

# Soybean, Tilled Weed Control Studies

Southern Illinois University

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

<b>Trial Status:</b> F one-year/final <b>Initiation Date:</b> 6-13-15 <b>Completion Date:</b> 10-20-15	<b>Trial Location</b>
<b>City:</b> Belleville <b>Country:</b> USA <b>State/Prov.:</b> Illinois IL <b>Postal Code:</b> 62221	

**Objectives:**  
Compare different preemergence soybean programs.

<b>Study Director:</b> Ronald F. Krausz <b>Organization:</b> Belleville Research Center - Southern Illinois Univ Carbondale <b>Address:</b> 2036 Charles Lane <b>City+State/Prov:</b> Belleville, IL <b>Postal Code:</b> 62221 <b>Country:</b> USA	<b>Contacts</b> <b>Title:</b> Researcher/Farm Manager <b>Phone No.:</b> 618-566-4761 <b>E-mail:</b> rkrausz@siu.edu
---	--

<b>Crop 1:</b> GLXMA Glycine max Soybean <b>Variety:</b> AG3832 <b>BBCH Scale:</b> BSOY <b>Description:</b> RR2Y	<b>Crop Description</b>
<b>Planting Rate, Unit:</b> 140000 S/A <b>Depth, Unit:</b> 1 IN <b>Row Spacing, Unit:</b> 30 IN	<b>Planting Date:</b> 6-13-15 <b>Planting Method:</b> SEEDED

<b>Pest 1 Type:</b> W <b>Code:</b> AMBTR Ambrosia trifida L. <b>Common Name:</b> ragweed, giant	<b>Pest Description</b>
<b>Pest 2 Type:</b> W <b>Code:</b> ABUTH Abutilon theophrasti Medik. <b>Common Name:</b> velvetleaf	
<b>Pest 3 Type:</b> W <b>Code:</b> AMATA Amaranthus rudis Sauer <b>Common Name:</b> waterhemp, common	

<b>Treated Plot Width:</b> 7.5 FT <b>Total Plot Width:</b> 10 FT <b>Treated Plot Length:</b> 27 FT <b>Total Plot Length:</b> 27 FT	<b>Site and Design</b> <b>Site Type:</b> FIELD <b>Experimental Unit:</b> 1 PLOT <b>Tillage Type:</b> REDTIL reduced-till <b>Study Design:</b> RACOB� Randomized Complete Block (RCB)						
<b>Replications:</b> 4 <b>Untreated Arrangement:</b> INCLUDED single control randomized in each block							
<table border="1"> <thead> <tr> <th>No.</th> <th>Previous Crop</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>ZEAMD</td> <td>2014</td> </tr> </tbody> </table>	No.	Previous Crop	Year	1.	ZEAMD	2014	
No.	Previous Crop	Year					
1.	ZEAMD	2014					

<b>Maintenance</b>				
<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 50 LB/A, K2O 100 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A
No.	Maintenance Product Name			
1.	N 0 LB/A, P2O5 50 LB/A, K2O 100 LB/A			

<b>Description Name:</b> 51E_2013 <b>% OM:</b> 2.8 <b>Texture:</b> SIL silt loam <b>pH:</b> 6.1 <b>Soil Name:</b> Pierron <b>CEC:</b> 10	<b>Soil Description</b>									
<table border="1"> <thead> <tr> <th>Element</th> <th>Quantity</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>87</td> <td>lb/A</td> </tr> <tr> <td>K</td> <td>343</td> <td>lb/A</td> </tr> </tbody> </table>	Element	Quantity	Unit	P1	87	lb/A	K	343	lb/A	<b>Additional Measured Elements</b>
Element	Quantity	Unit								
P1	87	lb/A								
K	343	lb/A								

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

## Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-29-15					7	DAY	36	84	F
2.	5-6-15					7	DAY	49	85	F
3.	5-8-15	4.09	IN	RAIN	rain	4	DAY			
4.	5-13-15					7	DAY	45	83	F
5.	5-14-15	0.33	IN	RAIN	rain	4	DAY			
6.	5-20-15					7	DAY	44	85	F
7.	5-20-15	0.16	IN	RAIN	rain	1	DAY			
8.	5-24-15	0.89	IN	RAIN	rain	1	DAY			
9.	5-26-15	0.59	IN	RAIN	rain	2	DAY			
10.	5-27-15					7	DAY	55	84	F
11.	5-29-15	2.15	IN	RAIN	rain	2	DAY			
12.	6-3-15					7	DAY	53	89	F
13.	6-5-15	0.17	IN	RAIN	rain	1	DAY			
14.	6-8-15	0.66	IN	RAIN	rain	1	DAY			
15.	6-10-15					7	DAY	64	91	F
16.	6-14-15	0.16	IN	RAIN	rain	1	DAY			
17.	6-15-15	0.11	IN	RAIN	rain	1	DAY			
18.	6-16-15	2.25	IN	RAIN	rain	1	DAY			
19.	6-17-15					7	DAY	69	91	F
20.	6-17-15	0.09	IN	RAIN	rain	1	DAY			
21.	6-18-15	0.14	IN	RAIN	rain	1	DAY			
22.	6-19-15	3.29	IN	RAIN	rain	1	DAY			
23.	6-20-15	0.2	IN	RAIN	rain	2	DAY			
24.	6-24-15					7	DAY	62	93	F
25.	6-25-15	1.66	IN	RAIN	rain	2	DAY			
26.	6-28-15	0.6	IN	RAIN	rain	2	DAY			
27.	7-1-15					7	DAY	63	88	F
28.	7-1-15	0.64	IN	RAIN	rain	2	DAY			
29.	7-7-15	1.33	IN	RAIN	rain	2	DAY			
30.	7-8-15					7	DAY	59	97	F
31.	7-10-15	0.26	IN	RAIN	rain	1	DAY			
32.	7-15-15					7	DAY	69	93	F
33.	7-19-15	0.35	IN	RAIN	rain	2	DAY			
34.	7-22-15					7	DAY	65	95	F
35.	7-26-15	1.21	IN	RAIN	rain	3	DAY			
36.	7-29-15					7	DAY	65	93	F
37.	8-5-15	2.25	IN	RAIN	rain	1	DAY			
38.	8-9-15	0.47	IN	RAIN	rain	1	DAY			
39.	8-12-15					7	DAY	63	89	F
40.	8-18-15	2.23	IN	RAIN	rain	2	DAY			
41.	8-19-15					7	DAY	52	82	F
42.	8-22-15	0.18	IN	RAIN	rain	1	DAY			
43.	8-26-15					7	DAY	54	91	F
44.	9-2-15					7	DAY	68	94	F
45.	9-8-15	1.93	IN	RAIN	rain	2	DAY			
46.	9-9-15					7	DAY	47	83	F
47.	9-11-15	0.4	IN	RAIN	rain	1	DAY			
48.	9-16-15					7	DAY	51	90	F
49.	9-19-15	0.14	IN	RAIN	rain	1	DAY			
50.	9-23-15					7	DAY	54	85	F
51.	9-28-15	0.13	IN	RAIN	rain	1	DAY			

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
 Investigator: Ronald F. Krausz

**Application Description**

	A	B
Application Date:	6-13-15	7-15-15
Appl. Start Time:	14:50	13:00
Appl. Stop Time:	15:40	13:30
Application Method:	Spray	Spray
Application Timing:	PRE	V4
Application Placement:	BROSOI	BROFOL
Applied By:	LXF	RFK
Air Temperature, Unit:	84 F	83 F
% Relative Humidity:	65	63
Wind Velocity, Unit:	7 MPH	2 MPH
Wind Direction:	SW	N
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	75 F	81 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	60	25
Next Moisture Occurred On:	6-14-15	7-19-15
Time to Next Moisture, Unit:	15 HR	4 DAY

**Crop Stage At Each Application**

	A	B
Crop 1 Code, BBCH Scale:	GLXMA	GLXMA
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	NA	V4
Stage Minimum, Percent:		V4
Stage Maximum, Percent:		V4
Height, Unit:		9 IN
Height Minimum, Maximum:		7 9

**Pest Stage At Each Application**

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	NA	10+
Stage Minimum, Percent:		10+
Stage Maximum, Percent:		10+
Height, Unit:		8 IN
Height Minimum, Maximum:		4 8
Density, Unit:		0.1 FT2
Pest 2 Code, Type, Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	NA	NA
Pest 3 Code, Type, Scale:	AMATA W	AMATA W
Stage Majority, Percent:	NA	10
Stage Minimum, Percent:		8
Stage Maximum, Percent:		10
Height, Unit:		4 IN
Height Minimum, Maximum:		2 6
Density, Unit:		0.1 FT2

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120      Location: Belleville Res. Center      Trial Year: 2015  
Investigator: Ronald F. Krausz**Application Equipment**

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

## Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	GLXMA 10-20-15 Moisture Percent	GLXMA 10-20-15 Test wt. lb/bu	GLXMA 10-20-15 Yield bu/A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
1	NONTREATED								
2	BLANKET 4F	4 SC		0.188 lb ai/a		6 fl oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
3	SONIC	70 WG		0.175 lb ai/a		4 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
4	SONIC	70 WG		0.219 lb ai/a		5 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
5	BLANKET 4F	4 SC		0.234 lb ai/a		7.5 fl oz/a		PRE	A
	FIRSTRATE	84 WG		0.0263 lb ai/a		0.5 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
6	BLANKET 4F	4 SC		0.219 lb ai/a		7 fl oz/a		PRE	A
	FIRSTRATE	84 WG		0.02 lb ai/a		0.38 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
7	BLANKET 4F	4 SC		0.2 lb ai/a		6.4 fl oz/a		PRE	A
	GLORY 4L	3.8 SC		0.19 lb ai/a		6.4 fl oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
8	BLANKET 4F	4 SC		0.188 lb ai/a		6 fl oz/a		PRE	A
	GLORY	75 WG		0.28 lb ai/a		6 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
9	BLANKET 4F	4 SC		0.2 lb ai/a		6.4 fl oz/a		PRE	A
	GLORY	75 WG		0.202 lb ai/a		4.3 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
10	AUTHORITY MTZ	45 WG		0.394 lb ai/a		14 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
11	FIRSTRATE	84 WG		0.0263 lb ai/a		0.5 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
12	GLORY	75 WG		0.28 lb ai/a		6 oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B
13	SONIC	70 WG		0.175 lb ai/a		4 oz/a		PRE	A
	BLANKET 4F	4 SC		0.0625 lb ai/a		2 fl oz/a		PRE	A
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B

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.

Missing data estimates are included in columns: Average=6,7,9,10,14,18,11,15,25,12,16,19,22,26,13,17,20,23,27,21,24,28

Could not calculate LSD (% mean diff) for columns 18,25 because error mean square = 0.

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
 Investigator: Ronald F. Krausz

Pest Code								GLXMA	GLXMA	GLXMA		
Crop Code								10-20-15	10-20-15	10-20-15		
Rating Date								Moisture	Test wt.	Yield		
Rating Type								Percent	lb/bu	bu/A		
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			
14	AUTHORITY ASSIST	4	SC	0.219	lb ai/a	7	fl oz/a	PRE	A	8.5 a	58.8 a	62 abc
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
15	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	8.3 a	58.9 a	54 b-e
	THUNDER MASTER	2.17	SL	0.54	lb ai/a	2	pt/a	PRE	A			
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
16	AUTHORITY XL	70	WG	0.219	lb ai/a	5	oz/a	PRE	A	8.3 a	58.9 a	61 abc
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
17	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	8.3 a	58.9 a	58 a-e
	RESIST	75	WG	0.14	lb ai/a	3	oz/a	PRE	A			
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
LSD P=.05								0.48	0.37	10.3		
Standard Deviation								0.33	0.26	7.2		
CV								3.96	0.44	12.58		
Replicate F								1.583	1.845	0.129		
Replicate Prob(F)								0.2099	0.1559	0.9420		
Treatment F								1.322	1.271	3.336		
Treatment Prob(F)								0.2356	0.2655	0.0012		

## Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	GLXMA 6-27-15 Stunt Percent	GLXMA 7-4-15 Stunt Percent	GLXMA 7-15-15 Stunt Percent 32 DA-A 0 DA-B	GLXMA 6-27-15 STDRED Percent 14 DA-A	GLXMA 7-4-15 STDRED Percent 21 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	NONTREATED									0	0
2	BLANKET 4F	4 SC		0.188 lb ai/a		6 fl oz/a		PRE	A	10 cd	5 cde
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
3	SONIC	70 WG		0.175 lb ai/a		4 oz/a		PRE	A	11 cd	3 de
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
4	SONIC	70 WG		0.219 lb ai/a		5 oz/a		PRE	A	10 cd	8 a-e
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
5	BLANKET 4F	4 SC		0.234 lb ai/a		7.5 fl oz/a		PRE	A	21 bcd	15 a
	FIRSTRATE	84 WG		0.0263 lb ai/a		0.5 oz/a		PRE	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
6	BLANKET 4F	4 SC		0.219 lb ai/a		7 fl oz/a		PRE	A	47 a	13 ab
	FIRSTRATE	84 WG		0.02 lb ai/a		0.38 oz/a		PRE	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
7	BLANKET 4F	4 SC		0.2 lb ai/a		6.4 fl oz/a		PRE	A	25 abc	13 abc
	GLORY 4L	3.8 SC		0.19 lb ai/a		6.4 fl oz/a		PRE	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
8	BLANKET 4F	4 SC		0.188 lb ai/a		6 fl oz/a		PRE	A	11 cd	3 de
	GLORY	75 WG		0.28 lb ai/a		6 oz/a		PRE	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
9	BLANKET 4F	4 SC		0.2 lb ai/a		6.4 fl oz/a		PRE	A	13 cd	4 de
	GLORY	75 WG		0.202 lb ai/a		4.3 oz/a		PRE	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
10	AUTHORITY MTZ	45 WG		0.394 lb ai/a		14 oz/a		PRE	A	10 cd	3 de
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
11	FIRSTRATE	84 WG		0.0263 lb ai/a		0.5 oz/a		PRE	A	0 d	0 e
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
12	GLORY	75 WG		0.28 lb ai/a		6 oz/a		PRE	A	0 d	0 e
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		
13	SONIC	70 WG		0.175 lb ai/a		4 oz/a		PRE	A	10 cd	2 e
	BLANKET 4F	4 SC		0.0625 lb ai/a		2 fl oz/a		PRE	A		
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a		22 fl oz/a		V4	B		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		V4	B		

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
 Investigator: Ronald F. Krausz

Pest Code						GLXMA 6-27-15 Stunt Percent	GLXMA 7-4-15 Stunt Percent	GLXMA 7-15-15 Stunt Percent 32 DA-A 0 DA-B	GLXMA 6-27-15 STDRED Percent 14 DA-A	GLXMA 7-4-15 STDRED Percent 21 DA-A
Crop Code						14 DA-A	21 DA-A	0 DA-B	14 DA-A	21 DA-A
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	
14	AUTHORITY ASSIST	4	SC	0.219	lb ai/a	7	fl oz/a	PRE	A	12 cd
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	0 e
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	0 a
15	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	37 ab
	THUNDER MASTER	2.17	SL	0.54	lb ai/a	2	pt/a	PRE	A	12 abc
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	0 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	10 a
16	AUTHORITY XL	70	WG	0.219	lb ai/a	5	oz/a	PRE	A	17 bcd
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	7 b-e
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	0 a
17	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	25 abc
	RESIST	75	WG	0.14	lb ai/a	3	oz/a	PRE	A	10 a-d
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	0 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	13 a
LSD P=.05						21.7	7.8	.	27.3	27.3
Standard Deviation						15.1	5.4	0.0	19.0	19.0
CV						93.69	91.15	0.0	104.4	104.4
Replicate F						2.141	2.457	0.000	4.155	4.155
Replicate Prob(F)						0.1127	0.0792	1.0000	0.0128	0.0128
Treatment F						2.677	3.540	0.000	1.473	1.473
Treatment Prob(F)						0.0082	0.0010	1.0000	0.1693	0.1693



## Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

Pest Code							GLXMA		
Crop Code							8-22-15		
Rating Date							Injury		
Rating Type							Percent		
Rating Unit							38 DA-B		
Rating Timing							70 DA-A		
Trt-Eval Interval									
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	NONTREATED								0
2	BLANKET 4F	4 SC		0.188 lb ai/a	6 fl oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
3	SONIC	70 WG		0.175 lb ai/a	4 oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
4	SONIC	70 WG		0.219 lb ai/a	5 oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
5	BLANKET 4F	4 SC		0.234 lb ai/a	7.5 fl oz/a		PRE	A	0 a
	FIRSTRATE	84 WG		0.0263 lb ai/a	0.5 oz/a		PRE	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
6	BLANKET 4F	4 SC		0.219 lb ai/a	7 fl oz/a		PRE	A	0 a
	FIRSTRATE	84 WG		0.02 lb ai/a	0.38 oz/a		PRE	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
7	BLANKET 4F	4 SC		0.2 lb ai/a	6.4 fl oz/a		PRE	A	0 a
	GLORY 4L	3.8 SC		0.19 lb ai/a	6.4 fl oz/a		PRE	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
8	BLANKET 4F	4 SC		0.188 lb ai/a	6 fl oz/a		PRE	A	0 a
	GLORY	75 WG		0.28 lb ai/a	6 oz/a		PRE	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
9	BLANKET 4F	4 SC		0.2 lb ai/a	6.4 fl oz/a		PRE	A	0 a
	GLORY	75 WG		0.202 lb ai/a	4.3 oz/a		PRE	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
10	AUTHORITY MTZ	45 WG		0.394 lb ai/a	14 oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
11	FIRSTRATE	84 WG		0.0263 lb ai/a	0.5 oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
12	GLORY	75 WG		0.28 lb ai/a	6 oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	
13	SONIC	70 WG		0.175 lb ai/a	4 oz/a		PRE	A	0 a
	BLANKET 4F	4 SC		0.0625 lb ai/a	2 fl oz/a		PRE	A	
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
 Investigator: Ronald F. Krausz

Pest Code								GLXMA		
Crop Code								8-22-15		
Rating Date								Injury		
Rating Type								Percent		
Rating Unit								38 DA-B		
Rating Timing								70 DA-A		
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
14	AUTHORITY ASSIST	4	SC	0.219 lb ai/a		7 fl oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a		22 fl oz/a		V4	B	
	N-PAK AMS	100	SL	2.5 % v/v		2.5 % v/v		V4	B	
15	BLANKET 4F	4	SC	0.188 lb ai/a		6 fl oz/a		PRE	A	0 a
	THUNDER MASTER	2.17	SL	0.54 lb ai/a		2 pt/a		PRE	A	
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a		22 fl oz/a		V4	B	
	N-PAK AMS	100	SL	2.5 % v/v		2.5 % v/v		V4	B	
16	AUTHORITY XL	70	WG	0.219 lb ai/a		5 oz/a		PRE	A	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a		22 fl oz/a		V4	B	
	N-PAK AMS	100	SL	2.5 % v/v		2.5 % v/v		V4	B	
17	BLANKET 4F	4	SC	0.188 lb ai/a		6 fl oz/a		PRE	A	0 a
	RESIST	75	WG	0.14 lb ai/a		3 oz/a		PRE	A	
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a		22 fl oz/a		V4	B	
	N-PAK AMS	100	SL	2.5 % v/v		2.5 % v/v		V4	B	
LSD P=.05										.
Standard Deviation										0.0
CV										0.0
Replicate F										0.000
Replicate Prob(F)										1.0000
Treatment F										0.000
Treatment Prob(F)										1.0000

## Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	AMBTR	AMBTR	AMBTR	AMBTR	AMBTR	
							6-27-15 Control Percent	7-4-15 Control Percent	7-11-15 Control Percent	7-18-15 Control Percent	8-22-15 Control Percent	
							14 DA-A	21 DA-A	28 DA-A	35 DA-A	70 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	NONTREATED									0	0	0
2	BLANKET 4F ROUNDUP POWERMAX N-PAK AMS	4 SC 4.5 SL 100 SL		0.188 lb ai/a 0.77 lb ae/a 2.5 % v/v		6 fl oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	96 a	96 a	90 a
3	SONIC ROUNDUP POWERMAX N-PAK AMS	70 WG 4.5 SL 100 SL		0.175 lb ai/a 0.77 lb ae/a 2.5 % v/v		4 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	98 a	98 a	97 a
4	SONIC ROUNDUP POWERMAX N-PAK AMS	70 WG 4.5 SL 100 SL		0.219 lb ai/a 0.77 lb ae/a 2.5 % v/v		5 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	99 a	99 a	98 a
5	BLANKET 4F FIRSTRATE ROUNDUP POWERMAX N-PAK AMS	4 SC 84 WG 4.5 SL 100 SL		0.234 lb ai/a 0.0263 lb ai/a 0.77 lb ae/a 2.5 % v/v		7.5 fl oz/a 0.5 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	98 a
6	BLANKET 4F FIRSTRATE ROUNDUP POWERMAX N-PAK AMS	4 SC 84 WG 4.5 SL 100 SL		0.219 lb ai/a 0.02 lb ai/a 0.77 lb ae/a 2.5 % v/v		7 fl oz/a 0.38 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	98 a
7	BLANKET 4F GLORY 4L ROUNDUP POWERMAX N-PAK AMS	4 SC 3.8 SC 4.5 SL 100 SL		0.2 lb ai/a 0.19 lb ai/a 0.77 lb ae/a 2.5 % v/v		6.4 fl oz/a 6.4 fl oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	98 a	98 a	96 a
8	BLANKET 4F GLORY ROUNDUP POWERMAX N-PAK AMS	4 SC 75 WG 4.5 SL 100 SL		0.188 lb ai/a 0.28 lb ai/a 0.77 lb ae/a 2.5 % v/v		6 fl oz/a 6 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	94 a	94 a	91 a
9	BLANKET 4F GLORY ROUNDUP POWERMAX N-PAK AMS	4 SC 75 WG 4.5 SL 100 SL		0.2 lb ai/a 0.202 lb ai/a 0.77 lb ae/a 2.5 % v/v		6.4 fl oz/a 4.3 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	96 a	96 a	93 a
10	AUTHORITY MTZ ROUNDUP POWERMAX N-PAK AMS	45 WG 4.5 SL 100 SL		0.394 lb ai/a 0.77 lb ae/a 2.5 % v/v		14 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	93 a	93 a	90 a
11	FIRSTRATE ROUNDUP POWERMAX N-PAK AMS	84 WG 4.5 SL 100 SL		0.0263 lb ai/a 0.77 lb ae/a 2.5 % v/v		0.5 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	98 a	98 a	98 a
12	GLORY ROUNDUP POWERMAX N-PAK AMS	75 WG 4.5 SL 100 SL		0.28 lb ai/a 0.77 lb ae/a 2.5 % v/v		6 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	66 a	66 a	66 a
13	SONIC BLANKET 4F ROUNDUP POWERMAX N-PAK AMS	70 WG 4 SC 4.5 SL 100 SL		0.175 lb ai/a 0.0625 lb ai/a 0.77 lb ae/a 2.5 % v/v		4 oz/a 2 fl oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	93 a	93 a	91 a

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
 Investigator: Ronald F. Krausz

Pest Code						AMBTR	AMBTR	AMBTR	AMBTR	AMBTR
Crop Code						6-27-15	7-4-15	7-11-15	7-18-15	8-22-15
Rating Date						Control	Control	Control	Control	Control
Rating Type						Percent	Percent	Percent	Percent	Percent
Rating Unit								-4 DA-B	3 DA-B	38 DA-B
Rating Timing								28 DA-A	35 DA-A	70 DA-A
Trt-Eval Interval						14 DA-A	21 DA-A			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
14	AUTHORITY ASSIST	4	SC	0.219	lb ai/a	7	fl oz/a	PRE	A	93 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	93 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	89 a
15	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	96 a
	THUNDER MASTER	2.17	SL	0.54	lb ai/a	2	pt/a	PRE	A	96 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	93 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	93 a
16	AUTHORITY XL	70	WG	0.219	lb ai/a	5	oz/a	PRE	A	98 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	98 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	96 a
17	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	96 a
	RESIST	75	WG	0.14	lb ai/a	3	oz/a	PRE	A	96 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B	94 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B	94 a
LSD P=.05						19.9	19.9	20.3	20.3	3.3
Standard Deviation						13.8	13.8	14.2	14.2	2.3
CV						14.66	14.66	15.31	15.31	2.38
Replicate F						0.920	0.920	1.186	1.186	2.668
Replicate Prob(F)						0.4415	0.4415	0.3292	0.3292	0.0627
Treatment F						1.296	1.296	1.220	1.220	0.966
Treatment Prob(F)						0.2561	0.2561	0.3031	0.3031	0.5082

## Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH			
							6-27-15 Control Percent	7-4-15 Control Percent	7-11-15 Control Percent	7-18-15 Control Percent	8-22-15 Control Percent			
							14 DA-A	21 DA-A	28 DA-A	35 DA-A	70 DA-A			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	NONTREATED									0	0	0	0	0
2	BLANKET 4F ROUNDUP POWERMAX N-PAK AMS	4 SC 4.5 SL 100 SL		0.188 lb ai/a 0.77 lb ae/a 2.5 % v/v		6 fl oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	99 a	99 a	99 a	99 a	99 a
3	SONIC ROUNDUP POWERMAX N-PAK AMS	70 WG 4.5 SL 100 SL		0.175 lb ai/a 0.77 lb ae/a 2.5 % v/v		4 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	99 a	99 a	99 a	99 a	99 a
4	SONIC ROUNDUP POWERMAX N-PAK AMS	70 WG 4.5 SL 100 SL		0.219 lb ai/a 0.77 lb ae/a 2.5 % v/v		5 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	99 a	99 a	99 a	99 a	99 a
5	BLANKET 4F FIRSTRATE ROUNDUP POWERMAX N-PAK AMS	4 SC 84 WG 4.5 SL 100 SL		0.234 lb ai/a 0.0263 lb ai/a 0.77 lb ae/a 2.5 % v/v		7.5 fl oz/a 0.5 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	99 a	99 a	99 a
6	BLANKET 4F FIRSTRATE ROUNDUP POWERMAX N-PAK AMS	4 SC 84 WG 4.5 SL 100 SL		0.219 lb ai/a 0.02 lb ai/a 0.77 lb ae/a 2.5 % v/v		7 fl oz/a 0.38 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	99 a	99 a	96 a
7	BLANKET 4F GLORY 4L ROUNDUP POWERMAX N-PAK AMS	4 SC 3.8 SC 4.5 SL 100 SL		0.2 lb ai/a 0.19 lb ai/a 0.77 lb ae/a 2.5 % v/v		6.4 fl oz/a 6.4 fl oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	99 a	99 a	99 a
8	BLANKET 4F GLORY ROUNDUP POWERMAX N-PAK AMS	4 SC 75 WG 4.5 SL 100 SL		0.188 lb ai/a 0.28 lb ai/a 0.77 lb ae/a 2.5 % v/v		6 fl oz/a 6 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	99 a	99 a	99 a
9	BLANKET 4F GLORY ROUNDUP POWERMAX N-PAK AMS	4 SC 75 WG 4.5 SL 100 SL		0.2 lb ai/a 0.202 lb ai/a 0.77 lb ae/a 2.5 % v/v		6.4 fl oz/a 4.3 oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	99 a	99 a	98 a
10	AUTHORITY MTZ ROUNDUP POWERMAX N-PAK AMS	45 WG 4.5 SL 100 SL		0.394 lb ai/a 0.77 lb ae/a 2.5 % v/v		14 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	99 a	99 a	99 a	99 a	99 a
11	FIRSTRATE ROUNDUP POWERMAX N-PAK AMS	84 WG 4.5 SL 100 SL		0.0263 lb ai/a 0.77 lb ae/a 2.5 % v/v		0.5 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	99 a	99 a	99 a	99 a	99 a
12	GLORY ROUNDUP POWERMAX N-PAK AMS	75 WG 4.5 SL 100 SL		0.28 lb ai/a 0.77 lb ae/a 2.5 % v/v		6 oz/a 22 fl oz/a 2.5 % v/v		PRE V4 V4	A B B	96 a	96 a	96 a	96 a	99 a
13	SONIC BLANKET 4F ROUNDUP POWERMAX N-PAK AMS	70 WG 4 SC 4.5 SL 100 SL		0.175 lb ai/a 0.0625 lb ai/a 0.77 lb ae/a 2.5 % v/v		4 oz/a 2 fl oz/a 22 fl oz/a 2.5 % v/v		PRE PRE V4 V4	A A B B	99 a	99 a	99 a	99 a	99 a

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
 Investigator: Ronald F. Krausz

Pest Code								ABUTH	ABUTH	ABUTH	ABUTH	ABUTH		
Crop Code								6-27-15	7-4-15	7-11-15	7-18-15	8-22-15		
Rating Date								Control	Control	Control	Control	Control		
Rating Type								Percent	Percent	Percent	Percent	Percent		
Rating Unit								-4 DA-B	3 DA-B	38 DA-B	38 DA-B	38 DA-B		
Rating Timing								14 DA-A	21 DA-A	28 DA-A	35 DA-A	70 DA-A		
Trt-Eval Interval														
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
14	AUTHORITY ASSIST	4	SC	0.219	lb ai/a	7	fl oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B					
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B					
15	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
	THUNDER MASTER	2.17	SL	0.54	lb ai/a	2	pt/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B					
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B					
16	AUTHORITY XL	70	WG	0.219	lb ai/a	5	oz/a	PRE	A	99 a	99 a	99 a	99 a	98 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B					
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B					
17	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
	RESIST	75	WG	0.14	lb ai/a	3	oz/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B					
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B					
LSD P=.05								1.7	1.7	1.8	1.8	1.9		
Standard Deviation								1.2	1.2	1.2	1.2	1.4		
CV								1.22	1.22	1.24	1.24	1.38		
Replicate F								0.778	0.778	0.623	0.623	2.757		
Replicate Prob(F)								0.5143	0.5143	0.6050	0.6050	0.0568		
Treatment F								1.556	1.556	1.481	1.481	1.368		
Treatment Prob(F)								0.1386	0.1386	0.1661	0.1661	0.2171		

## Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

Pest Code							AMATA	AMATA	AMATA
Crop Code							7-11-15	7-18-15	8-22-15
Rating Date							Control	Control	Control
Rating Type							Percent	Percent	Percent
Rating Unit							-4 DA-B	3 DA-B	38 DA-B
Rating Timing							28 DA-A	35 DA-A	70 DA-A
Trt-Eval Interval									
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Stage	Appl Code	
1	NONTREATED								0
2	BLANKET 4F	4 SC		0.188 lb ai/a	6 fl oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
3	SONIC	70 WG		0.175 lb ai/a	4 oz/a		PRE	A	98 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
4	SONIC	70 WG		0.219 lb ai/a	5 oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
5	BLANKET 4F	4 SC		0.234 lb ai/a	7.5 fl oz/a		PRE	A	99 a
	FIRSTRATE	84 WG		0.0263 lb ai/a	0.5 oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
6	BLANKET 4F	4 SC		0.219 lb ai/a	7 fl oz/a		PRE	A	99 a
	FIRSTRATE	84 WG		0.02 lb ai/a	0.38 oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	98 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	98 a
7	BLANKET 4F	4 SC		0.2 lb ai/a	6.4 fl oz/a		PRE	A	99 a
	GLORY 4L	3.8 SC		0.19 lb ai/a	6.4 fl oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
8	BLANKET 4F	4 SC		0.188 lb ai/a	6 fl oz/a		PRE	A	99 a
	GLORY	75 WG		0.28 lb ai/a	6 oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
9	BLANKET 4F	4 SC		0.2 lb ai/a	6.4 fl oz/a		PRE	A	99 a
	GLORY	75 WG		0.202 lb ai/a	4.3 oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
10	AUTHORITY MTZ	45 WG		0.394 lb ai/a	14 oz/a		PRE	A	97 ab
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	97 ab
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
11	FIRSTRATE	84 WG		0.0263 lb ai/a	0.5 oz/a		PRE	A	87 d
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	87 d
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a
12	GLORY	75 WG		0.28 lb ai/a	6 oz/a		PRE	A	93 bc
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	93 bc
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	98 a
13	SONIC	70 WG		0.175 lb ai/a	4 oz/a		PRE	A	99 a
	BLANKET 4F	4 SC		0.0625 lb ai/a	2 fl oz/a		PRE	A	99 a
	ROUNDUP POWERMAX	4.5 SL		0.77 lb ae/a	22 fl oz/a		V4	B	99 a
	N-PAK AMS	100 SL		2.5 % v/v	2.5 % v/v		V4	B	99 a

Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
 Investigator: Ronald F. Krausz

Pest Code								AMATA	AMATA	AMATA		
Crop Code												
Rating Date								7-11-15	7-18-15	8-22-15		
Rating Type								Control	Control	Control		
Rating Unit								Percent	Percent	Percent		
Rating Timing								-4 DA-B	3 DA-B	38 DA-B		
Trt-Eval Interval								28 DA-A	35 DA-A	70 DA-A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
14	AUTHORITY ASSIST	4	SC	0.219	lb ai/a	7	fl oz/a	PRE	A	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
15	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	93 c	93 c	99 a
	THUNDER MASTER	2.17	SL	0.54	lb ai/a	2	pt/a	PRE	A			
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
16	AUTHORITY XL	70	WG	0.219	lb ai/a	5	oz/a	PRE	A	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
17	BLANKET 4F	4	SC	0.188	lb ai/a	6	fl oz/a	PRE	A	99 a	99 a	99 a
	RESIST	75	WG	0.14	lb ai/a	3	oz/a	PRE	A			
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	V4	B			
LSD P=.05								4.5	4.5	1.1		
Standard Deviation								3.1	3.1	0.8		
CV								3.24	3.24	0.76		
Replicate F								1.221	1.221	2.259		
Replicate Prob(F)								0.3167	0.3167	0.0987		
Treatment F								4.887	4.887	1.435		
Treatment Prob(F)								0.0001	0.0001	0.1855		



Preemergence Soybean Program Comparison.

Trial ID: 15-51E-M120 Location: Belleville Res. Center Trial Year: 2015  
Investigator: Ronald F. Krausz

Trial Comments

1. Protocol: Rosen's (PRE soybean programs).
2. Ratings:  
CI at 14 DAP and 0 DA-B or until injury is no longer observable.  
WC at 7, 14, 21, 28, 35, and 70 DA-A.
3. Yield.
4. Rainfall following the PRE application was 2.52 inch over 3 days beginning 15 hours later.  
Rainfall following the V4 application was 0.35 inch over 2 days beginning 4 days later.
5. GLXMA, STDRED = Soybean stand reduction.
6. Missing data for plots 407-417 was due to flooding.
7. At 7 DA-A there were no emerged weeds in the nontreated plots, too early to rate weed control.
8. Harvested 10-20-15, (2) 30 inch rows by 24 ft.