

Southern Illinois University

FMC Residuals Preemergence and Early Postemergence in Soybean.

Trial ID: 12-T1-S100  
 Location: Belleville Res. Center  
 Investigator: Bryan Young

General Trial Information	
<b>Study Director:</b> Bryan Young	<b>Title:</b> Professor
<b>Investigator:</b> Bryan Young	
<b>Trial Status:</b> F - one-year/final	
<b>Initiation Date:</b> 5-25-12	
Trial Location	
<b>City:</b> Belleville	
<b>State/Prov.:</b> IL	
<b>Postal Code:</b> 62221	
<b>Country:</b> USA	

<b>Objectives:</b> Evaluate crop response and residual weed control from FMC products and competitive products.
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Personnel	
<b>Study Director:</b> Bryan Young	<b>Title:</b> Professor
<b>Investigator:</b> Bryan Young	
<b>Affiliation:</b> Southern Illinois University	
<b>Address:</b> 1205 Lincoln Drive - AG 176 - MC 4415	
<b>Location:</b> Carbondale IL	
<b>Postal Code:</b> 62901	<b>E-mail:</b> bgyoung@siu.edu
<b>Phone No.:</b> 618-453-7679	<b>Mobile No.:</b> 618-713-6471

Crop Description	
<b>Crop 1:</b> GLXMA Glycine max Soybean	<b>Description:</b> RR2Y
<b>Variety:</b> AG3832	<b>Planting Date:</b> 5-25-12
<b>BBCH Scale:</b> BSOY	<b>Rate, Unit:</b> 75 LB/A
<b>Planting Method:</b> SEEDED Seeded	
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 30 IN	

Pest Description	
<b>Pest 1 Type:</b> W	<b>Code:</b> AMATA - Amaranthus rudis Sauer
	<b>Common Name:</b> waterhemp, common
<b>Pest 2 Type:</b> W	<b>Code:</b> PANDI - Panicum dichotomiflorum Michx.
	<b>Common Name:</b> panicum, fall
<b>Pest 3 Type:</b> W	<b>Code:</b> IPOHE - Ipomoea hederacea (L.) Jacq.
	<b>Common Name:</b> morningglory, ivyleaf

Site and Design	
<b>Plot Width, Unit:</b> 10 FT	<b>Site Type:</b> FIELD field
<b>Plot Length, Unit:</b> 27 FT	
<b>Plot Area, Unit:</b> 270 FT2	<b>Tillage Type:</b> REDTIL reduced-till
<b>Replications:</b> 4	<b>Study Design:</b> RACOB� Randomized Complete Block (RCB)

No.	Previous Crop	Year
1.	ZEAMD	2011

Maintenance	
<b>No.</b>	<b>Maintenance Treatment Name</b>
1.	N 0 LB/A, P205 50 LB/A, K20 100 LB/A

Soil Description	
<b>% OM:</b> 1.8	<b>Texture:</b> SIL SILT LOAM
<b>pH:</b> 6.6	<b>Soil Name:</b> BETHALTO
<b>CEC:</b> 9	

Additional Measured Elements		
Element	Quantity	Unit
P1	84	LB/A
K	336	LB/A

Moisture and Weather Conditions	
<b>Overall Moisture Conditions:</b>	BELNOR below normal
<b>Closest Weather Station:</b> ICN - Belleville IL	<b>Distance, Unit:</b> 0.5 MI

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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-24-12					7	DAY	42.6	74.3	F
2.	4-29-12	3.06	IN	RAIN	rain					
3.	4-30-12	0.66	IN	RAIN	rain					
4.	5-1-12	0.13	IN	RAIN	rain					
5.	5-1-12					7	DAY	33.5	76	F
6.	5-4-12	0.25	IN	RAIN	rain					
7.	5-7-12	0.29	IN	RAIN	rain					
8.	5-8-12					7	DAY	47.5	87.8	F
9.	5-15-12					7	DAY	37.7	81.3	F
10.	5-21-12	0.18	IN	RAIN	rain					
11.	5-22-12					7	DAY	47.6	82.3	F
12.	5-29-12					7	DAY	48.1	90	F
13.	5-30-12	0.07	IN	RAIN	rain					
14.	5-31-12	0.21	IN	RAIN	rain					
15.	6-5-12					7	DAY	50.2	90.1	F
16.	6-11-12	0.75	IN	RAIN	rain					
17.	6-12-12					7	DAY	52.4	93.6	F
18.	6-17-12	0.36	IN	RAIN	rain					
19.	6-19-12					7	DAY	56.3	94	F
20.	6-26-12					7	DAY	51.8	105.4	F
21.	7-3-12					7	DAY	68.9	104.7	F
22.	7-8-12	0.28	IN	RAIN	rain					
23.	7-10-12					7	DAY	63.4	95	F
24.	7-17-12					7	DAY	61	102.2	F
25.	7-24-12					7	DAY	61	103	F
26.	7-29-12	0.15	IN	RAIN	rain					
27.	7-31-12					7	DAY	60.2	99.1	F
28.	8-5-12	0.18	IN	RAIN	rain					
29.	8-7-12					7	DAY	50.2	99.8	F
30.	8-13-12	0.88	IN	RAIN	rain					
31.	8-14-12					7	DAY	51	95.6	F
32.	8-17-12	1.19	IN	RAIN	rain					
33.	8-21-12					7	DAY	54.7	94.2	F
34.	8-26-12	0.04	IN	RAIN	rain					
35.	8-27-12	1.66	IN	RAIN	rain					
36.	8-31-12	0.11	IN	RAIN	rain					

Application Description

	A	B
Application Date:	5-25-12	6-18-12
Time of Day:	12:00	8:30
Application Method:	Spray	Spray
Application Timing:	PRE	V1-V2
Application Placement:	BROFOL	BROFOL
Applied By:	LAH	RJW
Air Temperature, Unit:	87 F	80 F
% Relative Humidity:	55	67
Wind Velocity, Unit:	2 MPH	6 MPH
Wind Direction:	S	SW
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	69 F	78 F
Soil Moisture:	BELNOR	NORMAL
% Cloud Cover:	10	0
Next Rain Occurred On:	5-31-12	7-8-12

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Crop Stage At Each Application				
	A		B	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:	DESC		DESC	
Stage Majority, Percent:	NA		V2	
Stage Minimum, Percent:			V1	
Stage Maximum, Percent:			V2	
Height, Unit:			4	IN
Height Minimum, Maximum:			3	4

Pest Stage At Each Application				
	A		B	
Pest 1 Code, Type, Scale:	AMATA	W DESC	AMATA	W DESC
Stage Majority, Percent:	NA		NA	
Pest 2 Code, Type, Scale:	PANDI	W DESC	PANDI	W DESC
Stage Majority, Percent:	NA		NA	
Pest 3 Code, Type, Scale:	IPOHE	W DESC	IPOHE	W DESC
Stage Majority, Percent:	NA		Coty	
Stage Minimum, Percent:			Coty	
Stage Maximum, Percent:			16	
Height, Unit:			0.5	IN
Height Minimum, Maximum:			0.5	3
Density, Unit:			5	FT2

Application Equipment				
	A		B	
Appl. Equipment:	CO2 sprayer		CO2 sprayer	
Equipment Type:	BACSPR		BACSPR	
Operation Pressure, Unit:	30	PSI	30	PSI
Nozzle Type:	XR		XR	
Nozzle Size:	8002		8002	
Boom Length, Unit:	7.5	FT	7.5	FT
Spray Volume, Unit:	15	GPA	15	GPA

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Trial ID: 12-T1-S100

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							GLXMA 10-30-12 Moisture Percent	GLXMA 10-30-12 Test wt. lb/bu	GLXMA 10-30-12 Yield bu/A
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	AUTHORITY FIRST SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.28 lb ai/a 0.125 lb ai/a 1 % v/v	6.4 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	11.6 abc 57.9 a 68 a
2	AUTHORITY XL SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.284 lb ai/a 0.125 lb ai/a 1 % v/v	6.5 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	11.4 a-d 58.2 a 60 abc
3	VALOR XLT SELECT COC (PRIME OIL)	40.3 WG 2 EC 100 SL		0.126 lb ai/a 0.125 lb ai/a 1 % v/v	5.0 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	11.3 bcd 58.2 a 65 ab
4	FIERCE SELECT COC (PRIME OIL)	76 WG 2 EC 100 SL		0.143 lb ai/a 0.125 lb ai/a 1 % v/v	3 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	11.7 ab 57.9 a 51 bc
5	PREFIX SELECT COC (PRIME OIL)	5.29 EC 2 EC 100 SL		1.32 lb ai/a 0.125 lb ai/a 1 % v/v	2 pt/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	11.7 ab 57.9 a 48 c
6	OPTILL SELECT COC (PRIME OIL)	68 WG 2 EC 100 SL		0.085 lb ai/a 0.125 lb ai/a 1 % v/v	2 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	11.4 a-d 58.2 a 61 abc
7	AUTHORITY XL ANTHEM ROUNDUP POWERMAX N-PAK AMS	70 WG 2.15 SE 4.5 SL 100 SL		0.175 lb ai/a 0.101 lb ai/a 0.77 lb ae/a 2.5 % v/v	4 oz/a 6 fl oz/a 22 fl oz/a 2.5 % v/v		PRE V1-V2 V1-V2 V1-V2	A B B B	11.1 cd 58.3 a 71 a
8	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.118 lb ai/a 0.77 lb ae/a 2.5 % v/v	7 fl oz/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B	11.1 d 58.4 a 68 a
9	PREFIX ROUNDUP POWERMAX N-PAK AMS	5.29 EC 4.5 SL 100 SL		1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v	2 pt/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B	11.8 a 57.7 a 64 ab
10	FLEXSTAR GT 3.5 N-PAK AMS	2.82 SL 100 SL		1.23 lb ae/a 2.5 % v/v	3.5 pt/a 2.5 % v/v		V1-V2 V1-V2	B B	11.1 d 58.4 a 68 a
11	EXTREME N-PAK AMS	2.17 SL 100 SL		0.81 lb ai/a 2.5 % v/v	3 pt/a 2.5 % v/v		V1-V2 V1-V2	B B	11.2 bcd 58.2 a 69 a
12	WARRANT ROUNDUP POWERMAX N-PAK AMS	3 CS 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v	3 pt/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B	11.1 cd 58.4 a 71 a
13	AUTHORITY XL PREFIX ROUNDUP POWERMAX N-PAK AMS	70 WG 5.29 EC 4.5 SL 100 SL		0.175 lb ai/a 1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v	4 oz/a 2 pt/a 22 fl oz/a 2.5 % v/v		PRE V1-V2 V1-V2 V1-V2	A B B B	11.0 d 58.4 a 73 a
14	AUTHORITY XL SHARPEN SELECT COC (PRIME OIL)	70 WG 2.85 SC 2 EC 100 SL		0.175 lb ai/a 0.0223 lb ai/a 0.125 lb ai/a 1 % v/v	4 oz/a 1 fl oz/a 8 fl oz/a 1 % v/v		PRE PRE V1-V2 V1-V2	A A B B	11.2 bcd 58.3 a 64 ab

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								GLXMA 10-30-12 Moisture Percent	GLXMA 10-30-12 Test wt. lb/bu	GLXMA 10-30-12 Yield bu/A
Crop Code										
Rating Date										
Rating Type										
Rating Unit										
Rating Timing										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code
15	NONTREATED									
								11.4 a-d	58.2 a	54 bc
LSD (P=.05)								0.44	0.45	13.9
Standard Deviation								0.31	0.31	9.7
CV								2.72	0.54	15.26
Replicate F								5.428	4.957	1.342
Replicate Prob(F)								0.0030	0.0049	0.2736
Treatment F								2.356	1.747	2.390
Treatment Prob(F)								0.0163	0.0819	0.0149

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Location: Belleville Res. Center

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							GLXMA 6-14-12 Injury Percent 14 DAE 20 DA-A	GLXMA 6-25-12 Injury Percent 7 DA-B 31 DA-A	GLXMA 6-30-12 Injury Percent 30 DAE 36 DA-A	GLXMA 7-9-12 Injury Percent 21 DA-B		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code				
1	AUTHORITY FIRST SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.28 lb ai/a 0.125 lb ai/a 1 % v/v	6.4 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	0 a	0 d	0 d	0 d
2	AUTHORITY XL SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.284 lb ai/a 0.125 lb ai/a 1 % v/v	6.5 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	0 a	0 d	0 d	0 d
3	VALOR XLT SELECT COC (PRIME OIL)	40.3 WG 2 EC 100 SL		0.126 lb ai/a 0.125 lb ai/a 1 % v/v	5.0 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	1 a	1 d	0 d	0 d
4	FIERCE SELECT COC (PRIME OIL)	76 WG 2 EC 100 SL		0.143 lb ai/a 0.125 lb ai/a 1 % v/v	3 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	1 a	0 d	0 d	0 d
5	PREFIX SELECT COC (PRIME OIL)	5.29 EC 2 EC 100 SL		1.32 lb ai/a 0.125 lb ai/a 1 % v/v	2 pt/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	1 a	0 d	0 d	0 d
6	OPTILL SELECT COC (PRIME OIL)	68 WG 2 EC 100 SL		0.085 lb ai/a 0.125 lb ai/a 1 % v/v	2 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	2 a	0 d	0 d	0 d
7	AUTHORITY XL ANTHEM ROUNDUP POWERMAX N-PAK AMS	70 WG 2.15 SE 4.5 SL 100 SL		0.175 lb ai/a 0.101 lb ai/a 0.77 lb ae/a 2.5 % v/v	4 oz/a 6 fl oz/a 22 fl oz/a 2.5 % v/v		PRE V1-V2 V1-V2 V1-V2	A B B B	1 a	5 c	3 c	2 c
8	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.118 lb ai/a 0.77 lb ae/a 2.5 % v/v	7 fl oz/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B		7 ab	5 b	3 bc
9	PREFIX ROUNDUP POWERMAX N-PAK AMS	5.29 EC 4.5 SL 100 SL		1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v	2 pt/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B		6 b	5 b	4 ab
10	FLEXSTAR GT 3.5 N-PAK AMS	2.82 SL 100 SL		1.23 lb ae/a 2.5 % v/v	3.5 pt/a 2.5 % v/v		V1-V2 V1-V2	B B		4 c	2 c	1 d
11	EXTREME N-PAK AMS	2.17 SL 100 SL		0.81 lb ai/a 2.5 % v/v	3 pt/a 2.5 % v/v		V1-V2 V1-V2	B B		0 d	0 d	0 d
12	WARRANT ROUNDUP POWERMAX N-PAK AMS	3 CS 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v	3 pt/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B		0 d	0 d	0 d
13	AUTHORITY XL PREFIX ROUNDUP POWERMAX N-PAK AMS	70 WG 5.29 EC 4.5 SL 100 SL		0.175 lb ai/a 1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v	4 oz/a 2 pt/a 22 fl oz/a 2.5 % v/v		PRE V1-V2 V1-V2 V1-V2	A B B B	0 a	9 a	6 a	4 a
14	AUTHORITY XL SHARPEN SELECT COC (PRIME OIL)	70 WG 2.85 SC 2 EC 100 SL		0.175 lb ai/a 0.0223 lb ai/a 0.125 lb ai/a 1 % v/v	4 oz/a 1 fl oz/a 8 fl oz/a 1 % v/v		PRE PRE V1-V2 V1-V2	A A B B	0 a	0 d	0 d	0 d

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Pest Code	GLXMA	GLXMA	GLXMA	GLXMA
Crop Code	6-14-12	6-25-12	6-30-12	7-9-12
Rating Date	Injury	Injury	Injury	Injury
Rating Type	Percent	Percent	Percent	Percent
Rating Unit	14 DAE	7 DA-B	30 DAE	21 DA-B
Rating Timing	20 DA-A	31 DA-A	36 DA-A	
Trt-Eval Interval				
Trt Treatment	Form	Form	Rate	Other
No. Name	Conc	Type	Rate	Unit
			Rate	Rate
			Unit	Stage
			Code	
15 NONTREATED	0 a	0 d	0 d	0 d
LSD (P=.05)	1.6	1.3	0.9	1.0
Standard Deviation	1.1	0.9	0.6	0.7
CV	214.09	45.38	45.0	77.25
Replicate F	2.036	1.070	1.129	0.138
Replicate Prob(F)	0.1356	0.3721	0.3483	0.9368
Treatment F	1.115	44.240	48.948	18.163
Treatment Prob(F)	0.3897	0.0001	0.0001	0.0001

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							AMATA	AMATA	AMATA	PANDI	PANDI	PANDI			
							6-30-12 Control Percent 30 DAE 36 DA-A	7-30-12 Control Percent 60 DAE 66 DA-A	8-29-12 Control Percent 90 DAE 96 DA-A	6-30-12 Control Percent 30 DAE 36 DA-A	7-30-12 Control Percent 60 DAE 66 DA-A	8-29-12 Control Percent 90 DAE 96 DA-A			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	AUTHORITY FIRST SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.28 lb ai/a 0.125 lb ai/a 1 % v/v	ai/a ai/a v/v	6.4 oz/a 8 fl oz/a 1 % v/v	oz/a fl oz/a v/v	PRE V1-V2 V1-V2	A B B	99 a	99 a	98 a	97 ab	97 ab	94 a
2	AUTHORITY XL SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.284 lb ai/a 0.125 lb ai/a 1 % v/v	ai/a ai/a v/v	6.5 oz/a 8 fl oz/a 1 % v/v	oz/a fl oz/a v/v	PRE V1-V2 V1-V2	A B B	98 a	98 a	97 a	97 ab	95 ab	91 a
3	VALOR XLT SELECT COC (PRIME OIL)	40.3 WG 2 EC 100 SL		0.126 lb ai/a 0.125 lb ai/a 1 % v/v	ai/a ai/a v/v	5.0 oz/a 8 fl oz/a 1 % v/v	oz/a fl oz/a v/v	PRE V1-V2 V1-V2	A B B	99 a	98 a	97 a	96 abc	88 bcd	83 a
4	FIERCE SELECT COC (PRIME OIL)	76 WG 2 EC 100 SL		0.143 lb ai/a 0.125 lb ai/a 1 % v/v	ai/a ai/a v/v	3 oz/a 8 fl oz/a 1 % v/v	oz/a fl oz/a v/v	PRE V1-V2 V1-V2	A B B	99 a	97 a	93 a	97 ab	97 ab	92 a
5	PREFIX SELECT COC (PRIME OIL)	5.29 EC 2 EC 100 SL		1.32 lb ai/a 0.125 lb ai/a 1 % v/v	ai/a ai/a v/v	2 pt/a 8 fl oz/a 1 % v/v	pt/a fl oz/a v/v	PRE V1-V2 V1-V2	A B B	99 a	97 a	96 a	97 ab	97 ab	95 a
6	OPTILL SELECT COC (PRIME OIL)	68 WG 2 EC 100 SL		0.085 lb ai/a 0.125 lb ai/a 1 % v/v	ai/a ai/a v/v	2 oz/a 8 fl oz/a 1 % v/v	oz/a fl oz/a v/v	PRE V1-V2 V1-V2	A B B	78 c	66 d	53 d	94 bcd	98 a	95 a
7	AUTHORITY XL ANTHEM ROUNDUP POWERMAX N-PAK AMS	70 WG 2.15 SE 4.5 SL 100 SL		0.175 lb ai/a 0.101 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ai/a ae/a v/v	4 oz/a 6 fl oz/a 22 fl oz/a 2.5 % v/v	oz/a fl oz/a fl oz/a v/v	PRE V1-V2 V1-V2 V1-V2	A B B B	99 a	99 a	97 a	99 a	94 abc	88 a
8	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.118 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	7 fl oz/a 22 fl oz/a 2.5 % v/v	fl oz/a fl oz/a v/v	V1-V2 V1-V2 V1-V2	B B B	97 ab	85 b	75 b	92 cd	85 cd	80 ab
9	PREFIX ROUNDUP POWERMAX N-PAK AMS	5.29 EC 4.5 SL 100 SL		1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	2 pt/a 22 fl oz/a 2.5 % v/v	pt/a fl oz/a v/v	V1-V2 V1-V2 V1-V2	B B B	94 ab	78 bc	65 bcd	92 d	73 e	58 c
10	FLEXSTAR GT 3.5 N-PAK AMS	2.82 SL 100 SL		1.23 lb ae/a 2.5 % v/v	ae/a v/v	3.5 pt/a 2.5 % v/v	pt/a v/v	V1-V2 V1-V2	B B	89 b	73 cd	56 cd	94 bcd	80 de	63 bc
11	EXTREME N-PAK AMS	2.17 SL 100 SL		0.81 lb ai/a 2.5 % v/v	ai/a v/v	3 pt/a 2.5 % v/v	pt/a v/v	V1-V2 V1-V2	B B	93 ab	79 bc	71 bc	95 a-d	83 d	83 a
12	WARRANT ROUNDUP POWERMAX N-PAK AMS	3 CS 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ae/a v/v	3 pt/a 22 fl oz/a 2.5 % v/v	pt/a fl oz/a v/v	V1-V2 V1-V2 V1-V2	B B B	98 a	97 a	93 a	96 a-d	81 de	78 ab
13	AUTHORITY XL PREFIX ROUNDUP POWERMAX N-PAK AMS	70 WG 5.29 EC 4.5 SL 100 SL		0.175 lb ai/a 1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v	ai/a ai/a ae/a v/v	4 oz/a 2 pt/a 22 fl oz/a 2.5 % v/v	oz/a pt/a fl oz/a v/v	PRE V1-V2 V1-V2 V1-V2	A B B B	99 a	98 a	96 a	98 ab	94 abc	92 a
14	AUTHORITY XL SHARPEN SELECT COC (PRIME OIL)	70 WG 2.85 SC 2 EC 100 SL		0.175 lb ai/a 0.0223 lb ai/a 0.125 lb ai/a 1 % v/v	ai/a ai/a ai/a v/v	4 oz/a 1 fl oz/a 8 fl oz/a 1 % v/v	oz/a fl oz/a fl oz/a v/v	PRE PRE V1-V2 V1-V2	A A B B	99 a	99 a	98 a	96 a-d	94 abc	87 a



Southern Illinois University

FMC Residuals Preemergence and Early Postemergence in Soybean.

Trial ID: 12-T1-S100

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code	AMATA	AMATA	AMATA	PANDI	PANDI	PANDI
Crop Code						
Rating Date	6-30-12	7-30-12	8-29-12	6-30-12	7-30-12	8-29-12
Rating Type	Control	Control	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing	30 DAE	60 DAE	90 DAE	30 DAE	60 DAE	90 DAE
Trt-Eval Interval	36 DA-A	66 DA-A	96 DA-A	36 DA-A	66 DA-A	96 DA-A
Trt Treatment	Form	Form	Rate	Other	Other	Growth Appl
No. Name	Conc	Type	Rate	Unit	Rate	Rate Unit Stage Code
15 NONTREATED	0 d	0 e	0 e	0 e	0 e	0 d
LSD (P=.05)	8.6	10.6	15.5	4.6	9.7	18.8
Standard Deviation	6.0	7.4	10.9	3.2	6.8	13.2
CV	6.76	8.85	13.75	3.64	8.1	16.8
Replicate F	0.467	0.724	0.988	0.465	2.370	1.383
Replicate Prob(F)	0.7068	0.5435	0.4075	0.7082	0.0841	0.2610
Treatment F	70.666	48.181	25.131	232.983	51.838	13.750
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Southern Illinois University

FMC Residuals Preemergence and Early Postemergence in Soybean.

Trial ID: 12-T1-S100

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval										IPOHE	IPOHE	IPOHE
										6-30-12 Control Percent 30 DAE 36 DA-A	7-30-12 Control Percent 60 DAE 66 DA-A	8-29-12 Control Percent 90 DAE 96 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	AUTHORITY FIRST SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.28 lb ai/a 0.125 lb ai/a 1 % v/v		6.4 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	81 abc	70 bcd	59 b-e
2	AUTHORITY XL SELECT COC (PRIME OIL)	70 WG 2 EC 100 SL		0.284 lb ai/a 0.125 lb ai/a 1 % v/v		6.5 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	79 bc	55 def	48 def
3	VALOR XLT SELECT COC (PRIME OIL)	40.3 WG 2 EC 100 SL		0.126 lb ai/a 0.125 lb ai/a 1 % v/v		5.0 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	80 bc	59 def	44 ef
4	FIERCE SELECT COC (PRIME OIL)	76 WG 2 EC 100 SL		0.143 lb ai/a 0.125 lb ai/a 1 % v/v		3 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	45 e	41 ef	13 g
5	PREFIX SELECT COC (PRIME OIL)	5.29 EC 2 EC 100 SL		1.32 lb ai/a 0.125 lb ai/a 1 % v/v		2 pt/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	60 de	38 f	8 g
6	OPTILL SELECT COC (PRIME OIL)	68 WG 2 EC 100 SL		0.085 lb ai/a 0.125 lb ai/a 1 % v/v		2 oz/a 8 fl oz/a 1 % v/v		PRE V1-V2 V1-V2	A B B	75 cd	43 ef	23 fg
7	AUTHORITY XL ANTHEM ROUNDUP POWERMAX N-PAK AMS	70 WG 2.15 SE 4.5 SL 100 SL		0.175 lb ai/a 0.101 lb ai/a 0.77 lb ae/a 2.5 % v/v		4 oz/a 6 fl oz/a 22 fl oz/a 2.5 % v/v		PRE V1-V2 V1-V2 V1-V2	A B B B	98 a	92 ab	91 a
8	ANTHEM ROUNDUP POWERMAX N-PAK AMS	2.15 SE 4.5 SL 100 SL		0.118 lb ai/a 0.77 lb ae/a 2.5 % v/v		7 fl oz/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B	94 ab	94 ab	89 ab
9	PREFIX ROUNDUP POWERMAX N-PAK AMS	5.29 EC 4.5 SL 100 SL		1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v		2 pt/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B	94 ab	84 abc	78 a-d
10	FLEXSTAR GT 3.5 N-PAK AMS	2.82 SL 100 SL		1.23 lb ae/a 2.5 % v/v		3.5 pt/a 2.5 % v/v		V1-V2 V1-V2	B B	96 ab	90 ab	81 abc
11	EXTREME N-PAK AMS	2.17 SL 100 SL		0.81 lb ai/a 2.5 % v/v		3 pt/a 2.5 % v/v		V1-V2 V1-V2	B B	94 ab	94 ab	90 a
12	WARRANT ROUNDUP POWERMAX N-PAK AMS	3 CS 4.5 SL 100 SL		1.13 lb ai/a 0.77 lb ae/a 2.5 % v/v		3 pt/a 22 fl oz/a 2.5 % v/v		V1-V2 V1-V2 V1-V2	B B B	94 ab	96 a	92 a
13	AUTHORITY XL PREFIX ROUNDUP POWERMAX N-PAK AMS	70 WG 5.29 EC 4.5 SL 100 SL		0.175 lb ai/a 1.32 lb ai/a 0.77 lb ae/a 2.5 % v/v		4 oz/a 2 pt/a 22 fl oz/a 2.5 % v/v		PRE V1-V2 V1-V2 V1-V2	A B B B	94 ab	91 ab	92 a
14	AUTHORITY XL SHARPEN SELECT COC (PRIME OIL)	70 WG 2.85 SC 2 EC 100 SL		0.175 lb ai/a 0.0223 lb ai/a 0.125 lb ai/a 1 % v/v		4 oz/a 1 fl oz/a 8 fl oz/a 1 % v/v		PRE PRE V1-V2 V1-V2	A A B B	85 abc	63 cde	56 cde

Southern Illinois University

FMC Residuals Preemergence and Early Postemergence in Soybean.

Trial ID: 12-T1-S100

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code								IPOHE	IPOHE	IPOHE
Crop Code								6-30-12	7-30-12	8-29-12
Rating Date								Control	Control	Control
Rating Type								Percent	Percent	Percent
Rating Unit								30 DAE	60 DAE	90 DAE
Rating Timing								36 DA-A	66 DA-A	96 DA-A
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code
15	NONTREATED								f	
									g	
									g	
LSD (P=.05)								17.8	24.8	30.4
Standard Deviation								12.5	17.4	21.2
CV								16.04	25.85	36.98
Replicate F								2.040	4.910	2.013
Replicate Prob(F)								0.1229	0.0052	0.1266
Treatment F								17.480	10.555	10.047
Treatment Prob(F)								0.0001	0.0001	0.0001

FMC Residuals Preemergence and Early Postemergence in Soybean.

Trial ID: 12-T1-S100

Location: Belleville Res. Center

Investigator: Bryan Young

Trial Comments

1. Protocol: FMC.
2. Ratings: CI at 14 and 30 DAE; CI at 7 and 21 DA-B.  
WC at 30, 60, and 90 DAE; Evaluations at 30 DAE is targeted to be prior to the B application.
3. Yield.
4. Rainfall following the PRE application was 0.28 inch 6 days later and 0.75 inch 17 days later.
5. Weed emergence at the V1-V2 (B) application was limited to IPOHE due to dry soil conditions.  
The planned weed control rating prior to the B application could not be made due to lack of emerged weeds due to dry soil conditions.
6. Harvested 10-30-12, (2) 30 inch rows by 24 ft.