

Rhythm and Dawn Postemergence in Soybean.

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

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: De Soto IL 62924 USA
 Trial Status: FINAL Initiation Date: 05-08-10

Objectives: Determine if Rhythm applied postemergence is equal to or better than Flexstar for control of glyphosate-resistant waterhemp.

Crop 1: GLXMA Soybean Variety: AG 4005 Description: RR
 Planting Method: SEEDS 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: 4 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: 05-21-10
 Time of Day: 18:00
 Application Method: Spray
 Application Timing: 1-2"WH
 Application Placement: BROFOL
 Applied By: DKP
 Air Temperature, Unit: 71 F
 % Relative Humidity: 68
 Wind Velocity, Unit: 4 MPH
 Wind Direction: W
 Dew Presence (Y/N): N
 Soil Temperature, Unit: 70 F
 Soil Moisture: ABONOR
 % Cloud Cover: 80

05-21-10
 Crop stage at application: VC
 Height Min, Max (inch): 2 5

Pest Stage At Each Application

Application Date: 05-21-10
 Weed Code: AMATA
 Stage Majority (leaves): 2
 Stage Min, Max: COTY 4
 Height Majority: 1.5 IN
 Height Min, Max: 0.5 2
 Density, Unit: 20 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

Rhythm and Dawn Postemergence in Soybean.

Trial ID: 10-DSO-RhyDawn

Location: De Soto, IL

Pest Code										AMATA			AMATA	AMATA	
Crop Code										GLXMA	GLXMA	GLXMA	06-04-10	06-11-10	06-25-10
Rating Date										06-04-10	06-18-10	07-02-10	Control	Control	Control
Rating Data Type										Injury	Injury	Injury	Percent	Percent	Percent
Rating Unit										Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing															
Trt-Eval Interval										14 DA-A	28 DA-A	42 DA-A	14 DA-A	21 DA-A	35 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	1-2"WH	A	3	f	0	c	0	a
1	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	1-2"WH	A						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
2	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	6	de	2	bc	0	a
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	1-2"WH	A						
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
3	RHYTHM	1.88	ME	0.59	lb ai/a	40	fl oz/a	1-2"WH	A	11	a	4	a	0	a
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	1-2"WH	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
4	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	1-2"WH	A	3	f	0	c	0	a
4	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	1-2"WH	A						
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
5	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	7	cd	2	bc	0	a
5	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	1-2"WH	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
6	DAWN	2	AS	0.375	lb ai/a	24	fl oz/a	1-2"WH	A	10	ab	3	ab	0	a
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	1-2"WH	A						
6	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
7	FLEXSTAR	1.88	EC	0.147	lb ai/a	10	fl oz/a	1-2"WH	A	4	ef	0	c	0	a
7	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	1-2"WH	A						
7	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
8	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	8	bc	2	ab	0	a
8	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	1-2"WH	A						
8	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
9	NONTREATED									0	g	0	c	0	a
LSD (P=.05)										2.1	1.7	0.0	1.0	1.2	2.0
Replicate F										2.223	1.608	0.000	0.690	0.041	0.409
Replicate Prob(F)										0.1115	0.2137	1.0000	0.5672	0.9886	0.7481
Treatment F										25.410	5.224	0.000	9104.292	6319.063	2172.387
Treatment Prob(F)										0.0001	0.0007	1.0000	0.0001	0.0001	0.0001

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

Trial Comments

1. Protocol: Cheminova (FOMME1001).
2. Ratings: CI at 14, 28 and 42 DAT. WC at 14, 21 and 35 DAT.
3. No yield data necessary.
4. Blanket postemergence application of Select (8 fl oz/A) plus COC (1%v/v) if needed for grass control.
5. Blanket burndown application of glyphosate (1.12 lb ae/A) plus 2,4-D (0.475 lb ae/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. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
7. Not harvested.