

Aim for Weed Control in Sorghum.

01-26C-N100

OBJECTIVE: Evaluate Aim for broadleaf weed control in sorghum.

SUMMARY: Sorghum injury 4 days after treatment (DAT) ranged from 59 to 83% from treatments that included Aim compared to 6 to 9% injury from Aatrex. Injury decreased over time with 20 to 45% injury observed from Aim treatments at 15 DAT. Aim alone controlled 94% of common cocklebur and morningglory species and 66% of common ragweed at 15 DAT. All tank mixtures with Aim controlled at least 87% of common cocklebur, morningglory species, and common ragweed. Atrazine alone at 1 lb/A controlled at least 97% of all weed species evaluated.

Sorghum yield ranged from 5 bu/A in nontreated plots to 90 bu/A. Sorghum yield in Aim treated plots ranged from 6 to 70 bu/A with the lowest yield in plots treated with Aim alone. The highest sorghum yield was observed in plots treated with Aatrex alone at 1 lb/A (90 bu/A). Tank mixing Aim with Aatrex at 1 lb/A reduced sorghum yield by 35 bu/A, most likely due to the high level of sorghum injury from Aim.

HERBICIDES

AATREX 90 WG
AIM 40 WG
CLARITY 4 EC
PEAK 57 WG
PERMIT 75 WG
WEEDAR 64 3.8 EC

WEEDS

cocklebur, common
morningglory, species
ragweed, common

CROP

sorghum

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Aim for Weed Control in Sorghum.

Project Code: 01-26C-N100 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: 4-16-01

Objective:

Evaluate Aim for broadleaf weed control in sorghum.

Weed Code	Common Name	Scientific Name
1. XANST	cocklebur, common	Xanthium strumarium L.
2. AMBEL	ragweed, common	Ambrosia artemisiifolia L.
3. IPOSS	morningglory, species	Ipomoea sp.

Crop 1:	SORVU sorghum	Variety:	P8500
Planting Method:	Seeded	Planting Date:	5-15-01
Rate:	7 LB/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	25 FT	Reps:	4
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2000				
Field Prep./Maintenance:	N 150 LB/A, P205 0 LB/A, K20 150 LB/A				

Soil Name:	Rushville	% OM:	1.1	pH:	5.4	CEC:	8
Texture:	Silt loam	Fert. Level:	P1: 76 LB/A, K: 285 LB/A				

APPLICATION DESCRIPTION

A

Application Date:	6-7-01
Time of Day:	15:00
Application Method:	SPRAY
Application Timing:	2-4"W
Applic. Placement:	BROFOL
Air Temp., Unit:	82 F
% Relative Humidity:	56
Wind Velocity, Unit:	3-5 MPH
Soil Moisture:	ABONOR
% Cloud Cover:	50

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage:	SORVU V3
Height, Unit:	2-4 IN

WEED STAGE AT EACH APPLICATION

A

Weed 1 Code:	XANST
Stage(leaves):	4-6
Height(inches):	2-4
Density:	High
Weed 2 Code:	AMBEL
Stage(leaves):	4-6
Height(inches):	1-
Density:	Low
Weed 3 Code:	IPOSS
Stage(leaves):	2-4
Height(inches):	1-3
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: 20 GPA

NOTES: HARVESTED 9-20-01, 2 ROWS X 22 FT.

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Trial Comments

1. Protocol: FMC.
2. Blanket application: Dual II Magnum at 1.33 pt/A PRE to all plots including the nontreated, applied 5-15-01.
3. DA-A = days after 2-4"W application.