

Southern Illinois University

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Trial Status: F one-year/final Initiation Date: 11-14-12 Completion Date: 10-18-13	Trial Location City: Murphysboro Country: USA State/Prov.: Illinois IL Postal Code: 62966
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Objectives:
Determine the performance of fall and spring applications of residual herbicides for soybean with the primary focus on residual waterhemp control in spring and summer.

Study Director: Bryan Young Organization: Southern Illinois University Address: 1205 Lincoln Drive - AG 176 - MC 4415 City+State/Prov: Carbondale IL Postal Code: 62901 Country: USA	Title: Professor Phone No.: 618-453-7679 Mobile No.: 618-713-6471 E-mail: bgyoung@siu.edu
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Crop 1: GLXMA Glycine max Soybean Variety: AG3832 BBCH Scale: BSOY Description: RR2Y Planting Rate, Unit: 140000 S/A Depth, Unit: 1.5 IN Row Spacing, Unit: 30 IN	Crop Description Planting Date: 5-1-13 Planting Method: SEEDED
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Pest 1 Type: W Code: ERICA <i>Conyza canadensis</i> (L.) Crong. Common Name: horseweed Description: glyphosate-resistant marestail Pest 2 Type: W Code: LAMAM <i>Lamium amplexicaule</i> L. Common Name: henbit Pest 3 Type: W Code: STEME <i>Stellaria media</i> (L.) Vill. Common Name: chickweed, common Pest 4 Type: W Code: VIORA <i>Viola bicolor</i> Pursh Common Name: pansy, field Pest 5 Type: W Code: AMATA <i>Amaranthus rudis</i> Sauer Common Name: waterhemp, common Description: glyphosate-resistant waterhemp	Pest Description
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Treated Plot Width: 6.67 FT Total Plot Width: 10 FT Treated Plot Length: 30 FT Total Plot Length: 30 FT Replications: 3 Untreated Arrangement: NONE control is other than an untreated	Site and Design Site Type: FIELD Experimental Unit: 1 PLOT Tillage Type: NOTILL no-till Study Design: RACOB L Randomized Complete Block (RCB)
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No.	Previous Crop	Year
1.	GLXMA	2012

Maintenance <table border="1"> <thead> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A
No.	Maintenance Product Name			
1.	N 0 LB/A, P2O5 0 LB/A, K2O 0 LB/A			

% OM: 1.87 Texture: SIL SILT LOAM pH: 5.5 Soil Name: ALVIN CEC: 7.06	Soil Description
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Element	Quantity	Unit
P1	172	LB/A
K	446	LB/A

Overall Moisture Conditions: NORMAL Closest Weather Station: SOUTHERN IL AIRPORT (93810)	Moisture and Weather Conditions Distance, Unit: 3.5 MI
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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	10-1-12					7	DAY	36	80	F
2.	10-1-12	1.07	IN	RAIN	rain	5	DAY			
3.	10-8-12					7	DAY	32	79	F
4.	10-11-12	1.01	IN	RAIN	rain	4	DAY			
5.	10-15-12					7	DAY	45	79	F
6.	10-17-12	0.99	IN	RAIN	rain	4	DAY			
7.	10-22-12					7	DAY	34	81	F
8.	10-25-12	0.7	IN	RAIN	rain	2	DAY			
9.	10-29-12					7	DAY	28	62	F
10.	11-5-12					7	DAY	29	71	F
11.	11-5-12	0.09	IN	RAIN	rain	3	DAY			
12.	11-11-12	1.49	IN	RAIN	rain	2	DAY			
13.	11-12-12					7	DAY	24	62	F
14.	11-19-12					7	DAY	24	66	F
15.	11-22-12	0.11	IN	RAIN	rain	5	DAY			
16.	11-26-12					7	DAY	21	66	F
17.	12-3-12					7	DAY	31	68	F
18.	12-4-12	0.26	IN	RAIN	rain	4	DAY			
19.	12-9-12	1.09	IN	RAIN	rain	8	DAY			
20.	12-10-12					7	DAY	23	59	F
21.	12-17-12					7	DAY	19	63	F
22.	12-20-12	0.35	IN	RAIN	rain	4	DAY			
23.	12-24-12					7	DAY	8	47	F
24.	12-28-12	0.83	IN	RAIN	rain	6	DAY			
25.	12-31-12					7	DAY	13	40	F
26.	1-7-13					7	DAY	19	64	F
27.	1-10-13	0.57	IN	RAIN	rain	3	DAY			
28.	1-12-13	2.66	IN	RAIN	rain	2	DAY			
29.	1-14-13					7	DAY	22	55	F
30.	1-21-13					7	DAY	16	52	F
31.	1-28-13					7	DAY	13	70	F
32.	1-29-13	2.17	IN	RAIN	rain	4	DAY			
33.	2-4-13					7	DAY	27	66	F
34.	2-7-13	0.25	IN	RAIN	rain	5	DAY			
35.	2-10-13	0.54	IN	RAIN	rain	5	DAY			
36.	2-11-13					7	DAY	24	60	F
37.	2-18-13					7	DAY	23	57	F
38.	2-18-13	1.35	IN	RAIN	rain	4	DAY			
39.	2-25-13					7	DAY	25	54	F
40.	2-26-13	0.67	IN	RAIN	rain	4	DAY			
41.	3-1-13	0.2	IN	RAIN	rain	5	DAY			
42.	3-4-13					7	DAY	26	68	F
43.	3-10-13	0.49	IN	RAIN	rain	2	DAY			
44.	3-11-13					7	DAY	24	74	F
45.	3-17-13	2.87	IN	RAIN	rain	3	DAY			
46.	3-18-13					7	DAY	23	57	F
47.	3-24-13	0.34	IN	RAIN	rain	2	DAY			
48.	3-25-13					7	DAY	24	68	F
49.	3-30-13	0.54	IN	RAIN	rain	2	DAY			
50.	4-1-13					7	DAY	26	75	F
51.	4-8-13					7	DAY	32	81	F
52.	4-10-13	0.85	IN	RAIN	rain	2	DAY			
53.	4-15-13					7	DAY	32	83	F
54.	4-18-13	2.16	IN	RAIN	rain	1	DAY			
55.	4-22-13					7	DAY	32	72	F
56.	4-24-13	0.55	IN	RAIN	rain	2	DAY			
57.	4-27-13	0.37	IN	RAIN	rain	2	DAY			

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58.	4-29-13					7	DAY	41	81	F
59.	5-3-13	1.33	IN	RAIN	rain	3	DAY			
60.	5-5-13	0.75	IN	RAIN	rain	2	DAY			
61.	5-6-13					7	DAY	41	80	F
62.	5-10-13	0.17	IN	RAIN	rain	3	DAY			
63.	5-13-13					7	DAY	37	87	F
64.	5-16-13	0.23	IN	RAIN	rain	2	DAY			
65.	5-20-13					7	DAY	43	85	F
66.	5-21-13	0.91	IN	RAIN	rain	1	DAY			
67.	5-27-13					7	DAY	59	86	F
68.	5-31-13	0.7	IN	RAIN	rain	3	DAY			
69.	6-1-13	1.67	IN	RAIN	rain	2	DAY			
70.	6-3-13					7	DAY	50	82	F
71.	6-10-13	0.13	IN	RAIN	rain	5	DAY			
72.	6-10-13					7	DAY	57	93	F
73.	6-17-13	0.36	IN	RAIN	rain	2	DAY			
74.	6-17-13					7	DAY	61	92	F
75.	6-22-13	0.34	IN	RAIN	rain	2	DAY			
76.	6-24-13					7	DAY	64	93	F
77.	6-26-13	1.25	IN	RAIN	rain	2	DAY			
78.	6-30-13	0.3	IN	RAIN	rain	2	DAY			

Application Description

	A	B	C	D
Application Date:	11-19-12	4-2-13	5-1-13	6-3-13
Appl. Start Time:	8:15	10:30	14:15	17:45
Appl. Stop Time:	9:00	11:00	14:45	18:30
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	FALL	EPP30	PRE	POST
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	RJW	RJW	BGY	NTH
Air Temperature, Unit:	44 F	42 F	82 F	81 F
% Relative Humidity:	69	40	48	50
Wind Velocity, Unit:	0 MPH	4 MPH	4 MPH	3 MPH
Wind Direction:		N	S	SE
Dew Presence (Y/N):	Y	N	N	N
Soil Temperature, Unit:	43 F	39 F	72 F	78 F
Soil Moisture:	NORMAL	ABONOR	ABONOR	NORMAL
% Cloud Cover:	50	70	75	5
Next Moisture Occurred On:	11-22-12	4-10-13	5-2-13	6-9-13
Time to Next Moisture, Unit:	92 HR	96 HR	32 HR	6 DAY

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA	GLXMA	GLXMA	GLXMA
Stage Scale Used:	DESC	DESC	DESC	DESC
Stage Majority, Percent:	NA	NA	NA	V3
Stage Minimum, Percent:				V2
Stage Maximum, Percent:				V3
Height, Unit:				6 IN
Height Minimum, Maximum:				2 6

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Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	ERICA W	ERICA W	ERICA W	ERICA W
Stage Majority, Percent:	NA	4	16	15
Stage Minimum, Percent:		COTY	10	10
Stage Maximum, Percent:		8	25	50+
Height, Unit:		1.5 IN	2.5 IN	3 IN
Height Minimum, Maximum:		0.25 2	0.25 10	1 14
Density, Unit:		2 FT2	2.5 FT2	2 FT2
Pest 2 Code, Type, Scale:	LAMAM W	LAMAM W	LAMAM W	LAMAM W
Stage Majority, Percent:	4	NA	NA	NA
Stage Minimum, Percent:	2			
Stage Maximum, Percent:	6			
Height, Unit:	2 IN			
Height Minimum, Maximum:	0.5 2			
Density, Unit:	5 FT2			
Pest 3 Code, Type, Scale:	STEME W	STEME W	STEME W	STEME W
Stage Majority, Percent:	10	6	NA	NA
Stage Minimum, Percent:	5	4		
Stage Maximum, Percent:	20	15		
Height, Unit:	2 IN	1 IN		
Height Minimum, Maximum:	0.5 2	0.5 2		
Density, Unit:	10 FT2	0.5 FT2		
Pest 4 Code, Type, Scale:	VIORA W	VIORA W	VIORA W	VIORA W
Stage Majority, Percent:	6	NA	NA	NA
Stage Minimum, Percent:	COTY			
Stage Maximum, Percent:	10			
Height, Unit:	1 IN			
Height Minimum, Maximum:	0.5 2			
Density, Unit:	10 FT2			
Pest 5 Code, Type, Scale:	AMATA W	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:	NA	NA	NA	12
Stage Minimum, Percent:				2
Stage Maximum, Percent:				40
Height, Unit:				4 IN
Height Minimum, Maximum:				0.5 14
Density, Unit:				10 FT2

Application Equipment				
	A	B	C	D
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Equipment Type:	BACSPR	BACSPR	BACSPR	BACSPR
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	XR	XR	XR	XR
Nozzle Size:	8002	8002	8002	8002
Boom Length, Unit:	6.67 FT	6.67 FT	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							GLXMA 10-18-13 Moisture Percent	GLXMA 10-18-13 Yield bu/A	GLXMA 6-3-13 Injury Percent 33 DA-C 0 DA-D	GLXMA 7-1-13 Injury Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	AUTHORITY XL	70 WG		0.175 lb ai/a	4 oz/a		FALL	A	15.4 a	38 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A		0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D		0 a
2	AUTHORITY XL	70 WG		0.35 lb ai/a	8 oz/a		FALL	A	15.9 a	35 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A		0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D		0 a
3	VALOR XLT	40.3 WG		0.0756 lb ai/a	3 oz/a		FALL	A	16.2 a	35 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A		0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D		0 a
4	VALOR XLT	40.3 WG		0.101 lb ai/a	4 oz/a		FALL	A	15.9 a	34 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A		0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D		0 a
5	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		FALL	A	16.2 a	37 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A		0 a
	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		EPP30	B		0 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		EPP30	B		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		EPP30	B		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		EPP30	B		0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D		0 a
6	VALOR XLT	40.3 WG		0.0378 lb ai/a	1.5 oz/a		FALL	A	17.0 a	36 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A		0 a
	VALOR XLT	40.3 WG		0.0378 lb ai/a	1.5 oz/a		EPP30	B		0 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		EPP30	B		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		EPP30	B		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		EPP30	B		0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D		0 a
7	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		FALL	A	15.8 a	33 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A		0 a
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A		0 a
	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		PRE	C		0 a
	GRAMOXONE 2 SL	2 SL		1 lb ai/a	64 fl oz/a		PRE	C		0 a
	COC (PRIME OIL)	100 SL		1 % v/v	1 % v/v		PRE	C		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		PRE	C		0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D		0 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D		0 a

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								GLXMA 10-18-13 Moisture Percent	GLXMA 10-18-13 Yield bu/A	GLXMA 6-3-13 Injury Percent 33 DA-C 0 DA-D	GLXMA 7-1-13 Injury Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
8	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a		FALL	A	17.9 a	36 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		FALL	A			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		FALL	A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		FALL	A			
	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a		PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			
9	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		EPP30	B	15.3 a	46 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B			
	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			
10	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a		EPP30	B	15.3 a	40 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B			
	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a		PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			
11	AUTHORITY XL	70	WG	0.175 lb ai/a	4 oz/a		EPP30	B	15.6 a	38 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			
12	AUTHORITY XL	70	WG	0.35 lb ai/a	8 oz/a		EPP30	B	15.4 a	38 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			
13	VALOR XLT	40.3	WG	0.0756 lb ai/a	3 oz/a		EPP30	B	16.2 a	41 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			
14	VALOR XLT	40.3	WG	0.101 lb ai/a	4 oz/a		EPP30	B	16.2 a	36 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			
15	AUTHORITY XL	70	WG	0.175 lb ai/a	4 oz/a		PRE	C	15.5 a	41 a	0 a
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D			

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							GLXMA 10-18-13 Moisture Percent	GLXMA 10-18-13 Yield bu/A	GLXMA 6-3-13 Injury Percent 33 DA-C 0 DA-D	GLXMA 7-1-13 Injury Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit	Appl Code		
16	AUTHORITY XL	70	WG	0.35 lb ai/a	8 oz/a		PRE	C	15.5 a	51 a
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C		0 a
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
17	VALOR XLT	40.3	WG	0.0756 lb ai/a	3 oz/a		PRE	C	15.8 a	44 a
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C		0 a
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
18	VALOR XLT	40.3	WG	0.101 lb ai/a	4 oz/a		PRE	C	15.8 a	33 a
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C		0 a
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
19	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		FALL	A	15.8 a	41 a
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		FALL	A		0 a
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		FALL	A		
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
20	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B	15.4 a	43 a
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B		0 a
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B		
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
21	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C	15.9 a	37 a
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		0 a
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
LSD (P=.05)							2.10	10.1	0.0	0.0
Standard Deviation							1.27	6.1	0.0	0.0
CV							7.98	15.83	0.0	0.0
Replicate F							1.303	5.582	0.000	0.000
Replicate Prob(F)							0.2831	0.0073	1.0000	1.0000
Treatment F							0.682	1.614	0.000	0.000
Treatment Prob(F)							0.8199	0.0975	1.0000	1.0000

Southern Illinois University

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								ERICA-HR 4-2-13 Control Percent 134 DA-A 0 DA-B	ERICA-HR 5-1-13 Control Percent 29 DA-B 0 DA-C	ERICA-HR 6-3-13 Control Percent 33 DA-C 0 DA-D	ERICA-HR 7-1-13 Control Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	AUTHORITY XL	70 WG		0.175 lb ai/a		4 oz/a		FALL	A	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D		
2	AUTHORITY XL	70 WG		0.35 lb ai/a		8 oz/a		FALL	A	99 a	98 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D		
3	VALOR XLT	40.3 WG		0.0756 lb ai/a		3 oz/a		FALL	A	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D		
4	VALOR XLT	40.3 WG		0.101 lb ai/a		4 oz/a		FALL	A	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D		
5	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		FALL	A	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A		
	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		EPP30	B		
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		EPP30	B		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		EPP30	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		EPP30	B		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D		
6	VALOR XLT	40.3 WG		0.0378 lb ai/a		1.5 oz/a		FALL	A	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A		
	VALOR XLT	40.3 WG		0.0378 lb ai/a		1.5 oz/a		EPP30	B		
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		EPP30	B		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		EPP30	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		EPP30	B		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D		
7	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		FALL	A	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A		
	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		PRE	C		
	GRAMOXONE 2 SL	2 SL		1 lb ai/a		64 fl oz/a		PRE	C		
	COC (PRIME OIL)	100 SL		1 % v/v		1 % v/v		PRE	C		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D		

Southern Illinois University

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								ERICA-HR 4-2-13 Control Percent 134 DA-A 0 DA-B	ERICA-HR 5-1-13 Control Percent 29 DA-B 0 DA-C	ERICA-HR 6-3-13 Control Percent 33 DA-C 0 DA-D	ERICA-HR 7-1-13 Control Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
8	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5	oz/a	FALL	A	99 a	98 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	FALL	A			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	FALL	A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	FALL	A			
	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5	oz/a	PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64	fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1	% v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			
9	AUTHORITY XL	70	WG	0.0875 lb ai/a	2	oz/a	EPP30	B		99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	EPP30	B			
	AUTHORITY XL	70	WG	0.0875 lb ai/a	2	oz/a	PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64	fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1	% v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			
10	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5	oz/a	EPP30	B		99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	EPP30	B			
	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5	oz/a	PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64	fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1	% v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			
11	AUTHORITY XL	70	WG	0.175 lb ai/a	4	oz/a	EPP30	B		99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			
12	AUTHORITY XL	70	WG	0.35 lb ai/a	8	oz/a	EPP30	B		99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			
13	VALOR XLT	40.3	WG	0.0756 lb ai/a	3	oz/a	EPP30	B		99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			
14	VALOR XLT	40.3	WG	0.101 lb ai/a	4	oz/a	EPP30	B		99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			
15	AUTHORITY XL	70	WG	0.175 lb ai/a	4	oz/a	PRE	C			99 a
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64	fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1	% v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	POST	D			

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							ERICA-HR 4-2-13 Control Percent 134 DA-A 0 DA-B	ERICA-HR 5-1-13 Control Percent 29 DA-B 0 DA-C	ERICA-HR 6-3-13 Control Percent 33 DA-C 0 DA-D	ERICA-HR 7-1-13 Control Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
16	AUTHORITY XL	70	WG	0.35 lb ai/a	8 oz/a		PRE	C		
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C		
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
17	VALOR XLT	40.3	WG	0.0756 lb ai/a	3 oz/a		PRE	C		
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C		
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
18	VALOR XLT	40.3	WG	0.101 lb ai/a	4 oz/a		PRE	C		
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C		
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
19	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		FALL	A		
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		FALL	A		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		FALL	A		
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
20	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B		
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B		
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
21	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C		
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C		
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D		
LSD (P=.05)							0.7	5.8	8.8	4.0
Standard Deviation							0.4	3.5	5.3	2.4
CV							0.39	3.57	5.8	2.5
Replicate F							1.000	0.879	0.454	1.592
Replicate Prob(F)							0.3897	0.4255	0.6383	0.2162
Treatment F							16.000	5.337	47.908	30.553
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001

Southern Illinois University

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								LAMAM	LAMAM	STEME	STEME	VIORA	VIORA
								4-2-13 Control Percent 134 DA-A 0 DA-B	5-1-13 Control Percent 29 DA-B 0 DA-C	4-2-13 Control Percent 134 DA-A 0 DA-B	5-1-13 Control Percent 29 DA-B 0 DA-C	4-2-13 Control Percent 134 DA-A 0 DA-B	5-1-13 Control Percent 29 DA-B 0 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Code				
1	AUTHORITY XL	70 WG		0.175 lb ai/a		4 oz/a		FALL	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A				
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D				
2	AUTHORITY XL	70 WG		0.35 lb ai/a		8 oz/a		FALL	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A				
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D				
3	VALOR XLT	40.3 WG		0.0756 lb ai/a		3 oz/a		FALL	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A				
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D				
4	VALOR XLT	40.3 WG		0.101 lb ai/a		4 oz/a		FALL	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A				
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D				
5	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		FALL	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A				
	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		EPP30	B				
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		EPP30	B				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		EPP30	B				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		EPP30	B				
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D				
6	VALOR XLT	40.3 WG		0.0378 lb ai/a		1.5 oz/a		FALL	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A				
	VALOR XLT	40.3 WG		0.0378 lb ai/a		1.5 oz/a		EPP30	B				
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		EPP30	B				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		EPP30	B				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		EPP30	B				
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D				
7	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		FALL	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a		44 fl oz/a		FALL	A				
	2,4-D LV 4	3.8 EC		0.475 lb ae/a		1 pt/a		FALL	A				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		FALL	A				
	AUTHORITY XL	70 WG		0.0875 lb ai/a		2 oz/a		PRE	C				
	GRAMOXONE 2 SL	2 SL		1 lb ai/a		64 fl oz/a		PRE	C				
	COC (PRIME OIL)	100 SL		1 % v/v		1 % v/v		PRE	C				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		PRE	C				
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		POST	D				
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D				

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval										LAMAM	LAMAM	STEME	STEME	VIORA	VIORA
										4-2-13 Control Percent 134 DA-A 0 DA-B	5-1-13 Control Percent 29 DA-B 0 DA-C	4-2-13 Control Percent 134 DA-A 0 DA-B	5-1-13 Control Percent 29 DA-B 0 DA-C	4-2-13 Control Percent 134 DA-A 0 DA-B	5-1-13 Control Percent 29 DA-B 0 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate	Growth Unit	Appl Stage Code						
8	VALOR XLT	40.3	WG	0.0378	lb ai/a	1.5	oz/a	FALL	A	99 a	99 a	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	FALL	A						
	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	FALL	A						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	FALL	A						
	VALOR XLT	40.3	WG	0.0378	lb ai/a	1.5	oz/a	PRE	C						
	GRAMOXONE 2 SL	2	SL	1	lb ai/a	64	fl oz/a	PRE	C						
	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	PRE	C						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	PRE	C						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						
9	AUTHORITY XL	70	WG	0.0875	lb ai/a	2	oz/a	EPP30	B		99 a		99 a		99 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	EPP30	B						
	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	EPP30	B						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	EPP30	B						
	AUTHORITY XL	70	WG	0.0875	lb ai/a	2	oz/a	PRE	C						
	GRAMOXONE 2 SL	2	SL	1	lb ai/a	64	fl oz/a	PRE	C						
	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	PRE	C						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	PRE	C						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						
10	VALOR XLT	40.3	WG	0.0378	lb ai/a	1.5	oz/a	EPP30	B		99 a		99 a		99 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	EPP30	B						
	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	EPP30	B						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	EPP30	B						
	VALOR XLT	40.3	WG	0.0378	lb ai/a	1.5	oz/a	PRE	C						
	GRAMOXONE 2 SL	2	SL	1	lb ai/a	64	fl oz/a	PRE	C						
	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	PRE	C						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	PRE	C						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						
11	AUTHORITY XL	70	WG	0.175	lb ai/a	4	oz/a	EPP30	B		99 a		99 a		99 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	EPP30	B						
	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	EPP30	B						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	EPP30	B						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						
12	AUTHORITY XL	70	WG	0.35	lb ai/a	8	oz/a	EPP30	B		99 a		99 a		99 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	EPP30	B						
	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	EPP30	B						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	EPP30	B						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						
13	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	EPP30	B		99 a		99 a		99 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	EPP30	B						
	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	EPP30	B						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	EPP30	B						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						
14	VALOR XLT	40.3	WG	0.101	lb ai/a	4	oz/a	EPP30	B		99 a		99 a		99 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	EPP30	B						
	2,4-D LV 4	3.8	EC	0.475	lb ae/a	1	pt/a	EPP30	B						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	EPP30	B						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						
15	AUTHORITY XL	70	WG	0.175	lb ai/a	4	oz/a	PRE	C						
	GRAMOXONE 2 SL	2	SL	1	lb ai/a	64	fl oz/a	PRE	C						
	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	PRE	C						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	PRE	C						
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	D						
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	POST	D						

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code							LAMAM	LAMAM	STEME	STEME	VIORA	VIORA
Crop Code							4-2-13	5-1-13	4-2-13	5-1-13	4-2-13	5-1-13
Rating Date							Control	Control	Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit							134 DA-A	29 DA-B	134 DA-A	29 DA-B	134 DA-A	29 DA-B
Rating Timing							0 DA-B	0 DA-C	0 DA-B	0 DA-C	0 DA-B	0 DA-C
Trt-Eval Interval												
Trt Treatment No. Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit Stage	Appl Code					
16 AUTHORITY XL	70 WG		0.35 lb ai/a	8 oz/a		PRE C						
GRAMOXONE 2 SL	2 SL		1 lb ai/a	64 fl oz/a		PRE C						
COC (PRIME OIL)	100 SL		1 % v/v	1 % v/v		PRE C						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		PRE C						
ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST D						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST D						
17 VALOR XLT	40.3 WG		0.0756 lb ai/a	3 oz/a		PRE C						
GRAMOXONE 2 SL	2 SL		1 lb ai/a	64 fl oz/a		PRE C						
COC (PRIME OIL)	100 SL		1 % v/v	1 % v/v		PRE C						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		PRE C						
ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST D						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST D						
18 VALOR XLT	40.3 WG		0.101 lb ai/a	4 oz/a		PRE C						
GRAMOXONE 2 SL	2 SL		1 lb ai/a	64 fl oz/a		PRE C						
COC (PRIME OIL)	100 SL		1 % v/v	1 % v/v		PRE C						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		PRE C						
ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST D						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST D						
19 ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL A	98 b	97	96 b	91 b	87 b	63 b
2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL A						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL A						
ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		POST D						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST D						
20 ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		EPP30 B		99		98 a		98 a
2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		EPP30 B						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		EPP30 B						
ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		POST D						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST D						
21 GRAMOXONE 2 SL	2 SL		1 lb ai/a	64 fl oz/a		PRE C						
COC (PRIME OIL)	100 SL		1 % v/v	1 % v/v		PRE C						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		PRE C						
ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		POST D						
N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST D						
LSD (P=.05)							0.7	0.0	0.7	3.9	1.5	9.6
Standard Deviation							0.4	0.0	0.4	2.3	0.8	5.8
CV							0.39	0.0	0.39	2.39	0.86	5.98
Replicate F							1.000	0.000	1.000	0.895	1.000	1.205
Replicate Prob(F)							0.3897	1.0000	0.3897	0.4191	0.3897	0.3137
Treatment F							4.000	0.000	16.000	2.351	64.474	7.053
Treatment Prob(F)							0.0088	1.0000	0.0001	0.0226	0.0001	0.0001

Southern Illinois University

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							AMATA-HR 5-1-13 Control Percent 29 DA-B 0 DA-C	AMATA-HR 6-3-13 Control Percent 33 DA-C 0 DA-D	AMATA-HR 7-1-13 Control Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	AUTHORITY XL	70 WG		0.175 lb ai/a	4 oz/a		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D	
2	AUTHORITY XL	70 WG		0.35 lb ai/a	8 oz/a		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D	
3	VALOR XLT	40.3 WG		0.0756 lb ai/a	3 oz/a		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D	
4	VALOR XLT	40.3 WG		0.101 lb ai/a	4 oz/a		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D	
5	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A	
	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		EPP30	B	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		EPP30	B	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		EPP30	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		EPP30	B	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D	
6	VALOR XLT	40.3 WG		0.0378 lb ai/a	1.5 oz/a		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A	
	VALOR XLT	40.3 WG		0.0378 lb ai/a	1.5 oz/a		EPP30	B	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		EPP30	B	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		EPP30	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		EPP30	B	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D	
7	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		FALL	A	
	ROUNDUP POWERMAX	4.5 SL		1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8 EC		0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		FALL	A	
	AUTHORITY XL	70 WG		0.0875 lb ai/a	2 oz/a		PRE	C	
	GRAMOXONE 2 SL	2 SL		1 lb ai/a	64 fl oz/a		PRE	C	
	COC (PRIME OIL)	100 SL		1 % v/v	1 % v/v		PRE	C	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		PRE	C	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		POST	D	

Southern Illinois University

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								AMATA-HR 5-1-13 Control Percent 29 DA-B 0 DA-C	AMATA-HR 6-3-13 Control Percent 33 DA-C 0 DA-D	AMATA-HR 7-1-13 Control Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
8	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a	FALL	A			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a	FALL	A			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a	FALL	A			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	FALL	A			
	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a	PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
								60 b	76 cd	32 efg
9	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	EPP30	B			
	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a	PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
								94 a	90 ab	45 cd
10	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	EPP30	B			
	VALOR XLT	40.3	WG	0.0378 lb ai/a	1.5 oz/a	PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
								93 a	78 cd	37 c-f
11	AUTHORITY XL	70	WG	0.175 lb ai/a	4 oz/a	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
								99 a	40 g	20 gh
12	AUTHORITY XL	70	WG	0.35 lb ai/a	8 oz/a	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
								99 a	65 e	30 fg
13	VALOR XLT	40.3	WG	0.0756 lb ai/a	3 oz/a	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
								98 a	42 fg	13 hi
14	VALOR XLT	40.3	WG	0.101 lb ai/a	4 oz/a	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a	EPP30	B			
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a	EPP30	B			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	EPP30	B			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
								99 a	52 f	20 gh
15	AUTHORITY XL	70	WG	0.175 lb ai/a	4 oz/a	PRE	C			
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a	PRE	C			
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v	PRE	C			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	D			
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	D			
									90 ab	60 b

Southern Illinois University

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							AMATA-HR 5-1-13 Control Percent 29 DA-B 0 DA-C	AMATA-HR 6-3-13 Control Percent 33 DA-C 0 DA-D	AMATA-HR 7-1-13 Control Percent 28 DA-D
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
16	AUTHORITY XL	70	WG	0.35 lb ai/a	8 oz/a		PRE	C	
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C	
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C	
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D	97 a
17	VALOR XLT	40.3	WG	0.0756 lb ai/a	3 oz/a		PRE	C	
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C	
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C	
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D	81 bc
18	VALOR XLT	40.3	WG	0.101 lb ai/a	4 oz/a		PRE	C	
	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C	
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C	
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST	D	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D	85 bc
19	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		FALL	A	
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		FALL	A	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		FALL	A	
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D	0 d
20	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B	
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30	B	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30	B	
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D	0 k
21	GRAMOXONE 2 SL	2	SL	1 lb ai/a	64 fl oz/a		PRE	C	
	COC (PRIME OIL)	100	SL	1 % v/v	1 % v/v		PRE	C	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE	C	
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		POST	D	
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST	D	0 k
LSD (P=.05)							11.4	10.2	12.8
Standard Deviation							6.8	6.2	7.7
CV							9.9	13.75	28.47
Replicate F							0.100	0.130	2.054
Replicate Prob(F)							0.9052	0.8782	0.1416
Treatment F							71.430	101.282	24.122
Treatment Prob(F)							0.0001	0.0001	0.0001

Timing of Fall-Applied Residual Herbicides for Weed Control in No-Till Soybean.

Trial ID: 13-FagerS-ISA-Fall Location: Murphysboro, IL Trial Year: 2013
Investigator: Bryan Young

Trial Comments

1. Protocol: ISA (Univ of IL).
2. Ratings: CI at 0 and 28 DA-D. WC at B, C, and D timings for all treated plots; WC 28 DA-D.
3. Yield?
4. For the FALL (A) timing; Roundup Powermax, 2, 4-D LV4, and AMS could be a blanket of entire study area, all plots 10 ft wide. Was applied as a blanket 11-14-12.
5. For the PRE (C) timing; Consider Gramoxone 2 SL as a replacement for Roundup Powermax if Marestalk is present. Gramoxone was used, treatment list has been modified to reflect the change.
6. ERICA-HR = Herbicide-resistant marestalk (glyphosate).
AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
7. Following the FALL application the first rainfall event, beginning 3 day later, was 0.11 inch over 5 days.
Following the EPP30 application the first rainfall event, beginning 8 days later, was 0.85 inch over 2 days.
Following the PRE application the first rainfall event, beginning 1 day later, was 2.08 inch over 4 days.
8. By 6-3-13, LAMAM, STEME, and VIORA in the nontreated plots were senescing naturally and could no longer be evaluated.
9. Harvested 10-18-13, (2) 30 inch rows by 27 ft.