

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

**General Trial Information**

**Study Director:** Bryan Young  
**Investigator:** Bryan Young **Title:** Professor

**Trial Status:** F - one-year/final  
**Initiation Date:** 11-23-11

**Trial Location**

**City:** Murphysboro  
**State/Prov.:** IL  
**Postal Code:** 62966  
**Country:** USA

**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.

**Personnel**

**Study Director:** Bryan Young  
**Investigator:** Bryan Young **Title:** Professor  
**Affiliation:** Southern Illinois University  
**Address:** 1205 Lincoln Drive - AG 176 - MC 4415  
**Location:** Carbondale IL  
**Postal Code:** 62901 **E-mail:** bgyoung@siu.edu  
**Phone No.:** 618-453-7679 **Mobile No.:** 618-713-6471

**Crop Description**

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** AG3832 **Description:** RR2Y  
**BBCH Scale:** BSOY **Planting Date:** 4-29-12  
**Planting Method:** SEEDED Seeded **Rate, Unit:** 155000 S/A  
**Depth, Unit:** 2 IN  
**Row Spacing, Unit:** 30 IN

**Pest Description**

**Pest 1 Type:** W **Code:** ERICA - Conyza canadensis (L.) Crong.  
**Common Name:** horseweed  
**Description:** glyphosate-resistant marestail

**Pest 2 Type:** W **Code:** AMATA - Amaranthus rudis Sauer  
**Common Name:** waterhemp, common  
**Description:** glyphosate-resistant waterhemp

**Pest 3 Type:** W **Code:** VIORA - Viola bicolor Pursh  
**Common Name:** pansy, field

**Site and Design**

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 30 FT  
**Plot Area, Unit:** 300 FT2 **Tillage Type:** NOTILL no-till  
**Replications:** 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

No.	Previous Crop	Year
1.	GLXMA	2011

**Maintenance**

No.	Maintenance Treatment Name
1.	N 0 LB/A, P205 0 LB/A, K20 0 LB/A

**Soil Description**

**% OM:** 1.87 **Texture:** SIL SILT LOAM  
**pH:** 5.5 **Soil Name:** ALVIN  
**CEC:** 7.06

**Additional Measured Elements**

Element	Unit
P1	LB/A
K	LB/A

**Moisture and Weather Conditions**

**Overall Moisture Conditions:** BELNOR below normal  
**Closest Weather Station:** SOUTHERN IL AIRPORT (93810) **Distance, Unit:** 3.5 MI

## Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-10-12					7	DAY	30.1	79.2	F
2.	4-13-12	0.22	IN	RAIN	rain					
3.	4-15-12	0.47	IN	RAIN	rain					
4.	4-16-12	0.29	IN	RAIN	rain					
5.	4-17-12					7	DAY	36.7	75.6	F
6.	4-20-12	0.13	IN	RAIN	rain					
7.	4-22-12	0.13	IN	RAIN	rain					
8.	4-24-12					7	DAY	43.7	80.9	F
9.	4-27-12	0.04	IN	RAIN	rain					
10.	4-30-12	0.55	IN	RAIN	rain					
11.	5-1-12					7	DAY	59.1	91.3	F
12.	5-6-12	0.14	IN	RAIN	rain					
13.	5-7-12	0.07	IN	RAIN	rain					
14.	5-8-12					7	DAY	43.3	79	F
15.	5-15-12					7	DAY	44.9	89.1	F
16.	5-20-12	0.93	IN	RAIN	rain					
17.	5-22-12					7	DAY	45.5	92.8	F
18.	5-29-12					7	DAY	46.3	89.8	F
19.	5-30-12	0.02	IN	RAIN	rain					
20.	5-31-12	0.14	IN	RAIN	rain					
21.	6-4-12	0.49	IN	RAIN	rain					
22.	6-5-12					7	DAY	48.5	88.8	F
23.	6-11-12	0.21	IN	RAIN	rain					
24.	6-12-12					7	DAY	49.8	91.1	F
25.	6-17-12	0.03	IN	RAIN	rain					
26.	6-19-12					7	DAY	55.4	96.4	F
27.	6-26-12					7	DAY	51.1	105.4	F
28.	7-3-12					7	DAY	71.1	105	F
29.	7-8-12	0.07	IN	RAIN	rain					
30.	7-9-12	0.12	IN	RAIN	rain					
31.	7-10-12					7	DAY	65.9	93.9	F
32.	7-14-12	0.02	IN	RAIN	rain					
33.	7-17-12					7	DAY	60	102.3	F
34.	7-17-12	0.03	IN	RAIN	rain					
35.	7-24-12					7	DAY	64.1	102.1	F
36.	7-26-12	1.41	IN	RAIN	rain					
37.	7-29-12	0.24	IN	RAIN	rain					
38.	7-31-12					7	DAY	62.7	97.9	F
39.	8-2-12	0.08	IN	RAIN	rain					
40.	8-4-12	3.29	IN	RAIN	rain					
41.	8-5-12	0.21	IN	RAIN	rain					
42.	8-7-12					7	DAY	54.1	97.2	F

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Application Description				
	A	B	C	D
Application Date:	11-23-11	3-29-12	4-30-12	5-31-12
Time of Day:	15:30	11:30	11:00	9:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	FALL	EPP30	PRE	POST
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	LAH	LAH	LAH	JRK
Air Temperature, Unit:	50 F	75 F	78 F	79 F
% Relative Humidity:	81	40	66	61
Wind Velocity, Unit:	0 MPH	1 MPH	3 MPH	2 MPH
Wind Direction:	NA	N	S	NE
Dew Presence (Y/N):	N no	N no	N no	N no
Soil Temperature, Unit:	51 F	66 F	69 F	70 F
Soil Moisture:	ABONOR	NORMAL	NORMAL	NORMAL
% Cloud Cover:	100	30	100	50
Next Rain Occurred On:	11-26-11	4-3-12	5-6-12	6-4-12

Crop Stage At Each Application				
	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	DESC	DESC	DESC
Stage Majority, Percent:	NA	NA	NA	V4
Stage Minimum, Percent:				V2
Stage Maximum, Percent:				V4
Height, Unit:				8 IN
Height Minimum, Maximum:				4 8

Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	ERICA W DESC	ERICA W DESC	ERICA W DESC	ERICA W DESC
Stage Majority, Percent:	NA	4	12	40
Stage Minimum, Percent:		Coty	Coty	10
Stage Maximum, Percent:		15	25	60
Height, Unit:		0.5 IN	3 IN	8 IN
Height Minimum, Maximum:		0.5 1	0.25 5	2 16
Density, Unit:		2 FT2	3 FT2	3 FT2
Pest 2 Code, Type, Scale:	AMATA W DESC	AMATA W DESC	AMATA W DESC	AMATA W DESC
Stage Majority, Percent:	NA	2	8	30
Stage Minimum, Percent:		Coty	Coty	4
Stage Maximum, Percent:		4	20	40
Height, Unit:		0.5 IN	3 IN	12 IN
Height Minimum, Maximum:		0.5 1	0.25 6	1 20
Density, Unit:		1 FT2	1 FT2	3 FT2
Pest 3 Code, Type, Scale:	VIORA W DESC	VIORA W DESC	VIORA W DESC	VIORA W DESC
Stage Majority, Percent:	NA	NA	NA	NA

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

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								GLXMA 10-16-12 Yield bu/A	GLXMA 4-29-12 Injury Percent	GLXMA 6-28-12 Injury Percent		
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	1 e	0 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			
	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	1 e	0 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			
	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			3	oz/a	FALL	A	2 de	0 a	0 a
	VALOR SX	51	WG	0.056	lb ai/a			FALL	A			
	CLASSIC	25	WG	0.0194	lb ai/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			4	oz/a	FALL	A	0 e	0 a	0 a
	VALOR SX	51	WG	0.075	lb ai/a			FALL	A			
	CLASSIC	25	WG	0.0258	lb ai/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	13 a-e	0 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			
	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			1.5	oz/a	FALL	A	27 a	0 a	0 a
	VALOR SX	51	WG	0.028	lb ai/a			FALL	A			
	CLASSIC	25	WG	0.0097	lb ai/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			1.5	oz/a	EPP30	B			
	VALOR SX	51	WG	0.028	lb ai/a			EPP30	B			
	CLASSIC	25	WG	0.0097	lb ai/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			

Means followed by same letter do not significantly differ (P=0.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code										GLXMA 10-16-12 Yield bu/A	GLXMA 4-29-12 Injury Percent	GLXMA 6-28-12 Injury Percent
Crop Code												
Rating Date												
Rating Type												
Rating Unit												
Rating Timing												
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
7	AUTHORITY XL	70	WG	0.0875	lb ai/a	2	oz/a	FALL	A	11 b-e	0 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			
	AUTHORITY XL	70	WG	0.0875	lb ai/a	2	oz/a	PRE	C			
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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			
8	VALOR XLT	40.3	WG			1.5	oz/a	FALL	A	19 abc	0 a	0 a
	VALOR SX	51	WG	0.028	lb ai/a			FALL	A			
	CLASSIC	25	WG	0.0097	lb ai/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			1.5	oz/a	PRE	C			
	VALOR SX	51	WG	0.028	lb ai/a			PRE	C			
	CLASSIC	25	WG	0.0097	lb ai/a			PRE	C			
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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	19 abc	0 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			
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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			1.5	oz/a	EPP30	B	21 ab	0 a	0 a
	VALOR SX	51	WG	0.028	lb ai/a			EPP30	B			
	CLASSIC	25	WG	0.0097	lb ai/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			1.5	oz/a	PRE	C			
	VALOR SX	51	WG	0.028	lb ai/a			PRE	C			
	CLASSIC	25	WG	0.0097	lb ai/a			PRE	C			
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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 a-e	0 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	17 a-d	0 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			

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								GLXMA 10-16-12 Yield bu/A	GLXMA 4-29-12 Injury Percent	GLXMA 6-28-12 Injury Percent		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Unit	Growth Stage	Appl Code			
13	VALOR XLT	40.3	WG			3	oz/a	EPP30 B		23 ab	0 a	0 a
	VALOR SX	51	WG	0.056	lb ai/a			EPP30 B				
	CLASSIC	25	WG	0.0194	lb ai/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				
14	VALOR XLT	40.3	WG			4	oz/a	EPP30 B		19 abc	0 a	0 a
	VALOR SX	51	WG	0.075	lb ai/a			EPP30 B				
	CLASSIC	25	WG	0.0258	lb ai/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				
15	AUTHORITY XL	70	WG	0.175	lb ai/a	4	oz/a	PRE C		15 a-e	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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				
16	AUTHORITY XL	70	WG	0.35	lb ai/a	8	oz/a	PRE C		9 b-e	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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			3	oz/a	PRE C		1 e	0 a	0 a
	VALOR SX	51	WG	0.056	lb ai/a			PRE C				
	CLASSIC	25	WG	0.0194	lb ai/a			PRE C				
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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			4	oz/a	PRE C		5 cde	0 a	0 a
	VALOR SX	51	WG	0.075	lb ai/a			PRE C				
	CLASSIC	25	WG	0.0258	lb ai/a			PRE C				
	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	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		1 e	0 a	0 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		1 e	0 a	0 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				

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code								GLXMA	GLXMA	GLXMA		
Crop Code								10-16-12	4-29-12	6-28-12		
Rating Date								Yield	Injury	Injury		
Rating Type								bu/A	Percent	Percent		
Rating Unit												
Rating Timing												
Trt-Eval Interval									-1 DA-C	28 DA-D		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Stage	Appl Code			
21	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a		44 fl oz/a		PRE	C	2 de	0 a	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)								15.9	0.0	0.0		
Standard Deviation								9.7	0.0	0.0		
CV								91.12	0.0	0.0		
Replicate F								2.175	0.000	0.000		
Replicate Prob(F)								0.1268	1.0000	1.0000		
Treatment F								2.586	0.000	0.000		
Treatment Prob(F)								0.0052	1.0000	1.0000		

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code								ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR		
Crop Code								3-29-12	4-29-12	5-31-12	6-28-12		
Rating Date								Control	Control	Control	Control		
Rating Type								Percent	Percent	Percent	Percent		
Rating Unit								0 DA-B	-1 DA-C	0 DA-D	28 DA-D		
Rating Timing													
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code				
1	AUTHORITY XL	70	WG	0.175	lb ai/a	4	oz/a	FALL	A	99 a	85 b	63 f	48 d
	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	95 a	88 b	80 b
	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			3	oz/a	FALL	A	98 a	85 b	73 de	63 c
	VALOR SX	51	WG	0.056	lb ai/a			FALL	A				
	CLASSIC	25	WG	0.0194	lb ai/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			4	oz/a	FALL	A	98 a	93 a	78 cde	67 c
	VALOR SX	51	WG	0.075	lb ai/a			FALL	A				
	CLASSIC	25	WG	0.0258	lb ai/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	93 b	99 a	98 a	97 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			1.5	oz/a	FALL	A	96 ab	99 a	98 a	97 a
	VALOR SX	51	WG	0.028	lb ai/a			FALL	A				
	CLASSIC	25	WG	0.0097	lb ai/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			1.5	oz/a	EPP30	B				
	VALOR SX	51	WG	0.028	lb ai/a			EPP30	B				
	CLASSIC	25	WG	0.0097	lb ai/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				



Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code							ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR		
Crop Code							3-29-12	4-29-12	5-31-12	6-28-12		
Rating Date							Control	Control	Control	Control		
Rating Type							Percent	Percent	Percent	Percent		
Rating Unit							0 DA-B	-1 DA-C	0 DA-D	28 DA-D		
Rating Timing												
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Stage	Appl Code				
7	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		FALL A	A	93 b	57 c	80 b-e	65 c
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		FALL A	A				
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		FALL A	A				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		FALL A	A				
	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		PRE C	C				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST D	D				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST D	D				
8	VALOR XLT	40.3	WG		1.5 oz/a		FALL A	A	97 a	60 c	85 bc	71 bc
	VALOR SX	51	WG	0.028 lb ai/a			FALL A	A				
	CLASSIC	25	WG	0.0097 lb ai/a			FALL A	A				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		FALL A	A				
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		FALL A	A				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		FALL A	A				
	VALOR XLT	40.3	WG		1.5 oz/a		PRE C	C				
	VALOR SX	51	WG	0.028 lb ai/a			PRE C	C				
	CLASSIC	25	WG	0.0097 lb ai/a			PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		PRE C	C				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST D	D				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST D	D				
9	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		EPP30 B	B		99 a	98 a	98 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30 B	B				
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30 B	B				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30 B	B				
	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		PRE C	C				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST D	D				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST D	D				
10	VALOR XLT	40.3	WG		1.5 oz/a		EPP30 B	B		99 a	98 a	98 a
	VALOR SX	51	WG	0.028 lb ai/a			EPP30 B	B				
	CLASSIC	25	WG	0.0097 lb ai/a			EPP30 B	B				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30 B	B				
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30 B	B				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30 B	B				
	VALOR XLT	40.3	WG		1.5 oz/a		PRE C	C				
	VALOR SX	51	WG	0.028 lb ai/a			PRE C	C				
	CLASSIC	25	WG	0.0097 lb ai/a			PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		PRE C	C				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		PRE C	C				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST D	D				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST D	D				
11	AUTHORITY XL	70	WG	0.175 lb ai/a	4 oz/a		EPP30 B	B		99 a	99 a	98 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30 B	B				
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30 B	B				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30 B	B				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST D	D				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST D	D				
12	AUTHORITY XL	70	WG	0.35 lb ai/a	8 oz/a		EPP30 B	B		99 a	99 a	98 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30 B	B				
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		EPP30 B	B				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		EPP30 B	B				
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		POST D	D				
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		POST D	D				

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code							ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
Crop Code							3-29-12	4-29-12	5-31-12	6-28-12
Rating Date							Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent
Rating Unit							0 DA-B	-1 DA-C	0 DA-D	28 DA-D
Rating Timing										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code		
13	VALOR XLT	40.3	WG			3 oz/a	EPP30 B		99 a	98 a
	VALOR SX	51	WG	0.056 lb ai/a			EPP30 B			
	CLASSIC	25	WG	0.0194 lb ai/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			
14	VALOR XLT	40.3	WG			4 oz/a	EPP30 B		99 a	99 a
	VALOR SX	51	WG	0.075 lb ai/a			EPP30 B			
	CLASSIC	25	WG	0.0258 lb ai/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			
15	AUTHORITY XL	70	WG	0.175 lb ai/a		4 oz/a	PRE C			77 cde
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a		44 fl oz/a	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			
16	AUTHORITY XL	70	WG	0.35 lb ai/a		8 oz/a	PRE C			82 bcd
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a		44 fl oz/a	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			3 oz/a	PRE C			72 ef
	VALOR SX	51	WG	0.056 lb ai/a			PRE C			
	CLASSIC	25	WG	0.0194 lb ai/a			PRE C			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a		44 fl oz/a	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			4 oz/a	PRE C			79 b-e
	VALOR SX	51	WG	0.075 lb ai/a			PRE C			
	CLASSIC	25	WG	0.0258 lb ai/a			PRE C			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a		44 fl oz/a	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	93 b	32 d	13 g
	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		96 a	80 b-e
	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			

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

										ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR			
										3-29-12 Control Percent	4-29-12 Control Percent	5-31-12 Control Percent	6-28-12 Control Percent			
										0 DA-B	-1 DA-C	0 DA-D	28 DA-D			
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code						
21	ROUNDUP POWERMAX N-PAK AMS	4.5 SL		1.55 lb ae/a		44 fl oz/a		PRE	C		73 de			67 c		
	ROUNDUP POWERMAX N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		PRE	C							
	ROUNDUP POWERMAX N-PAK AMS	4.5 SL		1.55 lb ae/a		44 fl oz/a		POST	D							
	ROUNDUP POWERMAX N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		POST	D							
LSD (P=.05)											3.0	8.2	9.0	11.1		
Standard Deviation											1.7	4.9	5.4	6.7		
CV											1.8	5.62	6.58	8.97		
Replicate F											1.262	4.661	4.238	3.078		
Replicate Prob(F)											0.3098	0.0173	0.0214	0.0571		
Treatment F											5.966	50.392	38.809	32.013		
Treatment Prob(F)											0.0012	0.0001	0.0001	0.0001		

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall  
 Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code								AMATA-HR	AMATA-HR	AMATA-HR	AMATA-HR	VIORA		
Crop Code								3-29-12	4-29-12	5-31-12	6-28-12	3-29-12		
Rating Date								Control	Control	Control	Control	Control		
Rating Type								Percent	Percent	Percent	Percent	Percent		
Rating Unit														
Rating Timing														
Trt-Eval Interval								0 DA-B	-1 DA-C	0 DA-D	28 DA-D	0 DA-B		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code					
1	AUTHORITY XL	70	WG	0.175	lb ai/a	4	oz/a	FALL	A	98 a	33 c	25 f	18 gh	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	98 a	52 b	20 fg	12 hi	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			3	oz/a	FALL	A	97 a	30 c	18 fg	13 hi	99 a
	VALOR SX	51	WG	0.056	lb ai/a			FALL	A					
	CLASSIC	25	WG	0.0194	lb ai/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			4	oz/a	FALL	A	98 a	28 c	12 g	10 hi	99 a
	VALOR SX	51	WG	0.075	lb ai/a			FALL	A					
	CLASSIC	25	WG	0.0258	lb ai/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	95 a	95 a	66 d	48 f	97 bc
	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			1.5	oz/a	FALL	A	96 a	97 a	52 e	32 g	98 b
	VALOR SX	51	WG	0.028	lb ai/a			FALL	A					
	CLASSIC	25	WG	0.0097	lb ai/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			1.5	oz/a	EPP30	B					
	VALOR SX	51	WG	0.028	lb ai/a			EPP30	B					
	CLASSIC	25	WG	0.0097	lb ai/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					

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code							AMATA-HR	AMATA-HR	AMATA-HR	AMATA-HR	VIORA
Crop Code							3-29-12	4-29-12	5-31-12	6-28-12	3-29-12
Rating Date							Control	Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent	Percent
Rating Unit							0 DA-B	-1 DA-C	0 DA-D	28 DA-D	0 DA-B
Rating Timing											
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
7	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		FALL	A	96 a	7 ef	95 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		FALL	A			95 a
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1 pt/a		FALL	A			95 a
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		FALL	A			96 c
	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		PRE	C			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		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			
8	VALOR XLT	40.3	WG		1.5 oz/a		FALL	A	90 a	0 f	93 a
	VALOR SX	51	WG	0.028 lb ai/a			FALL	A			89 ab
	CLASSIC	25	WG	0.0097 lb ai/a			FALL	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		1.5 oz/a		PRE	C			
	VALOR SX	51	WG	0.028 lb ai/a			PRE	C			
	CLASSIC	25	WG	0.0097 lb ai/a			PRE	C			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		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		93 a	94 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			94 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			
	AUTHORITY XL	70	WG	0.0875 lb ai/a	2 oz/a		PRE	C			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		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		1.5 oz/a		EPP30	B		96 a	89 ab
	VALOR SX	51	WG	0.028 lb ai/a			EPP30	B			88 ab
	CLASSIC	25	WG	0.0097 lb ai/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		1.5 oz/a		PRE	C			
	VALOR SX	51	WG	0.028 lb ai/a			PRE	C			
	CLASSIC	25	WG	0.0097 lb ai/a			PRE	C			
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		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	80 bc
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			73 cd
	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	90 ab
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44 fl oz/a		EPP30	B			91 ab
	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			

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code							AMATA-HR	AMATA-HR	AMATA-HR	AMATA-HR	VIORA
Crop Code							3-29-12	4-29-12	5-31-12	6-28-12	3-29-12
Rating Date							Control	Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent	Percent
Rating Unit											
Rating Timing											
Trt-Eval Interval							0 DA-B	-1 DA-C	0 DA-D	28 DA-D	0 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Unit	Growth Stage	Appl Code			
13	VALOR XLT	40.3	WG		3	oz/a	EPP30 B		99 a	63 d	50 ef
	VALOR SX	51	WG	0.056 lb ai/a			EPP30 B				
	CLASSIC	25	WG	0.0194 lb ai/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				
14	VALOR XLT	40.3	WG		4	oz/a	EPP30 B		97 a	71 cd	63 de
	VALOR SX	51	WG	0.075 lb ai/a			EPP30 B				
	CLASSIC	25	WG	0.0258 lb ai/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				
15	AUTHORITY XL	70	WG	0.175 lb ai/a	4	oz/a	PRE C			94 a	91 ab
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	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				
16	AUTHORITY XL	70	WG	0.35 lb ai/a	8	oz/a	PRE C			94 a	94 a
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	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		3	oz/a	PRE C			93 a	86 abc
	VALOR SX	51	WG	0.056 lb ai/a			PRE C				
	CLASSIC	25	WG	0.0194 lb ai/a			PRE C				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	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		4	oz/a	PRE C			92 a	88 ab
	VALOR SX	51	WG	0.075 lb ai/a			PRE C				
	CLASSIC	25	WG	0.0258 lb ai/a			PRE C				
	ROUNDUP POWERMAX	4.5	SL	1.55 lb ae/a	44	fl oz/a	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		95 a	13 de	0 h
	2,4-D LV 4	3.8	EC	0.475 lb ae/a	1	pt/a	FALL A				13 hi
	N-PAK AMS	100	SL	2.5 % v/v	2.5	% v/v	FALL A				99 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		18 d	0 h	0 i
	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				

Southern Illinois University

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

Trial ID: 12-FagerS-ISA-Fall

Location: Murphysboro, IL

Investigator: Bryan Young

Pest Code										AMATA-HR	AMATA-HR	AMATA-HR	AMATA-HR	VIORA	
Crop Code										3-29-12	4-29-12	5-31-12	6-28-12	3-29-12	
Rating Date										Control	Control	Control	Control	Control	
Rating Type										Percent	Percent	Percent	Percent	Percent	
Rating Unit															
Rating Timing															
Trt-Eval Interval										0 DA-B	-1 DA-C	0 DA-D	28 DA-D	0 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code					
21	ROUNDUP POWERMAX	4.5	SL	1.55	lb ae/a	44	fl oz/a	PRE	C			72	cd	78	bc
	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)											5.1	9.8	10.4	14.2	0.9
Standard Deviation											3.0	5.9	6.3	8.6	0.5
CV											3.09	9.79	10.05	14.73	0.54
Replicate F											4.063	5.334	0.436	1.048	1.600
Replicate Prob(F)											0.0374	0.0104	0.6496	0.3601	0.2326
Treatment F											2.375	139.745	92.815	49.781	12.000
Treatment Prob(F)											0.0670	0.0001	0.0001	0.0001	0.0001

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

Trial ID: 12-FagerS-ISA-Fall  
Location: Murphysboro, IL

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.
5. For the PRE (C) timing; Consider Gramoxone 2 SL as a replacement for Roundup Powermax if Marestalk is present.
6. ERICA-HR = Herbicide-resistant marestalk (glyphosate).  
AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
7. Harvested 10-16-12, (2) 30 inch rows by 27 ft.