

Residual Waterhemp Control.

Trial ID: 10-DSO-Residual Location: De Soto, IL

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 City State Zip Country: De Soto IL 62924 USA
 Trial Status: PRELIMINARY Initiation Date: 05-08-10

Objectives: Determine which herbicide for use in soybean has the greatest level of residual waterhemp control.

Crop 1: GLXMA Soybean Variety: AG 4005 Description: RR
 Planting Method: SEEDED Planting Date: 05-08-10
 Rate, Unit: 75 LB/A Depth, Unit: 1.0 IN
 Row Spacing, Unit: 30 IN

Pest 1 Type: W Code: AMATA Amaranthus rudis Sauer waterhemp, common
 Pest Description: glyphosate-resistant waterhemp

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 30 FT Tillage Type: NO-TILL
 Replications: 3 Study Design: Randomized Complete Block

Prior Crops, Year
 1. ZEAMD 2009

Field Prep./Maintenance: N 13 LB/A, P205 34 LB/A, K20 92 LB/A

% OM: 2.5 Texture: SILT LOAM
 pH: 6.8 Soil Name: OKAW
 CEC: 12 Fert. Level: P1 88 LB/A, K 207 LB/A

Application Description

A
 Application Date: 05-08-10
 Time of Day: 19:30
 Application Method: Spray
 Application Timing: PRE
 Application Placement: BROFOL
 Applied By: NVH
 Air Temperature, Unit: 57 F
 % Relative Humidity: 50
 Wind Velocity, Unit: 4 MPH
 Wind Direction: NW
 Dew Presence (Y/N): N
 Soil Temperature, Unit: 68 F
 Soil Moisture: NORMAL
 % Cloud Cover: 30

05-08-10
 Crop stage at application: NA

Pest Stage At Each Application

Application Date: 05-08-10
 Weed Code: AMATA
 Stage Majority (leaves): NA

Application Equipment

Appl. Equipment: CO2 sprayer
 Operating Pressure: 30 PSI
 Nozzle Type: Flat fan
 Nozzle Size: XR 8002
 Boom Length, Unit: 6.67 FT
 Spray Volume, Unit: 15 GPA

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Location: De Soto, IL

Pest Code Crop Code Rating Date Rating Data Type Rating Unit Rating Timing Trt-Eval Interval										GLXMA 05-22-10 Injury Percent		GLXMA 06-05-10 Injury Percent		GLXMA 07-03-10 Injury Percent		GLXMA 09-16-10 Injury Percent		AMATA-HR 06-05-10 Control Percent	AMATA-HR 07-03-10 Control Percent	AMATA-HR 09-16-10 Control Percent
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code	14 DA-A	28 DA-A	56 DA-A	EOS	28 DA-A	56 DA-A	EOS					
1	NONTREATED								0 c	0 c	0 b	0 a	0 e	0 f	0 e					
2	VALOR XLT	40.3	WG			3 oz/a	PRE	A	2 bc	1 c	0 b	0 a	96 bc	48 c	30 cd					
2	VALOR SX	51	WG	0.056	lb ai/a		PRE	A												
2	CLASSIC	25	WG	0.0194	lb ai/a		PRE	A												
3	SONIC	70	WG	0.14	lb ai/a	3.2 oz/a	PRE	A	0 c	0 c	0 b	0 a	97 ab	63 b	48 b					
4	FIERCE	76	WG	0.143	lb ai/a	3 oz/a	PRE	A	17 a	8 a	3 a	0 a	98 ab	48 c	28 cd					
5	VALOR XLT	40.3	WG			5.0 oz/a	PRE	A	3 b	3 b	0 b	0 a	98 ab	53 bc	15 de					
5	VALOR SX	51	WG	0.093	lb ai/a		PRE	A												
5	CLASSIC	25	WG	0.0322	lb ai/a		PRE	A												
6	SONIC	70	WG	0.28	lb ai/a	6.4 oz/a	PRE	A	1 bc	0 c	0 b	0 a	99 a	83 a	62 ab					
7	PREFIX	5.29	EC	1.65	lb ai/a	2.5 pt/a	PRE	A	0 c	0 c	0 b	0 a	98 a	96 a	75 a					
8	PROWL H2O	3.8	CS	1.19	lb ai/a	2.5 pt/a	PRE	A	0 c	0 c	0 b	0 a	94 c	17 de	8 e					
9	SHARPEN	2.85	SC	0.0223	lb ai/a	1 fl oz/a	PRE	A	0 c	0 c	0 b	0 a	78 d	8 ef	15 de					
10	BOUNDARY	6.5	EC	1.22	lb ai/a	1.5 pt/a	PRE	A	0 c	0 c	0 b	0 a	98 ab	28 d	32 c					
LSD (P=.05)									2.7	1.8	1.4	0.0	2.3	13.0	15.6					
Replicate F									0.372	0.215	1.000	0.000	2.206	0.002	0.251					
Replicate Prob(F)									0.6944	0.8086	0.3874	1.0000	0.1391	0.9977	0.7804					
Treatment F									33.214	19.471	3.368	0.000	1505.304	51.630	20.800					
Treatment Prob(F)									0.0001	0.0001	0.0136	1.0000	0.0001	0.0001	0.0001					

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU(BGY).
2. Ratings: CI at 14 DAT; CI/WC at 28 and 56 DAT and EOS.
3. No yield.
4. AMATA-HR = Herbicide-resistant waterhemp (glyphosate). EOS = End of season.
Crop injury on 5-22-10 at 14 DA-A was malformed leaves, unifoliolate was not unfolding.
5. Blanket burndown application of glyphosate (1.12 lbae/A) plus 2,4-D (0.475 lbae/A) plus AMS was applied 4-13-10.
Blanket preemergence application of Gramoxone (3 pt/A) plus NIS (0.5% v/v) was applied 5-8-10.
6. Not harvested.