Trial ID: 12-DSO-Residual Location: De Soto, IL

Investigator: Bryan Young

General Trial Information Study Director: Bryan Young									
Investigator: Bryan Young Title: Professor									
Trial Status: F - one-year/final									
Initiation Date: 4-29-12									
Trial Location									
City: De Soto									
Postal Code: 62924									
Country: USA									
Objectioner									
Determine which herbicide for use in sovbean has the greatest level									
of residual waterhemp control.									
Personnel									
Study Director: Bryan Young									
Investigator: Bryan Young Title: Professor									
Address: 1205 Lincoln Drive - AG 176 - MC 4415									
Location: Carbondale IL									
Postal Code: 62901 E-mail: bgyoung@siu.edu Phone No.: 618-453-7679 Mobile No.: 618-713-6471									
Crop Description									
Variety: AG3832 Description: RR2Y									
BBCH Scale: BSOY Planting Date: 4-29-12									
Planting Method: SEEDED Seeded Rate, Unit: 155000 S/A									
Row Spacing, Unit: 30 IN									
Pest Description									
Common Name: waterhemp. common									
Description: glyphosate-resistant waterhemp									
City and Desire									
Plot Width. Unit: 10 FT Site Type: FIELD field									
Plot Length, Unit: 30 FT									
Plot Area, Unit: 30 FT2 Tillage Type: NOTIL no-till									
No. Previous Crop Year									
1. GLXMA 2011									
Maintenance									
Maintenance									
No. Treatment Name									
1. N 27 LB/A, P205 69 LB/A, K20 90 LB/A									
Soil Description									
<b>% Silt:</b> 64.7 <b>pH:</b> 6.9 <b>Soil Name:</b> OKAW									
% Clay: 19.9 CEC: 12.4									
Additional Measured Elements									
Element Quantity Unit									
P1 94 LB/A									
K 468 LB/A									
Moisture and Weather Conditions									
Overall Moisture Conditions: BELNOR below normal   Closest Weather Station: SOUTHERN IL AIRPORT (93810) Distance. Unit: 1.5 MI									

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	Application Description						
	A	]					
Application Date:	4-29-12						
Time of Day:	16:00						
Application Method:	Spray						
Application Timing:	PRE						
Application Placement:	BROFOL						
Applied By:	LAH						
Air Temperature, Unit:	80 F						
% Relative Humidity:	59						
Wind Velocity, Unit:	2 MPH						
Wind Direction:	N						
Dew Presence (Y/N):	N no						
Soil Temperature, Unit:	70 F						
Soil Moisture:	NORMAL						
% Cloud Cover:	100						
Next Rain Occurred On:	4-30-12						

		Crop Stage At Each Application
	A	
Crop 1 Code, BBCH Scale:	GLXMA BSOY	
Stage Scale Used:	DESC	
Stage Majority, Percent:	NA	

		Pest Stage At Each Application
	A	
Pest 1 Code, Type, Scale:	AMATA W DESC	
Stage Majority, Percent:	NA	

A:							
	A						
Appl. Equipment:	CO2 sprayer						
Equipment Type:	BACS	PR					
Operation Pressure, Unit:	30		PSI				
Nozzle Type:	XR						
Nozzle Size:	8002						
Boom Length, Unit:	6.67	FT					
Spray Volume, Unit:	15	G	PA				

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Pest Code Crop Code Rating Date Rating Type Rating Unit						GLXMA 5-13-12 Injury Percent	GLXMA 5-27-12 Injury Percent	GLXMA 6-24-12 Injury Percent	AMATA-HR 5-13-12 Control Percent	AMATA-HR 5-27-12 Control Percent	AMATA-HR 6-24-12 Control Percent
Rating Timing Trt-Eval Interval						14 DA-A	28 DA-A	56 DA-A	14 DA-A	28 DA-A	56 DA-A
Trt Treatment No. Name	Form Form Conc Type	Rate Rate	Other Other Rate Rate Un	Growth it Stage	n Appl Code						
1 NONTREATED						0 a	0 a	0 a	0 b	0 f	0 f
2 SONIC	70 WG	0.28 lb ai/a	6.4 oz/a	PRE	A	0 a	0 a	0 a	99 a	97 a	95 a
3 ENVIVE	41.3 WG	0.129 lb ai/a	5 oz/a	PRE	A	0 a	0 a	0 a	99 a	94 bc	68 cd
4 VALOR XLT	40.3 WG	0.101 lb ai/a	4 oz/a	PRE	А	0 a	0 a	0 a	99 a	89 d	68 d
5 FIERCE	76 WG	0.214 lb ai/a	4.5 oz/a	PRE	A	0 a	0 a	0 a	99 a	97 ab	86 b
6 ZIDUA	85 WG	0.133 lb ai/a	2.5 oz/a	PRE	А	0 a	0 a	0 a	99 a	96 ab	76 c
7 PREFIX	5.29 EC	1.65 lb ai/a	2.5 pt/a	PRE	A	0 a	0 a	0 a	99 a	97 ab	93 ab
8 BOUNDARY	6.5 EC	1.22 lb ai/a	1.5 pt/a	PRE	A	0 a	0 a	0 a	99 a	86 e	55 e
9 MATADOR	4.7 SC	1.59 lb ai/a	2.7 pt/a	PRE	А	0 a	2 a	0 a	99 a	92 cd	68 d
10 VERDICT OUTLOOK	5.57 EC 6 EC	0.218 lb ai/a 0.47 lb ai/a	5 oz/a 10 fl oz/a	PRE PRE	A A	0 a	0 a	0 a	99 a	90 d	63 d
11 LINEX	4 SC	1 lb ai/a	2 pt/a	PRE	А	0 a	0 a	0 a	99 a	92 cd	64 d
12 NONTREATED						0 a	0 a	0 a	0 b	0 f	0 f
LSD (P=.05) Standard Deviation CV						0.0 0.0 0.0	1.4 0.8 600.0	0.0 0.0 0.0	0.0 0.0 0.0	3.5 2.1 2.69	7.7 4.5 7.4
Replicate F Replicate Prob(F) Treatment F Treatment Prob(F)						0.000 1.0000 0.000 1.0000	1.000 0.3840 1.000 0.4767	0.000 1.0000 0.000 1.0000	0.000 1.0000 0.000 1.0000	3.283 0.0565 914.325 0.0001	0.414 0.6659 141.197 0.0001

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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**Trial Comments** 

- 1. Protocol: SIU (BGY).
- 2. Ratings: CI at 14 DAT; CI/WC at 28 and 56 DAT.
- 3. Blanket application of Roundup Powermax (44 floz/A) at 56 DAT, to all plots 10 ft wide.
- 4. No yield.
- 5. Blanket burndown of Gramoxone Inteon (4 pt/A) plus NIS (0.5%) was applied on 4-28-12.
- 6. Rainfall following the PRE application was approximately 0.5 inch the next day and an additional 0.25 inch 7 days later.
- 7. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
- 8. Not harvested.