AT 2.0% AT V2-V3 SOYBEAN STAGE ON 6-16-00.
4. DAT = DAYS AFTER TREATMENT, AT EPP30 = PRIOR TO EPP30 APPLICATION, AT PLANT = AT PLANTING, DAP = DAYS AFTER PLANTING.  
AT POST = PRIOR TO POSTEMERGENCE ROUNDUP APPLICATION, M2 = METER SQUARED.
5. RATING DATES:  
14 DAYS AFTER FALL AND SPRING APPLICATION WAS ON DEC-2-99 AND MAY-2-00, RESPECTIVELY.  
28 DAYS AFTER FALL AND SPRING APPLICATION WAS ON DEC-16-99 AND MAY-16-00, RESPECTIVELY.
6. CONTROL OF WEEDS IN NONTREATED NO-TILL PLOTS IS MOST LIKELY DUE TO THE LACK OF SOIL DISTURBANCE AS COMPARED TO NONTREATED FALL TILLAGE PLOTS.