

Glyphosate-Resistant Waterhemp Control with Ignite Tank-Mixtures.

Trial ID: 08-DeSoto-Bayer Location: De Soto, IL

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: De Soto IL USA
 Trial Status: FINAL Initiation Date: 06-05-08

Objectives: To evaluate Ignite tank-mixtures for control of glyphosate-resistant common waterhemp.

Crop 1: GLXMA soybean Variety: FS39R70 RR
 Planting Method: SEEDED Planting Date: 06-05-08
 Rate, Unit: 148000 S/A Depth, Unit: 1.5 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. GLXMA 2007

Application Description

A

Application Date: 07-20-08
 Time of Day: 9:45
 Application Method: SPRAY
 Application Timing: POST
 Application Placement: BROFOL
 Air Temperature, Unit: 93 F
 % Relative Humidity: 56
 Wind Velocity, Unit: 2 MPH
 Dew Presence (Y/N): N
 Soil Temperature, Unit: 88 F
 Soil Moisture: BELNOR
 % Cloud Cover: 0

Crop stage at application: 07-20-08
 V6
 Height Min, Max (inch): 12 18

Pest Stage At Each Application

Application Date: 07-20-08
 Weed Code: AMATA
 Stage Majority (leaves): 10
 Stage Min, Max: 3 27
 Height Majority: 11 IN
 Height Min, Max: 3 29
 Density, Unit: 12 FT2

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

Glyphosate-Resistant Waterhemp Control with Ignite Tank-Mixtures.

Trial ID: 08-DeSoto-Bayer Location: De Soto, IL

Pest Code		AMATA-HR		AMATA-HR					
Crop Code		08-03-08		08-17-08					
Rating Date		Control		Control					
Rating Data Type		Percent		Percent					
Rating Unit		14 DA-A		28 DA-A					
Rating Timing									
Trt-Eval Interval									
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Other Rate Rate Unit	Growth Stage	Appl Code		
1	NONTREATED							0 d	0 d
2	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	67 ab	58 bc
2	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
3	IGNITE 280	2.34	EC	0.53 lb ai/a	29 fl oz/a	POST	A	72 a	63 ab
3	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
4	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	62 bc	53 c
4	SENCOR	75	WG	0.188 lb ai/a	4 oz/a	POST	A		
4	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
5	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	58 c	53 c
5	FLEXSTAR	1.88	EC	0.176 lb ai/a	12 fl oz/a	POST	A		
5	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
6	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	72 a	68 a
6	FLEXSTAR	1.88	EC	0.353 lb ai/a	24 fl oz/a	POST	A		
6	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
7	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	65 abc	58 bc
7	COBRA	2	EC	0.094 lb ai/a	6 fl oz/a	POST	A		
7	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
8	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	67 ab	58 bc
8	COBRA	2	EC	0.188 lb ai/a	12 fl oz/a	POST	A		
8	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
9	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	62 bc	55 bc
9	ROUNDUP P-MAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	A		
9	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
10	IGNITE 280	2.34	EC	0.53 lb ai/a	29 fl oz/a	POST	A	70 a	62 abc
10	ROUNDUP P-MAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	A		
10	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
11	ROUNDUP P-MAX	4.5	SL	0.77 lb ae/a	22 fl oz/a	POST	A	0 d	0 d
11	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
12	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	67 ab	57 bc
12	PRIME OIL COC	100	SL	1 % v/v	1 % v/v	POST	A		
12	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
13	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	68 ab	60 abc
13	FLEXSTAR	1.88	EC	0.176 lb ai/a	12 fl oz/a	POST	A		
13	PRIME OIL COC	100	SL	1 % v/v	1 % v/v	POST	A		
13	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
14	IGNITE 280	2.34	EC	0.402 lb ai/a	22 fl oz/a	POST	A	67 ab	63 ab
14	BASAGRAN	4	SL	0.75 lb ai/a	24 fl oz/a	POST	A		
14	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	POST	A		
LSD (P=.05)								8.1	9.7
Replicate F								1.219	0.054
Replicate Prob(F)								0.3119	0.9477
Treatment F								75.877	43.244
Treatment Prob(F)								0.0001	0.0001

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

Trial Comments

1. Protocol: Bayer.
2. Ratings: WC 14 + 28 DAT.
3. DA-A = Days after POST application.
AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
4. Not harvested.