

Marestail Control in No-Till Soybean.

01-5D-S90

OBJECTIVE: Evaluate various treatments for burndown activity on marestail (horseweed).

SUMMARY: Marestail control was 100% from Glyphomax Plus alone or in combination with FirstRate or Weedone 638. FirstRate or Weedone alone, Gramoxone Max, Canopy, and Canopy XL controlled 72 to 84% of marestail at 28 days after treatment.

Soybean yield ranged from 39 bu/A in nontreated plots to 52 bu/A. There was no significant difference between herbicide treatments for soybean yield.

HERBICIDES

CANOPY 75 WG
CANOPY XL 56.3 WG
FIRSTRATE 84 WG
GLYPHOMAX PLUS 3 SL
GRAMOXONE MAX 3 SL
WEEDONE 638 2.8 EC

WEEDS

horseweed

CROP

soybean

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PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Marestail Control in No-Till Soybean.

Project Code: 01-5D-S90 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
 Trial Status: Final Initiation Date: 5-1-01

Objective:

Evaluate various treatments for burndown activity on marestail (horseweed).

Weed Code	Common Name	Scientific Name
1.	ERICA horseweed	Conyza canadensis (L.) Crong.

Crop 1:	GLXMA soybean	Variety:	B-T 371CR
Planting Method:	Seeded	Planting Date:	5-29-01
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	3
Tillage Type:	No-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2000				
Field Prep./Maintenance:	N 0 LB/A, P205 0 LB/A, K20 200 LB/A				

Texture:	Silt loam	% OM:	2.0	pH:	6.8	CEC:	7
		Fert. Level:	P1: 70 LB/A, K: 192 LB/A				

APPLICATION DESCRIPTION

A

Application Date:	5-15-01
Time of Day:	7:00
Application Method:	Spray
Application Timing:	6-8"MT
Applic. Placement:	BROFOL
Air Temp., Unit:	74 F
% Relative Humidity:	68
Wind Velocity, Unit:	5-6 MPH
Dew Presence (Y/N):	N
Soil Moisture:	BELNOR
% Cloud Cover:	0

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage:	GLXMA NA
Height, Unit:	NA NA

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code:	ERICA
Stage (leaves):	15-20
Height (inches):	4-6
Density:	Medium

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: HARVESTED 10-20-01, 2 ROWS X 25 FT.

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 Blanket postemergence application, see comments.

Weed Code						ERICA		ERICA				
Crop Code						GLXMA						
Rating Data Type						Yield		Control				
Rating Unit						bu/A		Percent				
Rating Date						10-20-01		5-29-01				
Trit-Eval Interval								6-12-01				
								14 DA-A				
								28 DA-A				
Trit No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code			
1	NONTREATED									39	0	0
2	GLYPHOMAX PLUS	3	SL	0.75	LB AE/A	2	PT/A	6-8"MT	A	52	100	100
2	AMS	100	DRY	2.0	% W/W	17	LB/100 GAL	6-8"MT	A			
3	FIRSTRATE	84	WG	0.016	LB A/A	0.3	OZ/A	6-8"MT	A	49	85	82
3	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	%V/V	6-8"MT	A			
3	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	6-8"MT	A			
4	FIRSTRATE	84	WG	0.016	LB A/A	0.3	OZ/A	6-8"MT	A	52	100	100
4	GLYPHOMAX PLUS	3	SL	0.75	LB AE/A	2	PT/A	6-8"MT	A			
4	AMS	100	DRY	2.0	% W/W	17	LB/100 GAL	6-8"MT	A			
5	GRAMOXONE MAX	3	SL	0.75	LB A/A	2	PT/A	6-8"MT	A	52	90	82
5	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	%V/V	6-8"MT	A			
6	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	6-8"MT	A	46	80	77
6	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	%V/V	6-8"MT	A			
7	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	6-8"MT	A	47	100	100
7	GLYPHOMAX PLUS	3	SL	0.75	LB AE/A	2	PT/A	6-8"MT	A			
7	AMS	100	DRY	2.0	% W/W	17	LB/100 GAL	6-8"MT	A			
8	CANOPY	75	WG	0.188	LB A/A	4	OZ/A	6-8"MT	A	46	80	84
8	WEEDONE 638	2.8	EC	0.5	LB A/A	1.43	PT/A	6-8"MT	A			
8	PRIME OIL COC	100	LIQ	1.0	% V/V	1	%V/V	6-8"MT	A			
9	CANOPY XL	56.3	WG			3.4	OZ/A	6-8"MT	A	51	80	72
9	->CLASSIC	25	WG	0.02	LB A/A			6-8"MT	A			
9	->AUTHORITY	75	WG	0.1	LB A/A			6-8"MT	A			
9	PRIME OIL COC	100	LIQ	1.0	% V/V	1	%V/V	6-8"MT	A			
LSD (P=.05)										11.1	5.0	8.5
Replicate F										1.954	1.000	0.569
Replicate Prob(F)										0.1741	0.3897	0.5769
Treatment F										1.322	347.500	118.550
Treatment Prob(F)										0.3013	0.0001	0.0001

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Blanket postemergence application, see comments.

Trial Comments

1. Protocol: Dow (trts 2-4); SIU-BGY (trts 5-9).
2. Blanket application of Glyphomax Plus + AMS at 2.0 pt/A + 2.0 % at 28 days after 6-8"MT application, to all plots, applied 6-14-01.
3. DA-A = days after 6-8"MT application.