

Marestail Burndown in No-Till Soybean.

Project Code: 03-5D-N140 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
 Trial Status: Final Updated: 9-2-03

Objective:

Evaluate various treatments for control of marestail in no-till soybean.

Weed Code	Common Name	Scientific Name
1.	ERICA horseweed	Conyza canadensis (L.) Crong.
2.	AMBEL ragweed, common	Ambrosia artemisiifolia L.

Crop 1:	GLXMA soybean	Variety:	Asgrow 4403 RR
Planting Method:	Seeded	Planting Date:	6-23-03
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	21 FT	Reps:	3
Tillage Type:	No-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2002				

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

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Application Date:	6-9-03
Time of Day:	17:00
Application Method:	Spray
Application Timing:	14EPP
Applic. Placement:	BROFOL
Air Temp., Unit:	84 F
% Relative Humidity:	34
Wind Velocity, Unit:	0-5 MPH
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	5

CROP STAGE AT EACH APPLICATION

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

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code:	ERICA
Stage(leaves):	10-30
Height(inches):	6-14
Density:	High
Weed 2 Code:	AMBEL
Stage(leaves):	6-14
Height(inches):	6-14
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:	15 GPA

NOTES:
Not harvested.

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Weed Code	ERICA	ERICA	ERICA	AMBEL	AMBEL	AMBEL	GLXMA
Crop Code							
Rating Data Type	Control	Control	Control	Control	Control	Control	Injury
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Date	6-16-03	6-23-03	7-7-03	6-16-03	6-23-03	7-7-03	7-7-03
Trt-Eval Interval	7 DA-A	14 DA-A	28 DA-A	7 DA-A	14 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	ERICA	ERICA	ERICA	AMBEL	AMBEL	AMBEL	GLXMA
1	NONTREATED									0	0	0	0	0	0	0
2	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	14EPP	A	88	99	98	37	87	90	0
2	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
3	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	14EPP	A	92	99	99	70	95	99	0
3	2,4-D LV4	3.8	EC	0.71	LB A/A	1.5	PT/A	14EPP	A							
3	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
4	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	14EPP	A	85	99	99	47	92	92	0
4	AMPLIFY	84	WG	0.0315	LB A/A	0.6	OZ/A	14EPP	A							
4	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
5	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	14EPP	A	95	99	99	96	93	90	0
5	VALOR	51	WG	0.064	LB A/A	2	OZ/A	14EPP	A							
5	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
6	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	14EPP	A	53	96	99	53	83	87	0
6	SENCOR	75	WG	0.25	LB A/A	5.33	OZ/A	14EPP	A							
6	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
7	GRAMOXONE MAX	3	SL	0.75	LB A/A	2	PT/A	14EPP	A	99	99	99	99	99	99	0
7	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	14EPP	A							
8	GRAMOXONE MAX	3	SL	0.75	LB A/A	2	PT/A	14EPP	A	99	99	99	99	99	99	0
8	2,4-D LV4	3.8	EC	0.71	LB A/A	1.5	PT/A	14EPP	A							
8	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	14EPP	A							
9	BACKDRAFT	1.5	SL	0.94	LB A/A	5	PT/A	14EPP	A	87	99	99	50	73	93	0
9	2,4-D LV4	3.8	EC	0.71	LB A/A	1.5	PT/A	14EPP	A							
9	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	14EPP	A							
9	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
10	EXTREME	2.17	SL	0.81	LB A/A	3	PT/A	14EPP	A	60	90	99	53	67	83	0
10	2,4-D LV4	3.8	EC	0.71	LB A/A	1.5	PT/A	14EPP	A							
10	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	14EPP	A							
10	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
11	PROWL H2O	3.8	CS	1.19	LB A/A	2.5	PT/A	14EPP	A	67	90	99	53	80	99	0
11	BACKDRAFT	1.5	SL	0.94	LB A/A	5	PT/A	14EPP	A							
11	2,4-D LV4	3.8	EC	0.71	LB A/A	1.5	PT/A	14EPP	A							
11	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	14EPP	A							
11	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							

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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code							
12	PROWL H2O	3.8	CS	1.19	LB A/A	2.5	PT/A	14EPP	A	53	90	93	50	80	96	0
12	EXTREME	2.17	SL	0.81	LB A/A	3	PT/A	14EPP	A							
12	2,4-D LV4	3.8	EC	0.71	LB A/A	1.5	PT/A	14EPP	A							
12	ACTIVATOR 90	100	LIQ	0.25	% V/V	0.25	% V/V	14EPP	A							
12	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	14EPP	A							
13	VALOR	51	WG	0.064	LB A/A	2.0	OZ/A	14EPP	A	50	37	23	99	99	99	0
13	2,4-D LV4	3.8	EC	0.475	LB AE/A	16	FL OZ/A	14EPP	A							
13	PRIME OIL COC	100	LIQ	1.0	PT/A	1	PT/A	14EPP	A							
14	GANGSTER (MULTI-PACK)									40	40	53	83	85	96	0
14	->GANGSTER V	51	WG	0.048	LB A/A	1.5	OZ/A	14EPP	A							
14	->GANGSTER FR	84	WG	0.0157	LB A/A	0.3	OZ/A	14EPP	A							
14	PRIME OIL COC	100	LIQ	1.0	PT/A	1	PT/A	14EPP	A							
15	GANGSTER (MULTI-PACK)									57	77	82	98	99	99	0
15	->GANGSTER V	51	WG	0.048	LB A/A	1.5	OZ/A	14EPP	A							
15	->GANGSTER FR	84	WG	0.0157	LB A/A	0.3	OZ/A	14EPP	A							
15	2,4-D LV4	3.8	EC	0.237	LB AE/A	8	FL OZ/A	14EPP	A							
15	PRIME OIL COC	100	LIQ	1.0	PT/A	1	PT/A	14EPP	A							
16	AIM	2	EW	0.0078	LB A/A	0.5	FL OZ/A	14EPP	A	75	93	99	67	82	73	0
16	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	14EPP	A							
16	AMS	100	DRY	2.0	% W/W	2.5	LB/A	14EPP	A							
17	AIM	2	EW	0.0078	LB A/A	0.5	FL OZ/A	14EPP	A	92	98	98	96	98	96	0
17	2,4-D LV4	3.8	EC	0.237	LB AE/A	8	FL OZ/A	14EPP	A							
17	ROUNDUP W-MAX	4.5	SL	0.75	LB AE/A	21.3	FL OZ/A	14EPP	A							
17	AMS	100	DRY	2.0	% W/W	2.5	LB/A	14EPP	A							
18	NONTREATED									0	0	0	0	0	0	0
LSD (P=.05)										15.3	10.5	7.7	9.5	10.9	8.7	0.0
Replicate F										0.680	1.079	0.032	3.749	3.376	5.185	0.000
Replicate Prob(F)										0.5132	0.3514	0.9684	0.0338	0.0460	0.0108	1.0000
Treatment F										33.032	88.046	175.100	94.228	62.809	104.516	0.000
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

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Trial Comments

1. Protocol: BASF, Valent, Monsanto, FMC.
2. Ratings: CI 14 DAP; WC 7, 14 and 28 DAT.
3. DA-A = days after 14EPP application. 28 DA-A was also 14 days after planting.