

Rhythm and Dawn Postemergence in Soybean.

Trial ID: 11-DSO-RhyDawn Location: De Soto, IL

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 City State Zip Country: De Soto IL 62924 USA
 Trial Status: FINAL Initiation Date: 5-20-11

Objectives: Evaluate the efficacy of Rhythm and Dawn postemergence in soybean.

Crop 1: GLXMA Soybean Variety: AG 4005 Description: RR
 Planting Method: SEEDED Planting Date: 5-20-11
 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 2010

Field Prep./Maintenance: N 0 LB/A, P205 0 LB/A, K20 0 LB/A

% Sand: 15.4 % OM: 2.4 Texture: SILT LOAM
 % Silt: 64.7 pH: 6.1 Soil Name: OKAW
 % Clay: 19.9 CEC: 10.5 Fert. Level: P1 53 LB/A, K 352 LB/A

Application Description

	A	B
Application Date:	6-10-11	6-15-11
Time of Day:	10:45	12:00
Application Method:	Spray	Spray
Application Timing:	1-2"WH	7DA-A
Application Placement:	BROFOL	BROFOL
Applied By:	LAH	JRK
Air Temperature, Unit:	90 F	85 F
% Relative Humidity:	50	55
Wind Velocity, Unit:	3 MPH	5 MPH
Wind Direction:	S	SW
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	86 F	77 F
Soil Moisture:	BELNOR	ABONOR
% Cloud Cover:	5	0

	10-6-11	15-6-11
Crop stage at application:	V1-V2	V2-V3
Height Min, Max (inch):	4 7 5	8

Pest Stage At Each Application

	6-10-11	6-15-11
Application Date:	6-10-11	6-15-11
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	5	7
Stage Min, Max:	coty 28	2 28
Height Majority:	2 IN	3 IN
Height Min, Max:	0.25 11	0.5 11
Density, Unit:	15 FT2	15 FT2

Application Equipment

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

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Pest Code															
Crop Code															
Rating Date															
Rating Data Type															
Rating Unit															
Rating Timing															
Trt-Eval Interval															

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	14 DA-A	28 DA-A	42 DA-A			
1	RHYTHM	1.88	ME	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	16.3 a	54.0 a	48 ab			
1	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A						
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
1	ARROW	2	EC	0.125	lb ai/a	8	fl oz/a	7DA-A	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DA-A	B						
2	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	1-2"WH	A	16.5 a	53.8 a	47 ab			
2	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A						
2	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	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	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	16.3 a	54.0 a	50 a			
3	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A						
3	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	1-2"WH	A						
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
4	DAWN	2	AS	0.375	lb ai/a	24	fl oz/a	1-2"WH	A	16.5 a	53.9 a	49 a			
4	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A						
4	ARROW	2	EC	0.125	lb ai/a	8	fl oz/a	7DA-A	B						
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DA-A	B						
5	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	16.2 a	54.0 a	48 ab			
5	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A						
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A						
5	ARROW	2	EC	0.125	lb ai/a	8	fl oz/a	7DA-A	B						
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DA-A	B						
6	TACKLE	4.128	ME	1.03	lb ai/a	32	fl oz/a	1-2"WH	A	16.1 a	54.0 a	45 b			
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	NONTREATED									16.3 a	54.0 a	32 c			
LSD (P=.05)										0.49	0.23	3.5	1.3	0.0	0.0
Replicate F										0.545	0.875	2.570	0.533	0.000	0.000
Replicate Prob(F)										0.6577	0.4722	0.0864	0.6653	1.0000	1.0000
Treatment F										0.747	0.862	26.355	20.467	0.000	0.000
Treatment Prob(F)										0.6194	0.5405	0.0001	0.0001	1.0000	1.0000

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

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						AMATA-HR	AMATA-HR	AMATA-HR				
						6-24-11	7-1-11	7-15-11				
						Control	Control	Control				
						Percent	Percent	Percent				
						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	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	96 a	96 a	94 ab
1	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A			
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A			
1	ARROW	2	EC	0.125	lb ai/a	8	fl oz/a	7DA-A	B			
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DA-A	B			
2	RHYTHM	1.88	ME	0.147	lb ai/a	10	fl oz/a	1-2"WH	A	97 a	96 a	94 ab
2	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A			
2	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	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	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	98 a	98 a	97 a
3	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A			
3	GLYFOS X-TRA	3	SL	0.75	lb ae/a	32	fl oz/a	1-2"WH	A			
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A			
4	DAWN	2	AS	0.375	lb ai/a	24	fl oz/a	1-2"WH	A	96 a	96 a	94 ab
4	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A			
4	ARROW	2	EC	0.125	lb ai/a	8	fl oz/a	7DA-A	B			
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DA-A	B			
5	FLEXSTAR	1.88	EC	0.294	lb ai/a	20	fl oz/a	1-2"WH	A	98 a	97 a	92 b
5	MSO	100	SL	1	% v/v	1	% v/v	1-2"WH	A			
5	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	1-2"WH	A			
5	ARROW	2	EC	0.125	lb ai/a	8	fl oz/a	7DA-A	B			
5	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DA-A	B			
6	TACKLE	4.128	ME	1.03	lb ai/a	32	fl oz/a	1-2"WH	A	82 b	83 b	64 c
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	NONTREATED									0 c	0 c	0 d
LSD (P=.05)										4.7	3.2	4.5
Replicate F						0.901	2.905	0.691				
Replicate Prob(F)						0.4598	0.0631	0.5690				
Treatment F						529.113	1116.955	561.185				
Treatment Prob(F)						0.0001	0.0001	0.0001				

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

Trial Comments

1. Protocol: Cheminova (FOMME 1101).
2. Ratings: CI at 14, 28, and 42 DA-A; WC at 14, 21, and 35 DA-A.
3. Yield.
4. Blanket application of Roundup WeatherMax (22 fl oz/A) + 2,4-D LV4 (1 pt/A) + NPAK AMS (2.5 %v/v) was applied to all plots on 4-2-11.
Blanket burndown application of Gramoxone Inteon (3.5 pt/A) plus COC (1% v/v) was applied to all plots on 5-20-11.
5. AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
6. Rainfall for the week prior to planting was 1.2 inch.
Rainfall (weekly totals) for the the next three weeks and prior to the 1-2"WH application were 2.18, 0, and 0 inch.
Rainfall (weekly totals) for the the three weeks following the 1-2"WH application were 1.19, 1.37, and 4.38 inch.
7. Harvested 10-23-11, (2) 30 inch rows by 26.5 ft.