

AMS Replacement Study for Option.

Project Code: 05-ARC-3-E80 Location: Agronomy Research Center
 Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Carbondale IL 62901 USA
Trial Status: Final **Updated:** 11-14-05

Objective:

Determine the effectiveness of potential replacements for AMS with Option.

Weed Code	Common Name	Scientific Name
1.	SETFA foxtail, giant	Setaria faberi Herrm.
2.	AMBEL ragweed, common	Ambrosia artemisiifolia L.
3.	XANST cocklebur, common	Xanthium strumarium L.

Crop 1:	ZEAMX corn, field	Variety:	33P70
Planting Method:	Seeded	Planting Date:	5-10-05
Rate:	28000 S/A	Depth:	1.5 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	20 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2004				

Field Prep./Maintenance: N 150 LB/A, P205 0 LB/A, K20 0 LB/A

Soil Name:	Weir	% OM:	1.6	pH:	6.5	CEC:	8.7
Texture:	Silt loam	Fert. Level:	P1: 84 LB/A, K: 306 LB/A				

APPLICATION DESCRIPTION**A**

Application Date: 06-10-05
Time of Day: 9:50
Application Method: Spray
Application Timing: 6"W
Applic. Placement: BROFOL
Air Temp., Unit: 85 F
% Relative Humidity: 69
Wind Velocity, Unit: 0-4 MPH
Soil Moisture: BELNOR

CROP STAGE AT EACH APPLICATION**A**

Crop 1 Code, Stage: ZEAMX V5-V6
Height, Unit: 10-12 IN

WEED STAGE AT EACH APPLICATION**A**

Weed 1 Code: SETFA
Stage (leaves): 4-6
Height (inches): 6-8
Density: Medium

Weed 2 Code: AMBEL
Stage (leaves): 8-10
Height (inches): 6-8
Density: High

Weed 3 Code: XANST
Stage (leaves): 6-8
Height (inches): 6-8
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:

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	ZEAMX Injury Percent	ZEAMX Injury Percent	SETFA Control Percent	SETFA Control Percent	AMBEL Control Percent	AMBEL Control Percent	XANST Control Percent	XANST Control Percent
						06-24-05 14 DA-A	07-08-05 28 DA-A	06-24-05 14 DA-A	07-08-05 28 DA-A	06-24-05 14 DA-A	07-08-05 28 DA-A	06-24-05 14 DA-A	07-08-05 28 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code								
1	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	74	60	65	63	73	84
2	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	75	66	72	73	62	72
2	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
2	AMS	100	DRY	3.0	lb/a	3	lb/a	6"W	A								
3	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	77	67	67	76	65	77
3	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
3	ALLIANCE	100	LIQ	1.25	% v/v	1.25	% v/v	6"W	A								
4	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	74	69	69	81	60	80
4	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
4	ALLIANCE	100	LIQ	2.0	% v/v	2	% v/v	6"W	A								
5	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	77	74	73	82	52	79
5	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
5	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	6"W	A								
6	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	75	71	70	89	52	77
6	SUPERB HC	100	LIQ	0.5	% v/v	0.5	% v/v	6"W	A								
6	AMS	100	DRY	3.0	lb/a	3	lb/a	6"W	A								
7	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	75	68	74	76	56	71
7	SUPERB HC	100	LIQ	0.5	% v/v	0.5	% v/v	6"W	A								
7	ALLIANCE	100	LIQ	1.25	% v/v	1.25	% v/v	6"W	A								
8	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	73	71	68	77	59	79
8	SUPERB HC	100	LIQ	0.5	% v/v	0.5	% v/v	6"W	A								
8	ALLIANCE	100	LIQ	2.0	% v/v	2	% v/v	6"W	A								
9	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	73	66	71	69	50	75
9	SUPERB HC	100	LIQ	0.5	% v/v	0.5	% v/v	6"W	A								
9	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	6"W	A								
10	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	73	74	72	73	49	83
10	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
10	AMS	100	DRY	3.0	lb/a	3	lb/a	6"W	A								
11	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	80	75	69	79	54	79
11	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
11	ALLIANCE	100	LIQ	1.25	% v/v	1.25	% v/v	6"W	A								
12	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	78	86	79	82	61	84
12	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
12	ALLIANCE	100	LIQ	2.0	% v/v	2	% v/v	6"W	A								
13	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	6"W	A	0	0	76	75	76	71	55	81
13	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	6"W	A								
13	CLASS ACT NG	100	LIQ	2.5	% v/v	2.5	% v/v	6"W	A								
14	NONTREATED									0	0	0	0	0	0	0	0
LSD (P=.05)										0.0	0.0	4.8	8.7	7.6	8.6	12.2	5.6
Replicate F										0.000	0.000	6.207	9.058	0.125	1.569	1.181	0.588
Replicate Prob(F)										1.0000	1.0000	0.0063	0.0010	0.8830	0.2274	0.3228	0.5625
Treatment F										0.000	0.000	149.013	44.395	54.343	52.318	15.826	122.290
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Trial Comments

1. Protocol: Agrilience.
2. Ratings: CI/WC 14 and 28 DAT.
3. DA-A = Days after 6"W application.