

Effect of Three-Way Tank-Mixes on Weed Control when Soil-Applied in RR2Y Soybean.

Trial ID: 16-52-E130 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Trial Status: F one-year/final
Initiation Date: 6-9-16
Completion Date: 8-19-16

Trial Location

City: Belleville **Country:** USA
State/Prov.: Illinois IL
Postal Code: 62221

Objectives:

Evaluate the efficacy of three-way soil herbicide combinations on weed control in a Roundup Ready soybean system.

Contacts

Study Director: Karla Gage, Ph.D. **Title:** Assistant Professor of Weed Science
Organization: Southern Illinois University Carbondale
Address: 1205 Lincoln Drive MC 4415 **Phone No.:** 618-453-7679
City+State/Prov: Carbondale, IL
Postal Code: 62901 **E-mail:** kgage@siu.edu
Country: USA

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG3832 **BBCH Scale:** BSOY
Description: RR2Y
Planting Date: 6-9-16
Planting Rate, Unit: 140000 S/A **Planting Method:** SEEDED
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN

Pest Description

Pest 1 Type: W **Code:** ABUTH **Abutilon theophrasti Medik.**
Common Name: velvetleaf
Pest 2 Type: W **Code:** IPOHE **Ipomoea hederacea (L.) Jacq.**
Common Name: morningglory, ivyleaf
Pest 3 Type: W **Code:** GGGAN
Common Name: grasses, annual
Description: Mixture of SETFA 50% and PANDI 50%

Site and Design

Treated Plot Width: 7.5 FT **Total Plot Width:** 10 FT **Site Type:** FIELD
Treated Plot Length: 25 FT **Total Plot Length:** 25 FT **Experimental Unit:** 1 PLOT
Tillage Type: REDTIL reduced-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)
Untreated Arrangement: NONE control is other than an untreated

No.	Previous Crop	Year
1.	ZEAMD	2015

Maintenance

No.	Maintenance Product Name
1.	N 0 LB/A, P2O5 0 LB/A, K2O 150 LB/A

Soil Description

Description Name: 52_2013
% OM: 2.6 **Texture:** SIL silt loam
pH: 6.9 **Soil Name:** Pierron
CEC: 7

Additional Measured Elements

Element	Quantity	Unit
P1	77	lb/A
K	326	lb/A

Moisture and Weather Conditions

Overall Moisture Conditions: NORMAL
Closest Weather Station: ICN - Belleville IL **Distance, Unit:** 0.5 MI

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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-1-16					7	DAY	32	75	F
2.	4-6-16	0.49	IN	RAIN	rain	1	DAY			
3.	4-8-16					7	DAY	28	71	F
4.	4-10-16	0.97	IN	RAIN	rain	2	DAY			
5.	4-15-16					7	DAY	48	81	F
6.	4-20-16	0.45	IN	RAIN	rain	3	DAY			
7.	4-22-16					7	DAY	47	85	F
8.	4-26-16	1.74	IN	RAIN	rain	2	DAY			
9.	4-29-16					7	DAY	46	75	F
10.	4-29-16	1.94	IN	RAIN	rain	2	DAY			
11.	5-4-16	0.02	IN	RAIN	rain	1	DAY			
12.	5-6-16					7	DAY	44	87	F
13.	5-7-16	0.07	IN	RAIN	rain	1	DAY			
14.	5-9-16	2.12	IN	RAIN	rain	5	DAY			
15.	5-13-16					7	DAY	41	76	F
16.	5-16-16	1.06	IN	RAIN	rain	2	DAY			
17.	5-20-16					7	DAY	51	83	F
18.	5-20-16	0.06	IN	RAIN	rain	1	DAY			
19.	5-25-16	0.68	IN	RAIN	rain	3	DAY			
20.	5-27-16					7	DAY	62	88	F
21.	5-31-16	0.03	IN	RAIN	rain	2	DAY			
22.	6-3-16					7	DAY	55	89	F
23.	6-3-16	0.01	IN	RAIN	rain	1	DAY			
24.	6-4-16	0.72	IN	RAIN	rain	1	DAY			
25.	6-10-16					7	DAY	65	96	F
26.	6-13-16	0.03	IN	RAIN	rain	1	DAY			
27.	6-17-16					7	DAY	67	97	F
28.	6-21-16	0.01	IN	RAIN	rain	1	DAY			
29.	6-24-16					7	DAY	57	95	F
30.	6-25-16	0.02	IN	RAIN	rain	1	DAY			
31.	6-30-16	0.03	IN	RAIN	rain	1	DAY			
32.	7-1-16					7	DAY	60	91	F
33.	7-1-16	2.26	IN	RAIN	rain	4	DAY			
34.	7-6-16	0.32	IN	RAIN	rain	3	DAY			
35.	7-8-16					7	DAY	67	93	F
36.	7-13-16	0.49	IN	RAIN	rain	2	DAY			
37.	7-15-16					7	DAY	68	93	F
38.	7-17-16	0.02	IN	RAIN	rain	1	DAY			
39.	7-19-16	1.47	IN	RAIN	rain	2	DAY			
40.	7-22-16					7	DAY	72	94	F
41.	7-25-16	0.1	IN	RAIN	rain	1	DAY			
42.	7-29-16					7	DAY	69	91	F
43.	7-31-16	0.52	IN	RAIN	rain	3	DAY			
44.	8-3-16	0.75	IN	RAIN	rain	1	DAY			
45.	8-5-16					7	DAY	66	93	F
46.	8-5-16	0.06	IN	RAIN	rain	1	DAY			
47.	8-12-16					7	DAY	68	91	F
48.	8-12-16	4.85	IN	RAIN	rain	5	DAY			
49.	8-19-16					7	DAY	57	93	F

Comment:

Rainfall was recorded on station and provided by Illinois Climate Network.
Air temperature was recorded at Scott Air Force Base 2.5 miles north and provided by NOAA's National Centers for Environmental Information.
Air temperatures given are summarized as weekly high and low, detailed weather data is available on request.

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Application Description

	A	B
Application Date:	6-10-16	6-24-16
Appl. Start Time:	14:00	14:00
Appl. Stop Time:	15:00	15:00
Application Method:	Spray	Spray
Application Timing:	PRE	4-6"W
Application Placement:	BROSOI	BROFOL
Applied By:	MK	RFK
Air Temperature, Unit:	92 F	91 F
% Relative Humidity:	44	42
Wind Velocity, Unit:	3 MPH	2 MPH
Wind Direction:	S	W
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	75 F	80 F
Soil Moisture:	NORMAL	BELNOR
% Cloud Cover:	0	25
Next Moisture Occurred On:	6-30-16	6-30-16
Time to Next Moisture, Unit:	20 DAY	6 DAY

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA	GLXMA
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	NA	V3
Stage Minimum, Percent:		V2
Stage Maximum, Percent:		V3
Height, Unit:		5 IN
Height Minimum, Maximum:		3 5

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		3
Stage Maximum, Percent:		4
Height, Unit:		4 IN
Height Minimum, Maximum:		3 5
Density, Unit:		0.1 FT2
Pest 2 Code, Type, Scale:	IPOHE W	IPOHE W
Stage Majority, Percent:	NA	5
Stage Minimum, Percent:		4
Stage Maximum, Percent:		8
Height, Unit:		4 IN
Height Minimum, Maximum:		3 5
Density, Unit:		0.1 FT2
Pest 3 Code, Type, Scale:	GGGAN W	GGGAN W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		3
Stage Maximum, Percent:		4
Height, Unit:		5 IN
Height Minimum, Maximum:		2 6
Density, Unit:		4.5 FT2

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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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Pest Code		Crop Code		Rating Date		Rating Type		Rating Unit		Rating Timing		GLXMA	ABUTH	ABUTH	ABUTH
												7-8-16	7-8-16	7-22-16	8-19-16
												Injury	Control	Control	Control
												Percent	Percent	Percent	Percent
												14 DA-B	14 DA-B	28 DA-B	56 DA-B
Trt-Eval Interval												28 DA-A	28 DA-A	42 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	NO PRE HERBICIDE									0 a	95 a	88 ab	88 ab		
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
2	PREFIX	5.29 EC		1.65 lb ai/a		2.5 pt/a		PRE	A	0 a	92 a	89 ab	89 ab		
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
3	PREFIX	5.29 EC		1.65 lb ai/a		2.5 pt/a		PRE	A	0 a	95 a	93 ab	93 ab		
	CLASSIC	25 WG		0.02 lb ai/a		1.28 oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
4	PREFIX	5.29 EC		1.65 lb ai/a		2.5 pt/a		PRE	A	0 a	95 a	95 ab	95 ab		
	FIRSTRATE	84 WG		0.031 lb ai/a		0.6 oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
5	PREFIX	5.29 EC		1.65 lb ai/a		2.5 pt/a		PRE	A	0 a	92 a	92 ab	92 ab		
	PURSUIT	2 SL		0.063 lb ai/a		4 fl oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
6	PREFIX	5.29 EC		1.65 lb ai/a		2.5 pt/a		PRE	A	0 a	89 a	88 b	88 b		
	SCEPTER	70 WG		0.125 lb ai/a		2.86 oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
7	BOUNDARY	6.5 EC		1.63 lb ai/a		2 pt/a		PRE	A	0 a	89 a	86 b	86 b		
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
8	BOUNDARY	6.5 EC		1.63 lb ai/a		2 pt/a		PRE	A	0 a	88 a	87 b	87 b		
	CLASSIC	25 WG		0.02 lb ai/a		1.28 oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
9	BOUNDARY	6.5 EC		1.63 lb ai/a		2 pt/a		PRE	A	0 a	93 a	96 ab	96 ab		
	FIRSTRATE	84 WG		0.031 lb ai/a		0.6 oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
10	BOUNDARY	6.5 EC		1.63 lb ai/a		2 pt/a		PRE	A	0 a	89 a	86 b	86 b		
	PURSUIT	2 SL		0.063 lb ai/a		4 fl oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
11	BOUNDARY	6.5 EC		1.63 lb ai/a		2 pt/a		PRE	A	0 a	93 a	91 ab	91 ab		
	SCEPTER	70 WG		0.125 lb ai/a		2.86 oz/a		PRE	A						
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						
12	FIERCE	76 WG		0.1544 lb ai/a		3.25 oz/a		PRE	A	0 a	99 a	99 a	99 a		
	ROUNDUP POWERMAX	4.5 SL		1.13 lb ae/a		32 fl oz/a		4-6"W	B						
	AMS - LIQUID	100 SL		5 % v/v		5 % v/v		4-6"W	B						

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Could not calculate LSD (% mean diff) for columns 5 because error mean square = 0.

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	GLXMA 7-8-16 Injury Percent 14 DA-B	ABUTH 7-8-16 Control Percent 14 DA-B	ABUTH 7-22-16 Control Percent 28 DA-B	ABUTH 8-19-16 Control Percent 56 DA-B
13	FIERCE	76 WG	0.1544 lb ai/a	3.25 oz/a	PRE	A	0 a	99 a	99 a	99 a
	CLASSIC	25 WG	0.02 lb ai/a	1.28 oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
14	FIERCE	76 WG	0.1544 lb ai/a	3.25 oz/a	PRE	A	0 a	99 a	99 a	99 a
	FIRSTRATE	84 WG	0.031 lb ai/a	0.6 oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
15	FIERCE	76 WG	0.1544 lb ai/a	3.25 oz/a	PRE	A	0 a	99 a	99 a	99 a
	PURSUIT	2 SL	0.063 lb ai/a	4 fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
16	FIERCE	76 WG	0.1544 lb ai/a	3.25 oz/a	PRE	A	0 a	99 a	99 a	99 a
	SCEPTER	70 WG	0.125 lb ai/a	2.86 oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
17	AUTHORITY XL	70 WG	0.28 lb ai/a	6.4 oz/a	PRE	A	0 a	99 a	99 a	99 a
	DUAL MAGNUM	7.62 EC	1.27 lb ai/a	1.33 pt/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
18	AUTHORITY XL	70 WG	0.28 lb ai/a	6.4 oz/a	PRE	A	0 a	99 a	99 a	99 a
	ZIDUA	85 WG	0.086 lb ai/a	1.62 oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
19	AUTHORITY FIRST DF	70 WG	0.28 lb ai/a	6.4 oz/a	PRE	A	0 a	96 a	94 ab	94 ab
	DUAL MAGNUM	7.62 EC	1.27 lb ai/a	1.33 pt/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
20	AUTHORITY FIRST DF	70 WG	0.28 lb ai/a	6.4 oz/a	PRE	A	0 a	99 a	99 a	99 a
	ZIDUA	85 WG	0.086 lb ai/a	1.62 oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
21	FIERCE XLT	62.41 WG	0.176 lb ai/a	4.5 oz/a	PRE	A	0 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B				
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
22	ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	4-6"W	B	0 a	93 a	89 ab	89 ab
	AMS - LIQUID	100 SL	5 % v/v	5 % v/v	4-6"W	B				
LSD P=.05							.	10.7	10.8	10.8
Standard Deviation							0.0	7.6	7.6	7.6
CV							0.0	7.99	8.14	8.14
Replicate F							0.000	0.968	1.715	1.715
Replicate Prob(F)							1.0000	0.4133	0.1730	0.1730
Treatment F							0.000	1.127	1.800	1.800
Treatment Prob(F)							1.0000	0.3457	0.0383	0.0383

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	IPOHE	IPOHE	IPOHE	GGGAN	GGGAN			
							7-8-16 Control Percent 14 DA-B	7-22-16 Control Percent 28 DA-B	8-19-16 Control Percent 56 DA-B	7-22-16 Control Percent 28 DA-B	8-19-16 Control Percent 56 DA-B			
							28 DA-A	42 DA-A	70 DA-A	42 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	NO PRE HERBICIDE ROUNDUP POWERMAX AMS - LIQUID	4.5 SL 100 SL		1.13 lb ae/a 5 % v/v		32 fl oz/a 5 % v/v		4-6"W 4-6"W	B B	90 a	83 def	83 def	60 c	60 c
2	PREFIX ROUNDUP POWERMAX AMS - LIQUID	5.29 EC 4.5 SL 100 SL		1.65 lb ai/a 1.13 lb ae/a 5 % v/v		2.5 pt/a 32 fl oz/a 5 % v/v		PRE 4-6"W 4-6"W	A B B	90 a	89 a-f	89 a-f	95 a	95 a
3	PREFIX CLASSIC ROUNDUP POWERMAX AMS - LIQUID	5.29 EC 25 WG 4.5 SL 100 SL		1.65 lb ai/a 0.02 lb ai/a 1.13 lb ae/a 5 % v/v		2.5 pt/a 1.28 oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	93 a	87 b-f	87 b-f	96 a	96 a
4	PREFIX FIRSTRATE ROUNDUP POWERMAX AMS - LIQUID	5.29 EC 84 WG 4.5 SL 100 SL		1.65 lb ai/a 0.031 lb ai/a 1.13 lb ae/a 5 % v/v		2.5 pt/a 0.6 oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	98 a	97 ab	97 ab	94 a	94 a
5	PREFIX PURSUIT ROUNDUP POWERMAX AMS - LIQUID	5.29 EC 2 SL 4.5 SL 100 SL		1.65 lb ai/a 0.063 lb ai/a 1.13 lb ae/a 5 % v/v		2.5 pt/a 4 fl oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	97 a	95 abc	95 abc	99 a	99 a
6	PREFIX SCEPTER ROUNDUP POWERMAX AMS - LIQUID	5.29 EC 70 WG 4.5 SL 100 SL		1.65 lb ai/a 0.125 lb ai/a 1.13 lb ae/a 5 % v/v		2.5 pt/a 2.86 oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	99 a	97 ab	97 ab	98 a	98 a
7	BOUNDARY ROUNDUP POWERMAX AMS - LIQUID	6.5 EC 4.5 SL 100 SL		1.63 lb ai/a 1.13 lb ae/a 5 % v/v		2 pt/a 32 fl oz/a 5 % v/v		PRE 4-6"W 4-6"W	A B B	86 a	81 ef	81 ef	91 a	91 a
8	BOUNDARY CLASSIC ROUNDUP POWERMAX AMS - LIQUID	6.5 EC 25 WG 4.5 SL 100 SL		1.63 lb ai/a 0.02 lb ai/a 1.13 lb ae/a 5 % v/v		2 pt/a 1.28 oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	87 a	78 f	78 f	89 ab	89 ab
9	BOUNDARY FIRSTRATE ROUNDUP POWERMAX AMS - LIQUID	6.5 EC 84 WG 4.5 SL 100 SL		1.63 lb ai/a 0.031 lb ai/a 1.13 lb ae/a 5 % v/v		2 pt/a 0.6 oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	96 a	94 a-d	94 a-d	98 a	98 a
10	BOUNDARY PURSUIT ROUNDUP POWERMAX AMS - LIQUID	6.5 EC 2 SL 4.5 SL 100 SL		1.63 lb ai/a 0.063 lb ai/a 1.13 lb ae/a 5 % v/v		2 pt/a 4 fl oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	89 a	88 b-f	88 b-f	92 a	92 a
11	BOUNDARY SCEPTER ROUNDUP POWERMAX AMS - LIQUID	6.5 EC 70 WG 4.5 SL 100 SL		1.63 lb ai/a 0.125 lb ai/a 1.13 lb ae/a 5 % v/v		2 pt/a 2.86 oz/a 32 fl oz/a 5 % v/v		PRE PRE 4-6"W 4-6"W	A A B B	91 a	89 a-e	89 a-e	92 a	92 a
12	FIERCE ROUNDUP POWERMAX AMS - LIQUID	76 WG 4.5 SL 100 SL		0.1544 lb ai/a 1.13 lb ae/a 5 % v/v		3.25 oz/a 32 fl oz/a 5 % v/v		PRE 4-6"W 4-6"W	A B B	99 a	99 a	99 a	99 a	99 a

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Could not calculate LSD (% mean diff) for columns 5 because error mean square = 0.

Effect of Three-Way Tank-Mixes on Weed Control when Soil-Applied in RR2Y Soybean.

Trial ID: 16-52-E130 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

Pest Code								IPOHE	IPOHE	IPOHE	GGGAN	GGGAN		
Crop Code								7-8-16	7-22-16	8-19-16	7-22-16	8-19-16		
Rating Date								Control	Control	Control	Control	Control		
Rating Type								Percent	Percent	Percent	Percent	Percent		
Rating Unit								14 DA-B	28 DA-B	56 DA-B	28 DA-B	56 DA-B		
Rating Timing														
Trt-Eval Interval								28 DA-A	42 DA-A	70 DA-A	42 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					
13	FIERCE	76	WG	0.1544	lb ai/a	3.25	oz/a	PRE	A	99 a	99 a	99 a	98 a	98 a
	CLASSIC	25	WG	0.02	lb ai/a	1.28	oz/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
14	FIERCE	76	WG	0.1544	lb ai/a	3.25	oz/a	PRE	A	99 a	99 a	99 a	97 a	97 a
	FIRSTRATE	84	WG	0.031	lb ai/a	0.6	oz/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
15	FIERCE	76	WG	0.1544	lb ai/a	3.25	oz/a	PRE	A	99 a	99 a	99 a	96 a	96 a
	PURSUIT	2	SL	0.063	lb ai/a	4	fl oz/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
16	FIERCE	76	WG	0.1544	lb ai/a	3.25	oz/a	PRE	A	99 a	99 a	99 a	96 a	96 a
	SCEPTER	70	WG	0.125	lb ai/a	2.86	oz/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
17	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 a	96 a	96 a
	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
18	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 a	99 a	99 a
	ZIDUA	85	WG	0.086	lb ai/a	1.62	oz/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
19	AUTHORITY FIRST DF	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	96 a	92 a-e	92 a-e	80 b	80 b
	DUAL MAGNUM	7.62	EC	1.27	lb ai/a	1.33	pt/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
20	AUTHORITY FIRST DF	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 a	97 a	97 a
	ZIDUA	85	WG	0.086	lb ai/a	1.62	oz/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
21	FIERCE XLT	62.41	WG	0.176	lb ai/a	4.5	oz/a	PRE	A	98 a	98 ab	98 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B					
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
22	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4-6"	W B	92 a	86 c-f	86 c-f	58 c	58 c
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	4-6"	W B					
LSD P=.05								10.0	10.8	10.8	10.5	10.5		
Standard Deviation								7.1	7.7	7.7	7.4	7.4		
CV								7.43	8.24	8.24	8.13	8.13		
Replicate F								1.762	2.260	2.260	1.303	1.303		
Replicate Prob(F)								0.1636	0.0901	0.0901	0.2812	0.2812		
Treatment F								1.683	3.114	3.114	9.566	9.566		
Treatment Prob(F)								0.0583	0.0003	0.0003	0.0001	0.0001		

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Effect of Three-Way Tank-Mixes on Weed Control when Soil-Applied in RR2Y Soybean.

Trial ID: 16-52-E130 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Trial Comments

1. Protocol: SIU/RFK.
2. Ratings:
CI 14, and 28 DA-A; 0, 14, 28, and 56 DA-B.
WC 14, and 28 DA-A; 0, 14, 28, and 56 DA-B.
Rate before spray application B.
3. Yield to be determined.
4. Photos not requested, but as appropriate, probably at 0 DA-B if differences.
Photos of crop injury from application A if differences would be a good idea.
5. Rainfall following the PRE application A was 2.61 inch over 9 days beginning 20 days later.
Rainfall following the 4-6"W application B was 2.61 inch over 9 days beginning 6 days later.
6. Because there was no rainfall for the PRE application A for more than 2 weeks after application, the 4-6"W application B was applied as a blanket application to the entire area at 14 DA-A.
The planned 14 DA-A and 0 DA-B ratings were not made, PREs were not activated.
7. Not harvested.