

Evaluation of Aim as a Preharvest Aid.

Project Code: 03-21S-M20 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
 Trial Status: Final Updated: 11-19-03

Objective:

Determine the effectiveness of Aim vs Gramoxone for use as a harvest aid in soybean.

Weed Code	Common Name	Scientific Name
1. ABUTH	velvetleaf	Abutilon theophrasti Medicus
2. AMBTR	ragweed, giant	Ambrosia trifida L.
3. AMATA	waterhemp, common	Amaranthus rudis Sauer
4. CHEAL	lambsquarters, common	Chenopodium album L.
5. IPOHE	morningglory, ivyleaf	Ipomoea hederacea (L.) Jacq.

Crop 1: GLXMA soybean Variety: Asgrow 4403 RR
 Planting Method: Seeded Planting Date: 6-5-03
 Rate: 75 lb/A Depth: 1.0 IN
 Row Spacing: 30 IN

Plot Width, Unit: 10 FT Plot Length, Unit: 30 FT Reps: 3
 Tillage Type: Reduced-Till Study Design: Randomized complete block
 Previous Crop, Year: ZEAMX, 2002

Field Prep./Maintenance: N 0 LB/A, P205 50 LB/A, K2O 150 LB/A

Soil Name: Ebbert % OM: 1.4 pH: 5.7 CEC: 14
 Texture: Silt loam Fert. Level: P1: 97 LB/A, K: 291 LB/A

APPLICATION DESCRIPTION

A

Application Date: 10-2-03
 Time of Day: 13:00
 Application Method: Spray
 Application Timing: R7
 Applic. Placement: BROFOL
 Air Temp., Unit: 54 F
 % Relative Humidity: 24
 Wind Velocity, Unit: 3 MPH
 Soil Moisture: ABONOR

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: GLXMA R7
 Height, Unit: 28-36 IN

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code: ABUTH
 Stage(leaves): 10+
 Height(inches): 36
 Density: Low

Weed 2 Code: AMBTR
 Stage(leaves): 10+
 Height(inches): 28-36
 Density: Low

Weed 3 Code: AMATA
 Stage(leaves): 10+
 Height(inches): 28-36
 Density: Low

Weed 4 Code: CHEAL
Stage (leaves): 10+
Height (inches): 28-36
Density: Low

Weed 5 Code: IPOHE
Stage (leaves): 10+
Height (inches): 8-20
Density: Low

APPLICATION EQUIPMENT

A

Appl. Equipment: CO2 sprayer
Operating Pressure: 40 PSI
Nozzle Type: Flat fan
Nozzle Size: 8002
Boom Length, Unit: 7.5 FT
Spray Volume, Unit: 20 GPA

NOTES:

Primary weed was ABUTH which was mature.
Harvested Oct-16-03, (2) 30 inch rows by 27 ft.

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Weed Code	
Crop Code	GLXMA GLXMA
Rating Data Type	Moisture Yield
Rating Unit	Percent bu/A
Rating Date	10-16-03 10-16-03
Trt-Eval Interval	

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA Moisture Percent	GLXMA Yield bu/A
1	NONTREATED									12.1	45
2	GRAMOXONE MAX	3	SL	0.25	LB A/A	10.7	FL OZ/A	R7	A	11.9	48
2	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	R7	A		
3	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	R7	A	11.9	47
3	AMS	100	DRY	2.0	% W/W	2	% W/W	R7	A		
4	AIM	2	EW	0.016	LB A/A	1	FL OZ/A	R7	A	12.0	45
4	PRIME OIL COC	100	LIQ	1	% V/V	1	% V/V	R7	A		
4	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	R7	A		
5	AIM	2	EW	0.025	LB A/A	1.6	FL OZ/A	R7	A	12.0	47
5	PRIME OIL COC	100	LIQ	1	% V/V	1	% V/V	R7	A		
5	28% UAN	100	LIQ	2.5	% V/V	2.5	% V/V	R7	A		
6	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	R7	A	12.0	45
6	AIM	2	EW	0.025	LB A/A	1.6	FL OZ/A	R7	A		
6	AMS	100	DRY	2.0	% W/W	2	% W/W	R7	A		
LSD (P=.05)										0.30	4.4
Replicate F										0.603	8.590
Replicate Prob(F)										0.5660	0.0067
Treatment F										0.540	0.692
Treatment Prob(F)										0.7427	0.6408

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Trial Comments

1. Protocol: FMC.
2. Ratings: Weed leaf defoliation and stem/stalk desiccation at 3, 7, and 14 DAT.
3. Blanket postemergence application of Roundup Ultra Max + AMS at 0.375 lbae/A + 2.0 %v/v applied at 4 inch weed height, 10 ft wide to all plots including the nontreated on 7-8-03.
4. Evaluations of weeds were not made as there was a heavy frost following the R7 application.