

Aim used for Burndown in No-till Soybean.

00-11A-W85

OBJECTIVE: Evaluate the speed of activity of Roundup Ultra and Gramoxone burndown programs with the addition of Aim and Take-up in no-till soybean.

SUMMARY: Aim alone controlled 8 to 38% of broadleaf weeds at 7 days after treatment (DAT). Tank mixing Aim with Roundup Ultra or Roundup Ultra plus Weedone 638 increased giant ragweed control at 7 DAT. In general, tank mixing Aim with Roundup Ultra or Gramoxone Extra did not increase or decrease control of horseweed or common ragweed. Take-up did not speed the activity of Roundup Ultra or Gramoxone Extra or improve overall weed control.

HERBICIDES

AIM 40 WG
GRAMOXONE EXTRA 2.5 SL
ROUNDUP ULTRA 3 SL
WEEDONE 638 2.8 EC
TAKE-UP 100 LIQ

WEEDS

FOXTAIL, GIANT
GARLIC, WILD
HORSEWEED
RAGWEED, COMMON
RAGWEED, GIANT
ALL WEEDS

CROP

SOYBEAN

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Aim used for Burndown in No-till Soybean.

Project Code: 00-11A-W85 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

Weed Code	Common Name	Scientific Name
1. AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
2. ERICA	HORSEWEED	CONYZA CANADENSIS (L.) CRONG.
3. AMBTR	RAGWEED, GIANT	AMBROSIA TRIFIDA L.
4. ALLVI	GARLIC, WILD	ALLIUM VINEALE L.
5. SETFA	FOXTAIL, GIANT	SETARIA FABERI HERRM.
6. TTTTT	WEEDS, GENERALLY	

Crop 1:	GLXMA SOYBEAN	Variety:	AG 4301 RR/STS
Planting Method:	SEEDED	Planting Date:	May-24-00
Rate:	75 LB/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	26 FT	Reps:	3
Tillage Type:	NO-TILL	Study Design:	RCB		
Previous Crop, Year:	ZEAMX, 1999	Fertilizer applied:	N 0 LB/A,	P ₂ O ₅ 0 LB/A,	K ₂ O 0 LB/A

Soil Name:	WEIR	% OM:	2.2	pH:	6	CEC:	76
Texture:	SILT LOAM	P ₁ :	76 LB/A,	K:	349 LB/A		

APPLICATION DESCRIPTION

A
 Application Date: May-15-00
 Time of Day: 10:00
 Application Method: SPRAY
 Application Timing: EPP,4
 Applic. Placement: BROFOL
 Air Temp., Unit: 66 F
 % Relative Humidity: 30
 Wind Velocity, Unit: 2-3 MPH
 Soil Moisture: NORMAL
 % Cloud Cover: 60

CROP STAGE AT EACH APPLICATION

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

WEED STAGE AT EACH APPLICATION

A
 Weed 1 Code: AMBEL
 Stage(leaves): 4-6
 Height(inches): 2-4
 Density: MEDIUM

Weed 2 Code: ERICA
 Stage(leaves): 10+
 Height(inches): 2-9
 Density: LOW

Weed 3 Code: AMBTR
 Stage(leaves): 10+
 Height(inches): 7-8
 Density: MEDIUM

Weed 4 Code: ALLVI
 Stage(leaves): 3-4
 Height(inches): 21-30
 Density: HIGH

Weed 5 Code: SETFA
 Stage(leaves): 2-3
 Height(inches): 3-4
 Density: MEDIUM

APPLICATION EQUIPMENT

A
 Appl. Equipment: CO₂ SPRAY
 Operating Pressure: 40 PSI
 Nozzle Type: FLAT FAN
 Nozzle Size: 8002
 Boom Length, Unit: 7.33 FT
 Spray Volume, Unit: 20 GPA

NOTES:

Not harvested.

TABLE. AIM USED FOR BURNDOWN IN NO-TILL SOYBEAN. PROJECT CODE:00-11A-W85

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	TTTTT NECROSIS 3 DA EPP14	CONTROL, DAYS AFTER EPP14									
								SETFA		ALLVI		ERICA		AMBEL		AMBTR	
								7	14	7	14	7	14	7	14	7	14
								%	%	%	%	%	%	%	%	%	
1 NONTREATED							0	0	0	0	0	0	0	0	0	0	0
2 WEEDONE 638	2.8 EC	0.475	LB A/A	1.36	PT/A	EPP14 A	42	99	99	12	22	75	98	75	99	60	92
2 ROUNDUP ULTRA	3 SL	0.375	LB AE/A	1.0	PT/A	EPP14 A											
2 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	EPP14 A											
3 GRAMOXONE EXTRA	2.5 SL	0.78	LB A/A	2.5	PT/A	EPP14 A	95	99	99	47	52	98	99	99	99	97	98
3 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	EPP14 A											
4 ROUNDUP ULTRA	3 SL	0.5625	LB AE/A	1.5	PT/A	EPP14 A	20	99	99	13	27	78	99	77	99	45	78
4 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	EPP14 A											
5 AIM	40 WG	0.008	LB A/A	0.32	OZ/A	EPP14 A	62	99	99	15	50	80	96	88	99	90	99
5 WEEDONE 638	2.8 EC	0.475	LB A/A	1.36	PT/A	EPP14 A											
5 ROUNDUP ULTRA	3 SL	0.375	LB AE/A	1.0	PT/A	EPP14 A											
5 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	EPP14 A											
6 AIM	40 WG	0.008	LB A/A	0.32	OZ/A	EPP14 A	96	99	99	55	57	96	99	99	99	96	99
6 GRAMOXONE EXTRA	2.5 SL	0.78	LB A/A	2.5	PT/A	EPP14 A											
6 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	EPP14 A											
7 AIM	40 WG	0.008	LB A/A	0.32	OZ/A	EPP14 A	57	99	99	17	20	70	98	73	84	63	60
7 ROUNDUP ULTRA	3 SL	0.5625	LB AE/A	1.5	PT/A	EPP14 A											
7 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	EPP14 A											
8 AIM	40 WG	0.004	LB A/A	0.16	OZ/A	EPP14 A	50	99	99	17	25	67	99	67	83	67	72
8 ROUNDUP ULTRA	3 SL	0.5625	LB AE/A	1.5	PT/A	EPP14 A											
8 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	EPP14 A											
9 WEEDONE 638	2.8 EC	0.475	LB A/A	1.36	PT/A	EPP14 A	48	99	99	12	25	72	99	83	99	70	83
9 ROUNDUP ULTRA	3 SL	0.375	LB AE/A	1.0	PT/A	EPP14 A											
9 AMS	100 DRY	2.0	% W/W	17.0	LB/100 GAL	EPP14 A											
9 TAKE-UP	100 LIQ	1.5	PT/A	1.5	PT/A	EPP14 A											
10 GRAMOXONE EXTRA	2.5 SL	0.78	LB A/A	2.5	PT/A	EPP14 A	96	99	99	47	55	98	99	98	99	97	96
10 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	EPP14 A											
10 TAKE-UP	100 LIQ	1.5	PT/A	1.5	PT/A	EPP14 A											

(CONTINUED)

TABLE. AIM USED FOR BURNDOWN IN NO-TILL SOYBEAN. PROJECT CODE:00-11A-W85 (CONTINUED)

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	TTTTT NECROSIS 3 DA EPP14	CONTROL, DAYS AFTER EPP14									
								SETFA		ALLVI		ERICA		AMBEL		AMBTR	
								7	14	7	14	7	14	7	14	7	14
11 ROUNDUP ULTRA	3 SL	0.5625	LB AE/A	1.5 PT/A	EPP14	A	22	99	99	20	20	85	99	85	99	65	83
11 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	EPP14	A											
11 TAKE-UP	100 LIQ	1.5	PT/A	1.5 PT/A	EPP14	A											
12 AIM	40 WG	0.008	LB A/A	0.32 OZ/A	EPP14	A	62	0	0	10	20	10	0	17	3	38	27
12 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP14	A											
13 AIM	40 WG	0.008	LB A/A	0.32 OZ/A	EPP14	A	43	2	0	10	13	8	0	13	3	15	10
13 AMS	100 DRY	2.0	% W/W	17.0 LB/100 GAL	EPP14	A											
14 AIM	40 WG	0.008	LB A/A	0.32 OZ/A	EPP14	A	50	2	0	10	13	17	12	25	5	33	33
14 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	EPP14	A											
14 TAKE-UP	100 LIQ	1.5	PT/A	1.5 PT/A	EPP14	A											
LSD							7	2	0	12	23	10	6	12	17	14	30
P							0.01	0.01	1.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

1. PROTOCOL: FMC AND MALKEM INT.
2. TTTTT = WEEDS GENERALLY.
3. BLANKET APPLICATION OF ROUNDUP ULTRA + AMS, 1.0 QT/A + 17 LB/100 GAL AT 4-6"W APPLIED TO TREATMENTS 12, 13, AND 14 ON JUN-8-00.
4. BLANKET APPLICATION OF ROUNDUP ULTRA + AMS, 1.0 QT/A + 17 LB/100 GAL AT 4-6"W APPLIED TO TREATMENTS 2-11 ON JUN-19-00.
5. RATING DATES:
3 DA EPP14, 7 DA EPP14, AND 14 DA EPP14 ON MAY-18-00, MAY-22-00, AND MAY-29-00, RESPECTIVELY.