

## Growmark AMS Replacement Study.

Project Code: 04-24B-W80      Location: Belleville Research Center  
 Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country:      Belleville      IL 62221 USA  
 Trial Status: Final      Updated:      8-23-04

## Objective:

Determine the performance of "Replace" as an alternative to dry AMS alone and in combination with drift control adjuvants.

Weed Code	Common Name	Scientific Name
1. GGGAN	grasses, annual	
2. CYPES	nutsedge, yellow	Cyperus esculentus L.
3. AMBTR	ragweed, giant	Ambrosia trifida L.
4. AMATA	waterhemp, common	Amaranthus rudis Sauer
5. IPOHE	morningglory, ivyleaf	Ipomoea hederacea (L.) Jacq.
6. SETFA	foxtail, giant	Setaria faberi Herrm.
7. PANDI	panicum, fall	Panicum dichotomiflorum Michx.

Crop 1:	GLXMA soybean	Variety:	Asgrow 4403 RR
Planting Method:	Seeded	Planting Date:	6-7-04
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:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2003				

Field Prep./Maintenance: N 0 LB/A, P205 50 LB/A, K20 100 LB/A

Soil Name:	Rushville	% OM:	2.3	pH:	6	CEC:	12
Texture:	Silt loam	Fert. Level:	P1: 83 LB/A, K: 446 LB/A				

## APPLICATION DESCRIPTION

APPLICATION DESCRIPTION		A
Application Date:	7-9-04	
Time of Day:	14:00	
Application Method:	Spray	
Application Timing:	8-12"W	
Applic. Placement:	BROFOL	
Air Temp., Unit:	87 F	
% Relative Humidity:	61	
Wind Velocity, Unit:	2 MPH	
Soil Moisture:	ABONOR	

## CROP STAGE AT EACH APPLICATION

CROP STAGE AT EACH APPLICATION		A
Crop 1 Code, Stage:	GLXMA V4	
Height, Unit:	6-8 IN	

## WEED STAGE AT EACH APPLICATION

WEED STAGE AT EACH APPLICATION		A
Weed 1 Code:	GGGAN	
Stage(leaves):	5-7	
Height(inches):	10-12	
Density:	Medium	
Weed 2 Code:	CYPES	
Stage(leaves):	7-11	
Height(inches):	9-14	
Density:	Medium	
Weed 3 Code:	AMBTR	
Stage(leaves):	8-10	
Height(inches):	12-14	
Density:	High	



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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	GLXMA		GGGAN		CYPES		AMBTR		AMATA		IPOHE					
						Injury Percent	Injury Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent	Control Percent						
						7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04				
						14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code												
1	NONTREATED									0	0	0	0	0	0	0	0	0			
2	ROUNDUP W-MAX	4.5	SL	0.77	LB AE/A	22	FL OZ/A	8-12"W	A	0	0	99	99	72	73	93	87	98	95	92	92
3	ROUNDUP W-MAX 3 AMS	4.5	SL 100 DRY	0.77 1.0	LB AE/A % W/W	22	FL OZ/A 8.5 LB/100 GAL	8-12"W	A	0	0	99	99	77	75	93	90	98	95	91	92
4	ROUNDUP W-MAX 4 AMS	4.5	SL 100 DRY	0.77 2.0	LB AE/A % W/W	22	FL OZ/A 17 LB/100 GAL	8-12"W	A	0	0	99	99	80	82	95	93	98	95	94	92
5	ROUNDUP W-MAX 5 REPLACE	4.5	SL 100 LIQ	0.77 0.25	LB AE/A % V/V	22	FL OZ/A 1 QT/100 GAL	8-12"W	A	0	0	99	99	78	82	95	90	98	96	93	92
6	ROUNDUP W-MAX 6 CHOICE	4.5	SL 100 LIQ	0.77 0.5	LB AE/A % V/V	22	FL OZ/A 4 PT/100 GAL	8-12"W	A	0	0	99	99	77	80	95	92	97	94	91	88
7	ROUNDUP W-MAX 7 REQUEST	4.5	SL 100 LIQ	0.77 0.5	LB AE/A % V/V	22	FL OZ/A 4 PT/100 GAL	8-12"W	A	0	0	99	99	77	77	94	89	97	96	91	87
8	ROUNDUP W-MAX 8 QUEST	4.5	SL 100 LIQ	0.77 0.25	LB AE/A % V/V	22	FL OZ/A 1 QT/100 GAL	8-12"W	A	0	0	99	99	80	78	93	85	96	92	89	90
9	ROUNDUP W-MAX 9 SUNQUEST	4.5	SL 100 LIQ	0.77 0.5	LB AE/A % V/V	22	FL OZ/A 4 PT/100 GAL	8-12"W	A	0	0	99	99	73	78	94	82	96	96	90	90
10	ROUNDUP W-MAX 10 FORMULA 1	4.5	SL 100 LIQ	0.77 0.5	LB AE/A % V/V	22	FL OZ/A 4 PT/100 GAL	8-12"W	A	0	0	99	99	70	78	91	83	95	90	88	83
11	ROUNDUP W-MAX 11 ARROW FOUR	4.5	SL 100 LIQ	0.77 0.75	LB AE/A % V/V	22	FL OZ/A 3 QT/100 GAL	8-12"W	A	0	0	99	99	77	77	92	82	94	83	88	85
12	ROUNDUP W-MAX 12 ARRAY	4.5	SL 100 DRY	0.77 1.08	LB AE/A % W/W	22	FL OZ/A 9 LB/100 GAL	8-12"W	A	0	0	99	99	73	73	89	84	97	85	90	92
13	ROUNDUP W-MAX 13 REPLACE 13 AIM (ADJUVANT)	4.5	SL 100 LIQ 100 LIQ	0.77 0.25 0.0156	LB AE/A % V/V % V/V	22	FL OZ/A 1 QT/100 GAL 2 FL OZ/100 GAL	8-12"W 8-12"W 8-12"W	A A A	0	0	99	99	73	77	89	80	95	83	91	87
14	ROUNDUP W-MAX 14 FS LIQUID AMS 14 ELECTRA STICK	4.5	SL 100 LIQ 100 LIQ	0.77 2.5 0.25	LB AE/A % V/V % V/V	22	FL OZ/A 2.5 GAL/100 GAL 0.25 GAL/100 GAL	8-12"W 8-12"W 8-12"W	A A A	0	0	99	99	77	78	94	87	98	98	93	90
15	ROUNDUP W-MAX 15 ELECTRA SUPREME	4.5	SL 100 DRY	0.77 1.08	LB AE/A % W/W	22	FL OZ/A 9 LB/100 GAL	8-12"W	A	0	0	99	99	75	75	87	77	98	93	90	90
16	ROUNDUP W-MAX 16 ELECTRA PLUS	4.5	SL 100 DRY	0.77 2.1	LB AE/A % W/W	22	FL OZ/A 17.5 LB/100 GAL	8-12"W	A	0	0	99	99	75	78	85	75	95	88	88	90
LSD (P=.05)						0.0	0.0	0.0	0.0	5.2	9.2	4.6	10.5	3.3	10.1	3.3	8.2				

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Weed Code	GLXMA	GLXMA	GGGAN	GGGAN	CYPES	CYPES	AMBTR	AMBTR	AMATA	AMATA	IPOHE	IPOHE
Crop Code	Injury	Injury	Control	Control	Control	Control	Control	Control	Control	Control	Control	Control
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04	7-23-04	8-6-04
Rating Date	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
Trt-Eval Interval												

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code										
Replicate F				0.000		0.000				0.000	0.000	1.647	1.968	1.340	0.105	4.168	2.094	0.337	1.059
Replicate Prob(F)				1.0000		1.0000				1.0000	1.0000	0.2102	0.1579	0.2775	0.9004	0.0256	0.1414	0.7164	0.3599
Treatment F				0.000		0.000				0.000	0.000	111.496	37.755	209.976	36.527	452.920	45.141	405.712	62.753
Treatment Prob(F)				1.0000		1.0000				1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Trial Comments

1. Protocol: Growmark.
2. Ratings: CI and WC 14 and 28 DAT.
3. DA-A = Days after 8-12"W application.
4. GGGAN = annual grasses including SETFA and PANDI.