

Glyphosate Nozzle by Adjuvants Study - Winfield Solutions.

Trial ID: 12-21M-MW130  
 Location: Belleville Res. Center

Investigator: Bryan Young

<b>General Trial Information</b>	
<b>Study Director:</b> Bryan Young <b>Investigator:</b> Bryan Young <b>Title:</b> Professor	
<b>Trial Status:</b> F - one-year/final <b>Initiation Date:</b> 6-4-12	
<b>Trial Location</b>	
<b>City:</b> Belleville <b>State/Prov.:</b> IL <b>Postal Code:</b> 62221 <b>Country:</b> USA	

**Objectives:**  
 Evaluate the effect of Interlock and spray nozzles on the efficacy of weed control with glyphosate.

<b>Personnel</b>	
<b>Study Director:</b> Bryan Young <b>Investigator:</b> Bryan Young <b>Title:</b> Professor	
<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	

<b>Crop Description</b>	
<b>Crop 1:</b> GLXMA    Glycine max    Soybean <b>Variety:</b> AG3832 <b>Description:</b> RR2Y <b>BBCH Scale:</b> BSOY <b>Planting Date:</b> 6-4-12 <b>Planting Method:</b> SEEDED    Seeded <b>Rate, Unit:</b> 75 LB/A <b>Depth, Unit:</b> 1    IN <b>Row Spacing, Unit:</b> 30    IN	

<b>Pest Description</b>	
<b>Pest 1 Type:</b> W <b>Code:</b> IPOHE - Ipomoea hederacea (L.) Jacq. <b>Common Name:</b> morningglory, ivyleaf	
<b>Pest 2 Type:</b> W <b>Code:</b> AMATA - Amaranthus rudis Sauer <b>Common Name:</b> waterhemp, common	
<b>Pest 3 Type:</b> W <b>Code:</b> XANST - Xanthium strumarium L. <b>Common Name:</b> cocklebur, common	
<b>Pest 4 Type:</b> W <b>Code:</b> SETFA - Setaria faberi Herrm. <b>Common Name:</b> foxtail, giant	

<b>Site and Design</b>							
<b>Plot Width, Unit:</b> 10 FT <b>Site Type:</b> FIELD field <b>Plot Length, Unit:</b> 60 FT <b>Plot Area, Unit:</b> 600 FT2 <b>Tillage Type:</b> REDTIL reduced-till <b>Replications:</b> 3 <b>Study Design:</b> RACOB� Randomized Complete Block (RCB)							
<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>2011</td></tr></tbody></table>	No.	Previous Crop	Year	1.	ZEAMD	2011	
No.	Previous Crop	Year					
1.	ZEAMD	2011					

<b>Maintenance</b>					
<table border="1"><thead><tr><th>No.</th><th>Maintenance Treatment Name</th></tr></thead><tbody><tr><td>1.</td><td>N 0 LB/A, P205 50 LB/A, K20 100 LB/A</td></tr></tbody></table>	No.	Maintenance Treatment Name	1.	N 0 LB/A, P205 50 LB/A, K20 100 LB/A	
No.	Maintenance Treatment Name				
1.	N 0 LB/A, P205 50 LB/A, K20 100 LB/A				

<b>Soil Description</b>										
<b>% OM:</b> 2.1 <b>Texture:</b> SIL SILT LOAM <b>pH:</b> 6 <b>Soil Name:</b> BETHALTO <b>CEC:</b> 12										
<b>Additional Measured Elements</b>										
<table border="1"><thead><tr><th>Element</th><th>Quantity</th><th>Unit</th></tr></thead><tbody><tr><td>P1</td><td>89</td><td>LB/A</td></tr><tr><td>K</td><td>400</td><td>LB/A</td></tr></tbody></table>	Element	Quantity	Unit	P1	89	LB/A	K	400	LB/A	
Element	Quantity	Unit								
P1	89	LB/A								
K	400	LB/A								

<b>Moisture and Weather Conditions</b>	
<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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		A
<b>Application Date:</b>	7-9-12	
<b>Time of Day:</b>	7:00	
<b>Application Method:</b>	Spray	
<b>Application Timing:</b>	4-6"W	
<b>Application Placement:</b>	BROFOL	
<b>Applied By:</b>	JRK	
<b>Air Temperature, Unit:</b>	75 F	
<b>% Relative Humidity:</b>	69	
<b>Wind Velocity, Unit:</b>	1 MPH	
<b>Wind Direction:</b>	N	
<b>Dew Presence (Y/N):</b>	N no	
<b>Soil Temperature, Unit:</b>	83 F	
<b>Soil Moisture:</b>	BELNOR	
<b>% Cloud Cover:</b>	90	
<b>Next Rain Occurred On:</b>	7-29-12	

		A
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	
<b>Stage Scale Used:</b>	DESC	
<b>Stage Majority, Percent:</b>	V3	
<b>Stage Minimum, Percent:</b>	V2	
<b>Stage Maximum, Percent:</b>	V3	
<b>Height, Unit:</b>	7 IN	
<b>Height Minimum, Maximum:</b>	3 7	

		A
<b>Pest 1 Code, Type, Scale:</b>	IPHE W DESC	
<b>Stage Majority, Percent:</b>	6	
<b>Stage Minimum, Percent:</b>	Coty	
<b>Stage Maximum, Percent:</b>	14	
<b>Height, Unit:</b>	3 IN	
<b>Height Minimum, Maximum:</b>	1 5	
<b>Density, Unit:</b>	0.5 FT2	
<b>Pest 2 Code, Type, Scale:</b>	AMATA W DESC	
<b>Stage Majority, Percent:</b>	6	
<b>Stage Minimum, Percent:</b>	2	
<b>Stage Maximum, Percent:</b>	12	
<b>Height, Unit:</b>	5 IN	
<b>Height Minimum, Maximum:</b>	1 8	
<b>Density, Unit:</b>	0.3 FT2	
<b>Pest 3 Code, Type, Scale:</b>	XANST W DESC	
<b>Stage Majority, Percent:</b>	4	
<b>Stage Minimum, Percent:</b>	2	
<b>Stage Maximum, Percent:</b>	6	
<b>Height, Unit:</b>	4 IN	
<b>Height Minimum, Maximum:</b>	1 6	
<b>Density, Unit:</b>	0.1 FT2	
<b>Pest 4 Code, Type, Scale:</b>	SETFA W DESC	
<b>Stage Majority, Percent:</b>	4	
<b>Stage Minimum, Percent:</b>	1	
<b>Stage Maximum, Percent:</b>	7	
<b>Height, Unit:</b>	5 IN	
<b>Height Minimum, Maximum:</b>	0.5 8	
<b>Density, Unit:</b>	0.5 FT2	

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**Application Equipment**

	<b>A</b>
<b>Appl. Equipment:</b>	CO2 sprayer
<b>Equipment Type:</b>	ALTEVE
<b>Nozzle Type:</b>	See
<b>Nozzle Size:</b>	comment
<b>Boom Length, Unit:</b>	6.67 FT
<b>Spray Volume, Unit:</b>	10 GPA

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	GLXMA 7-16-12 Injury Percent	GLXMA 7-23-12 Injury Percent	GLXMA 8-6-12 Injury Percent
							7 DA-A	14 DA-A	28 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	0 a 0 a 0 a
2	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	0 a 0 a 0 a
3	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	0 a 0 a 0 a
4	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	0 a 0 a 0 a
5	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	0 a 0 a 0 a
6	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	0 a 0 a 0 a
7	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	0 a 0 a 0 a
8	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	0 a 0 a 0 a
9	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	0 a 0 a 0 a
10	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	0 a 0 a 0 a

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

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Pest Code										GLXMA	GLXMA	GLXMA
Crop Code										7-16-12	7-23-12	8-6-12
Rating Date										Injury	Injury	Injury
Rating Type										Percent	Percent	Percent
Rating Unit												
Rating Timing												
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A
Trt Treatment		Form	Form	Rate	Other	Other	Growth	Appl				
No. Name		Conc	Type	Rate	Rate	Rate	Unit	Stage	Code			
11 NONTREATED										0 a	0 a	0 a
LSD (P=.05)										0.0	0.0	0.0
Standard Deviation										0.0	0.0	0.0
CV										0.0	0.0	0.0
Replicate F										0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval									IPOHE 7-16-12 Control Percent 7 DA-A	IPOHE 7-23-12 Control Percent 14 DA-A	IPOHE 8-6-12 Control Percent 28 DA-A
Trt Treatment No. Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate	Other Unit	Growth Stage	Appl Code			
1 FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5	SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v			4-6"W 4-6"W	A A	73 ab	68 ab	68 ab
2 FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5	SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v			4-6"W 4-6"W 4-6"W	A A A	68 ab	62 abc	63 bc
3 MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5	SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v			4-6"W 4-6"W	A A	72 ab	65 ab	65 abc
4 MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5	SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v			4-6"W 4-6"W 4-6"W	A A A	73 ab	60 bc	60 bc
5 COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5	SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v			4-6"W 4-6"W	A A	68 ab	62 abc	65 abc
6 COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5	SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v			4-6"W 4-6"W 4-6"W	A A A	65 b	58 bc	58 bc
7 VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5	SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v			4-6"W 4-6"W	A A	78 a	72 a	73 a
8 VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5	SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v			4-6"W 4-6"W 4-6"W	A A A	65 b	53 c	56 c
9 ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX N-PAK AMS	4.5	SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v			4-6"W 4-6"W	A A	71 ab	65 ab	65 abc
10 ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5	SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v			4-6"W 4-6"W 4-6"W	A A A	68 ab	67 ab	68 ab

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Crop Code												
Rating Date										7-16-12	7-23-12	8-6-12
Rating Type										Control	Control	Control
Rating Unit										Percent	Percent	Percent
Rating Timing												
Trt-Eval Interval										7 DA-A	14 DA-A	28 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code		
11	NONTREATED										0 c	0 d
LSD (P=.05)											10.4	11.3
Standard Deviation											6.1	6.6
CV											9.56	11.53
Replicate F											7.389	5.805
Replicate Prob(F)											0.0040	0.0103
Treatment F											37.169	26.512
Treatment Prob(F)											0.0001	0.0001

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Pest Code	AMATA	AMATA	AMATA									
Crop Code												
Rating Date	7-16-12	7-23-12	8-6-12									
Rating Type	Control	Control	Control									
Rating Unit	Percent	Percent	Percent									
Rating Timing												
Trt-Eval Interval	7 DA-A	14 DA-A	28 DA-A									
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Unit	Growth Stage	Appl Code			
1	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v		10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	75 abc	88 a	90 a
2	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v		10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	72 bc	87 a	91 a
3	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v		10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	82 a	88 a	90 a
4	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v		10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	75 abc	83 a	90 a
5	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v		10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	78 ab	86 a	90 a
6	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v		10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	70 c	83 a	86 a
7	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v		10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	72 bc	83 a	87 a
8	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v		10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	73 bc	86 a	91 a
9	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 SL 100 SL		0.375 lb ae/a 5 % v/v		10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	72 bc	83 a	88 a
10	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 SL 100 SL 100 SL		0.375 lb ae/a 4 fl oz/a 5 % v/v		10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	72 bc	84 a	89 a



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Pest Code		AMATA	AMATA	AMATA
Crop Code				
Rating Date		7-16-12	7-23-12	8-6-12
Rating Type		Control	Control	Control
Rating Unit		Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval		7 DA-A	14 DA-A	28 DA-A
Trt Treatment No. Name	Form Conc	Form Type	Rate Unit	Other Rate
				Other Rate
				Growth Unit
				Stage
				Code
11 NONTREATED				
		0 d	0 b	0 b
LSD (P=.05)		6.8	8.4	6.3
Standard Deviation		4.0	5.0	3.7
CV		5.91	6.4	4.58
Replicate F		0.000	2.983	0.915
Replicate Prob(F)		1.0000	0.0735	0.4165
Treatment F		96.555	81.044	158.078
Treatment Prob(F)		0.0001	0.0001	0.0001

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Pest Code								XANST	XANST	XANST	
Crop Code								7-16-12	7-23-12	8-6-12	
Rating Date								Control	Control	Control	
Rating Type								Percent	Percent	Percent	
Rating Unit								7 DA-A	14 DA-A	28 DA-A	
Rating Timing											
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Unit	Appl Code			
1	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	99 a	99 a	99 a
2	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	99 a	99 a	99 a
3	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	99 a	99 a	99 a
4	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	96 b	99 a	99 a
5	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	99 a	99 a	99 a
6	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	99 a	99 a	99 a
7	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	99 a	99 a	99 a
8	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	99 a	99 a	99 a
9	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	99 a	99 a	99 a
10	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	98 a	99 a	99 a

Southern Illinois University

Glyphosate Nozzle by Adjuvants Study - Winfield Solutions.

Trial ID: 12-21M-MW130

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code		XANST	XANST	XANST
Crop Code				
Rating Date		7-16-12	7-23-12	8-6-12
Rating Type		Control	Control	Control
Rating Unit		Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval		7 DA-A	14 DA-A	28 DA-A
Trt Treatment No. Name	Form Conc	Form Type	Rate Unit	Other Rate
				Other Rate
				Growth Unit
				Stage
				Code
11 NONTREATED				
		0 c	0 b	0 b
LSD (P=,05)		1.3	0.0	0.0
Standard Deviation		0.8	0.0	0.0
CV		0.85	0.0	0.0
Replicate F		1.458	0.000	0.000
Replicate Prob(F)		0.2563	1.0000	1.0000
Treatment F		4566.657	0.000	0.000
Treatment Prob(F)		0.0001	1.0000	1.0000

Glyphosate Nozzle by Adjuvants Study - Winfield Solutions.

Trial ID: 12-21M-MW130  
Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								SETFA	SETFA	SETFA	
								7-16-12 Control Percent	7-23-12 Control Percent	8-6-12 Control Percent	
								7 DA-A	14 DA-A	28 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate	Growth Unit Stage	Appl Code			
1	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	99 a	99 a	99 a
2	FINE TJ60 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	99 a	99 a	99 a
3	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	99 a	99 a	99 a
4	MEDIUM XR 11003 @ 43.5 PSI 9.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	98 a	98 a	99 ab
5	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	98 a	98 a	98 b
6	COARSE AIXR 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	99 a	99 a	99 a
7	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	98 a	98 a	99 a
8	VC-XC AI 11004 @ 50 PSI 13.4 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	98 a	99 a	99 a
9	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX N-PAK AMS	4.5 100	SL SL	0.375 lb ae/a 5 % v/v	10.7 fl oz/a 5 % v/v		4-6"W 4-6"W	A A	98 a	99 a	99 a
10	ULTRA COARSE TTI 11004 @ 43.5 PSI 12.3 MPH ROUNDUP POWERMAX INTERLOCK N-PAK AMS	4.5 100 100	SL SL SL	0.375 lb ae/a 4 fl oz/a 5 % v/v	10.7 fl oz/a 4 fl oz/a 5 % v/v		4-6"W 4-6"W 4-6"W	A A A	98 a	98 a	99 a

Southern Illinois University

Glyphosate Nozzle by Adjuvants Study - Winfield Solutions.

Trial ID: 12-21M-MW130

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code		SETFA	SETFA	SETFA
Crop Code				
Rating Date		7-16-12	7-23-12	8-6-12
Rating Type		Control	Control	Control
Rating Unit		Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval		7 DA-A	14 DA-A	28 DA-A
Trt Treatment No. Name	Form Form Conc Type Rate	Rate Unit	Other Rate	Other Rate Unit Growth Stage Appl Code
11 NONTREATED				
LSD (P=.05)		1.4	1.0	0.6
Standard Deviation		0.8	0.6	0.4
CV		0.92	0.65	0.42
Replicate F		7.679	5.714	1.957
Replicate Prob(F)		0.0034	0.0109	0.1675
Treatment F		3896.688	7834.376	19138.133
Treatment Prob(F)		0.0001	0.0001	0.0001

Glyphosate Nozzle by Adjuvants Study - Winfield Solutions.

Trial ID: 12-21M-MW130

Location: Belleville Res. Center

Investigator: Bryan Young

Trial Comments

1. Protocol: Winfield Solutions.
2. Ratings: CI/WC at 7, 14 and 28 DAT.
3. Nozzle type/size, application PSI, and application speed are per treatment, see treatment list.
4. Rainfall following the 4-6"W application was 0.15 inch 20 days later.
5. Not harvested.