

Fall Applied Herbicides in Corn.

01-1-W140

OBJECTIVE: Evaluate various herbicides, fall applied, in no-till and reduced-till.

SUMMARY: Peak applied in the fall provided the greatest control of wild garlic at planting. Peak, Sencor, Basis, Python, and Princep applied in the fall controlled 93% or more of the henbit, mouseear chickweed, and shepherdspurse at planting. Basis, Princep, and Aatrex controlled Carolina foxtail, 88 to 100%, at planting. Peak plus Princep applied in the fall controlled 100% of all winter annual weeds at planting. Peak applied in the fall caused no corn plant discoloration. Peak caused 8 to 35% height reduction 42 days after planting (DAP). Tillage prior to planting tended to reduce the height reduction caused by fall-applied Peak. Peak at 0.054 lb ai/A reduced corn height at harvest by 6%. There were no differences in plant population 28 DAP.

Corn yield ranged from 190 to 218 bu/A. There were no significant differences in yield due to herbicide treatment.

HERBICIDES / TILLAGES

AATREX 90 WG
BASIS 75 WG
PEAK 57 WG
PRINCEP 90 WG
PYTHON 80 WG
ROUNDUP ULTRA 3 SL
SENCOR 75 WG
WEEDONE 638 2.8 EC
NO-TILL
SPRING TILLAGE

WEEDS

chickweed, mouseear
foxtail, Carolina
garlic, wild
henbit
shepherdspurse

CROP

corn, field

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Fall Applied Herbicides in Corn.

Project Code: 01-1-W140 Location: BELLEVILLE RESEARCH CENTER

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
 Trial Status: Final Initiation Date: 11-16-01

Objective:

Evaluate various herbicides, fall applied, in no-till and reduced-till.

Weed Code	Common Name	Scientific Name
1. ALLVI	garlic, wild	Allium vineale L.
2. LAMAM	henbit	Lamium amplexicaule L.
3. CERVU	chickweed, mouseear	Cerastium vulgatum L.
4. ALOCA	foxtail, Carolina	Alopecurus carolinianus Walt.
5. CAPBP	shepherdspurse	Capsella bursa-pastoris (L.) Medicus

Crop 1:	ZEAMX corn, field	Variety:	P33G28 LL
Planting Method:	Seeded	Planting Date:	5-9-01
Rate:	28000 S/A	Depth:	1.5 IN
Row Spacing:	30 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, 2000				
Field Prep./Maintenance:	N 150 LB/A, P205 0 LB/A, K20 150 LB/A				

Soil Name:	Weir	% OM:	1.8	pH:	5.7	CEC:	10
Texture:	Silt loam	Fert. Level:	P1: 98 LB/A, K: 258 LB/A				

APPLICATION DESCRIPTION

	A	B
Application Date:	11-15-00	5-2-01
Time of Day:	13:00	7:00
Application Method:	SPRAY	SPRAY
Application Timing:	FALL EPP	EPP7
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	45 F	69 F
% Relative Humidity:	40	80
Wind Velocity, Unit:	5 MPH	3 MPH
Soil Moisture:	NORMAL	NORMAL

CROP STAGE AT EACH APPLICATION

	A		B	
Crop 1 Code, Stage:	ZEAMX	NA	ZEAMX	NA
Height, Unit:	NA	IN	NA	IN

WEED STAGE AT EACH APPLICATION

	A		B	
Weed 1 Code:	ALLVI		ALLVI	
Stage(leaves):	3-5		3-5	
Height(inches):	8-16		16-30	
Density:	High		High	
Weed 2 Code:	LAMAM		LAMAM	
Stage(leaves):	10+		10+	
Height(inches):	0-1		4-6	
Density:	Medium		Medium	
Weed 3 Code:	CERVU		CERVU	
Stage(leaves):	5-10		10+	
Height(inches):	0-1		4-5	
Density:	Low		Medium	

Weed 4 Code:	ALOCA	ALOCA
Stage(leaves):	3-4	5-6
Height(inches):	1-2	4-6
Density:	Medium	Medium

Weed 5 Code:	CAPBP	CAPBP
Stage(leaves):	10+	10+
Height(inches):	0-2	6-12
Density:	Low	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:	8004	8004
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	24.2 GPA	24.2 GPA

NOTES: Tillages are no-till and spring-till, see treatment list. HARVESTED 9-29-01, 2 ROWS X 22 FT.

Fall Applied Herbicides in Corn.

Project Code: 01-1-W140 Location: BELLEVILLE RESEARCH CENTER

					ALLVI	ALLVI	ALLVI	LAMAM	LAMAM	LAMAM	CERVU	CERVU	CERVU	ALOCA	ALOCA	ALOCA		
Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent		
						11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	
						14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code									
1	NO-TILL									0	0	50	0	0	100	0	0	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									0	0	0	0	0	100	0	0	0
2	PYTHON	80	WG	0.05	LB A/A	1.0	OZ/A	FALL	EPP A									
2	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A									
2	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A									
3	NO-TILL									20	20	0	0	0	100	0	0	100
3	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL	EPP A									
3	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A									
3	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A									
4	NO-TILL									25	25	25	0	0	100	0	0	100
4	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL	EPP A									
4	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/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									0	0	0	0	0	100	0	0	93
5	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL	EPP A									
6	NO-TILL									0	0	100	0	0	100	0	0	100
6	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL	EPP A									
6	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A									
6	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A									
7	NO-TILL									0	0	78	0	0	100	0	0	100
7	PEAK	57	WG	0.027	LB A/A	0.76	OZ/A	FALL	EPP A									
7	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A									
7	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A									
8	NO-TILL									10	10	100	0	0	100	0	0	100
8	PEAK	57	WG	0.054	LB A/A	1.52	OZ/A	FALL	EPP A									
8	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A									
8	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A									
9	NO-TILL									24	24	0	0	0	100	0	0	100
9	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL	EPP A									
9	PYTHON	80	WG	0.05	LB A/A	1.0	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	NO-TILL									0	0	100	0	0	100	0	0	100
10	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL	EPP A									
10	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL	EPP A									
10	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A									
10	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A									

Weed Code									ALLVI	ALLVI	ALLVI	LAMAM	LAMAM	LAMAM	CERVU	CERVU	CERVU	ALOCA	ALOCA	ALOCA	
Crop Code									ALLVI	ALLVI	ALLVI	LAMAM	LAMAM	LAMAM	CERVU	CERVU	CERVU	ALOCA	ALOCA	ALOCA	
Rating Data Type									Control	Control	Control	Control	Control	Control	Control	Control	Control	Control	Control	Control	
Rating Unit									Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Rating Date									11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	
Trt-Eval Interval									14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code												
11	NO-TILL									10	10	0	0	0	100	0	0	100	0	0	100
11	AATREX	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP A	A												
11	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
11	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												
12	NO-TILL									0	0	50	0	0	50	0	0	50	0	0	50
12	ROUNDUP ULTRA	3	SL	0.38	LB AE/A	1.0	PT/A	EPP7	B												
12	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	EPP7	B												
13	NO-TILL									0	0	0	0	0	0	0	0	0	0	0	0
13	NONTREATED																				
14	NO-TILL									100	100	100	100	100	100	100	100	100	100	100	100
14	HANDWEEDED																				
15	SPRING TILLAGE									0	0	50	0	0	100	0	0	100	0	0	100
15	BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP A	A												
15	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
15	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												
16	SPRING TILLAGE									0	0	0	0	0	100	0	0	100	0	0	0
16	PYTHON	80	WG	0.05	LB A/A	1.0	OZ/A	FALL EPP A	A												
16	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
16	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												
17	SPRING TILLAGE									20	20	0	0	0	100	0	0	100	0	0	0
17	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL EPP A	A												
17	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
17	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												
18	SPRING TILLAGE									25	25	50	0	0	100	0	0	100	0	0	0
18	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL EPP A	A												
18	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	FALL EPP A	A												
18	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
18	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												
19	SPRING TILLAGE									0	0	0	0	0	100	0	0	100	0	0	97
19	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP A	A												
20	SPRING TILLAGE									0	0	100	0	0	100	0	0	100	0	0	0
20	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL EPP A	A												
20	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
20	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												
21	SPRING TILLAGE									0	0	100	0	0	100	0	0	100	0	0	0
21	PEAK	57	WG	0.027	LB A/A	0.76	OZ/A	FALL EPP A	A												
21	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
21	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												
22	SPRING TILLAGE									10	10	100	0	0	100	0	0	100	0	0	60
22	PEAK	57	WG	0.054	LB A/A	1.52	OZ/A	FALL EPP A	A												
22	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A	A												
22	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A	A												

Weed Code									ALLVI	ALLVI	ALLVI	LAMAM	LAMAM	LAMAM	CERVU	CERVU	CERVU	ALOCA	ALOCA	ALOCA	
Crop Code									Control	Control	Control	Control	Control	Control	Control	Control	Control	Control	Control	Control	
Rating Data Type									Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
Rating Unit									11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	11-29-00	12-13-00	5-9-01	
Rating Date									14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	14 DA-A	28 DA-A	0 DAP	
Trt-Eval Interval																					
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code												
23	SPRING TILLAGE									20	20	0	0	0	100	0	0	100	0	0	0
23	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL EPP	A												
23	PYTHON	80	WG	0.05	LB A/A	1.0	OZ/A	FALL EPP	A												
23	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A												
23	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A												
24	SPRING TILLAGE									0	0	100	0	0	100	0	0	100	0	0	100
24	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL EPP	A												
24	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP	A												
24	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A												
24	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A												
25	SPRING TILLAGE									10	10	0	0	0	100	0	0	100	0	0	100
25	AATREX	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP	A												
25	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A												
25	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A												
26	SPRING TILLAGE									0	0	50	0	0	50	0	0	50	0	0	50
26	ROUNDUP ULTRA	3	SL	0.38	LB AE/A	1.0	PT/A	EPP7	B												
26	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	EPP7	B												
27	SPRING TILLAGE									0	0	0	0	0	0	0	0	0	0	0	0
27	NONTREATED																				
28	SPRING TILLAGE									100	100	100	100	100	100	100	100	100	100	100	100
28	HANDWEEDED																				
LSD (P=.05)										0.7	0.7	14.4	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	15.1
Replicate F										1.000	1.000	0.466	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.338
Replicate Prob(F)										0.3972	0.3972	0.7067	1.0000	1.0000	1.0000	1.0000	1.0000	0.3972	1.0000	1.0000	0.2678
Treatment F										12228.852	12228.852	75.598	0.000	0.000	0.000	0.000	0.000	981.040	0.000	0.000	74.504
Treatment Prob(F)										0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	1.0000	1.0000	0.0001

Fall Applied Herbicides in Corn.

Project Code: 01-1-W140 Location: BELLEVILLE RESEARCH CENTER
 Blanket PRE application, see comments.

Weed Code		CAPBP		CAPBP		CAPBP		ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		ZEAMX		
Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	Control Percent	Control Percent	Control Percent	DISCOLOR	DISCOLOR	DISCOLOR	HEIRED	HEIRED	HEIRED	HEIRED	HEIRED	Plants 000/A	Height Inches	Yield bu/A				
					11-29-00	12-13-00	5-9-01	5-24-01	6-7-01	6-21-01	5-24-01	6-7-01	6-21-01	6-21-01	6-7-01	6-21-01	6-7-01	9-5-01	9-29-01			
					14 DA-A	28 DA-A	0 DAP	14 DAP	28 DAP	42 DAP	14 DAP	28 DAP	42 DAP	28 DAP								
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code													
1	NO-TILL									0	0	100	0	0	0	0	0	0	0	28.0	108.3	201
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									0	0	100	0	0	0	0	0	0	0	29.1	110.0	206
2	PYTHON	80	WG	0.05	LB A/A	1.0	OZ/A	FALL	EPP A													
2	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A													
2	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A													
3	NO-TILL									0	0	100	0	0	0	0	0	0	0	28.8	112.3	204
3	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL	EPP A													
3	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A													
3	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A													
4	NO-TILL									0	0	100	0	0	0	0	0	0	0	30.7	109.5	198
4	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL	EPP A													
4	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/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									0	0	95	0	0	0	0	0	0	0	29.7	110.5	203
5	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL	EPP A													
6	NO-TILL									0	0	100	0	0	0	0	0	0	13	30.0	112.8	218
6	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL	EPP A													
6	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A													
6	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A													
7	NO-TILL									0	0	100	0	0	0	0	0	0	19	28.8	111.0	205
7	PEAK	57	WG	0.027	LB A/A	0.76	OZ/A	FALL	EPP A													
7	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A													
7	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A													
8	NO-TILL									0	0	100	0	0	0	0	0	0	35	28.8	106.3	192
8	PEAK	57	WG	0.054	LB A/A	1.52	OZ/A	FALL	EPP A													
8	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A													
8	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A													
9	NO-TILL									0	0	100	0	0	0	0	0	0	0	27.6	109.3	194
9	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL	EPP A													
9	PYTHON	80	WG	0.05	LB A/A	1.0	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	NO-TILL									0	0	100	0	0	0	0	0	0	28	29.4	107.8	201
10	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL	EPP A													
10	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL	EPP A													
10	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL	EPP A													
10	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL	EPP A													

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	CAPBP 11-29-00	CAPBP 12-13-00	CAPBP 5-9-01	ZEAMX 5-24-01	ZEAMX 6-7-01	ZEAMX 6-21-01	ZEAMX 5-24-01	ZEAMX 6-7-01	ZEAMX 6-21-01	ZEAMX 6-7-01	ZEAMX 6-21-01	Plants 000/A	Height Inches	Yield bu/A	
11	NO-TILL									0	0	100	0	0	0	0	0	0	0	0	0	28.8	104.5	190
11	AATREX	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP	A															
11	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
11	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															
12	NO-TILL									0	0	50	0	0	0	0	0	0	0	0	0	30.5	112.3	213
12	ROUNDUP ULTRA	3	SL	0.38	LB AE/A	1.0	PT/A	EPP7	B															
12	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	EPP7	B															
13	NO-TILL									0	0	0	0	0	0	0	0	0	0	0	0	30.3	112.5	204
13	NONTREATED																							
14	NO-TILL									100	100	100	0	0	0	0	0	0	0	0	0	29.4	113.3	211
14	HANDWEEDED																							
15	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	0	0	0	29.3	106.0	200
15	BASIS	75	WG	0.0234	LB A/A	0.5	OZ/A	FALL EPP	A															
15	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
15	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															
16	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	0	0	0	30.3	110.0	208
16	PYTHON	80	WG	0.05	LB A/A	1.0	OZ/A	FALL EPP	A															
16	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
16	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															
17	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	0	0	0	30.5	107.8	204
17	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL EPP	A															
17	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
17	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															
18	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	0	0	0	29.9	106.3	202
18	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL EPP	A															
18	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	FALL EPP	A															
18	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
18	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															
19	SPRING TILLAGE									0	0	98	0	0	0	0	0	0	0	0	0	29.1	110.0	210
19	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP	A															
20	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	0	10	10	30.6	108.0	209
20	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL EPP	A															
20	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
20	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															
21	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	0	8	8	31.1	104.8	205
21	PEAK	57	WG	0.027	LB A/A	0.76	OZ/A	FALL EPP	A															
21	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
21	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															
22	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	0	25	25	29.8	103.0	195
22	PEAK	57	WG	0.054	LB A/A	1.52	OZ/A	FALL EPP	A															
22	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP	A															
22	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP	A															

Weed Code	CAPBP	CAPBP	CAPBP	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Code	Control	Control	Control	DISCOLOR	DISCOLOR	DISCOLOR	HEIRED	HEIRED	HEIRED	HEIRED	HEIRED	HEIRED	HEIRED
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	11-29-00	12-13-00	5-9-01	5-24-01	6-7-01	6-21-01	5-24-01	6-7-01	6-21-01	6-21-01	6-7-01	9-5-01	9-29-01
Rating Date	14 DA-A	28 DA-A	0 DAP	14 DAP	28 DAP	42 DAP	14 DAP	28 DAP	42 DAP	28 DAP	000/A	Inches	Yield
Trt-Eval Interval													

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code												
23	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	29.5	105.0	204
23	SENCOR	75	WG	0.187	LB A/A	4.0	OZ/A	FALL EPP A													
23	PYTHON	80	WG	0.05	LB A/A	1.0	OZ/A	FALL EPP A													
23	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A													
23	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A													
24	SPRING TILLAGE									0	0	100	0	0	0	0	0	1	29.5	106.5	202
24	PEAK	57	WG	0.013	LB A/A	0.365	OZ/A	FALL EPP A													
24	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP A													
24	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A													
24	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A													
25	SPRING TILLAGE									0	0	100	0	0	0	0	0	0	28.2	106.8	203
25	AATREX	90	WG	1.0	LB A/A	1.11	LB/A	FALL EPP A													
25	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	% V/V	FALL EPP A													
25	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	FALL EPP A													
26	SPRING TILLAGE									0	0	50	0	0	0	0	0	0	29.3	108.3	203
26	ROUNDUP ULTRA	3	SL	0.38	LB AE/A	1.0	PT/A	EPP7	B												
26	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	EPP7	B												
27	SPRING TILLAGE									0	0	0	0	0	0	0	0	0	29.1	111.0	209
27	NONTREATED																				
28	SPRING TILLAGE									100	100	100	0	0	0	0	0	0	30.8	110.0	205
28	HANDWEEDED																				
LSD (P=.05)										0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	7.3	2.13	4.75	16.4
Replicate F										0.000	0.000	1.605	0.000	0.000	0.000	0.000	0.000	1.639	2.620	8.702	6.019
Replicate Prob(F)										1.0000	1.0000	0.1945	1.0000	1.0000	1.0000	1.0000	1.0000	0.1869	0.0564	0.0001	0.0009
Treatment F										0.000	0.000	1573.151	0.000	0.000	0.000	0.000	0.000	14.608	1.333	2.730	1.137
Treatment Prob(F)										1.0000	1.0000	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.1630	0.0003	0.3216

Fall Applied Herbicides in Corn.

Project Code: 01-1-W140 Location: BELLEVILLE RESEARCH CENTER
Blanket PRE application, see comments.

Trial Comments

1. Protocol: RFK and BGY.
2. Blanket PRE application of Bicep II Magnum + Roundup Ultra at 2.89 lb ai/A + 0.75 lb ae/A, applied 5-10-01.
3. DA-A = days after FALL EPP application. DAP = days after planting. 0 DAP = at planting. DISCOLOR = discoloration. HEIRED = height reduction.