

Johnsongrass Control in Corn.

00-MURPHY-E40

OBJECTIVE: Compare various postemergence grass herbicides for control of rhizome johnsongrass.

SUMMARY: No corn injury was observed for any treatment. AE F130360-01 and AE F130360-02 provided similar levels of johnsongrass control as Accent. Initial control of rhizome johnsongrass at 14 DAT was the best with Accent, AE F130360-01, AE F130360-02, Spirit, Roundup Ultra, Lightning, Basis Gold, and Celebrity Plus. Johnsongrass control was less than acceptable with Beacon, Northstar, and Liberty.

HERBICIDES

ACCENT 75 WG
 AE F130360 01 70 WG
 AE F130360 02 62 WG
 BASIS GOLD 90 WG
 BEACON 75 WG
 CELEBRITY PLUS 70 WG
 LIBERTY 1.67 EC
 LIGHTNING 70 WG
 NORTHSTAR 47.4 WG
 ROUNDUP ULTRA 3 SL
 SPIRIT 57 WG

WEEDS

JOHNSONGRASS

CROP

CORN, FIELD

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PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Johnsongrass Control in Corn.

Project Code: 00-MURPHY-E40 Location: Murphysboro IL

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

Weed Code 1. SORHA	Common Name JOHNSONGRASS	Scientific Name SORGHUM HALEPENSE (L.) PERS.	
Crop 1: Planting Method: Rate: Row Spacing:	ZEAMX CORN, FIELD SEEDED 28000 S/A 30 IN	Variety: Depth:	P33G28 LL 1.5 IN
Plot Width, Unit: Tillage Type:	10 FT REDUCED-TILL	Plot Length, Unit: Study Design:	40 FT RCB Reps: 3

APPLICATION DESCRIPTION

	A	B
Application Date:	May-17-00	May-25-00
Time of Day:	10:00	12:00
Application Method:	SPRAY	SPRAY
Application Timing:	4"GR	10"GR
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	70 F	76 F
Wind Velocity, Unit:	5 MPH	5 MPH
Dew Presence (Y/N)	N	N
Soil Temp., Unit:	75 F	74 F
Soil Moisture:	NORMAL	WET
% Cloud Cover:	90	80

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ZEAMX V2	ZEAMX V4
Height, Unit:	5-6 IN	11-12 IN

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code:	SORHA	SORHA
Stage(leaves):	1-5	2-6
Height(inches):	1-7	2-15
Density:	HIGH	HIGH

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO, SPRAY	CO, SPRAY
Operating Pressure:	40 PSI	40 PSI
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002	8002
Boom Length, Unit:	10 FT	10 FT
Spray Volume, Unit:	18 GPA	18 GPA

NOTES:

Not harvested.

TABLE. JOHNSONGRASS CONTROL IN CORN. PROJECT CODE:00-MURPHY-E40

TREATMENT	FORM.	RATE	UNIT	PROD RATE	APPL TIME	APPL CODE	ZEAMX INJURY			SORHA CONTROL		
							DAT		56 DA	DAT		56 DA
							14	28	10"GR	14	28	10"GR
							%	%	%	%	%	%
1 NONTREATED							0	0	0	0	0	0
2 ACCENT	75 WG	0.031	LB A/A	0.66	OZ/A	10"GR B	0	0	0	83	88	91
2 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	%V/V	10"GR B						
2 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	10"GR B						
3 AE F130360 01	70 WG	0.05469	LB A/A	1.25	OZ/A	10"GR B	0	0	0	85	90	86
3 DESTINY MSO	100 LIQ	1.0	% V/V	1.0	%V/V	10"GR B						
3 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	10"GR B						
4 AE F130360 02	62 WG	0.04844	LB A/A	1.25	OZ/A	10"GR B	0	0	0	85	83	86
4 DESTINY MSO	100 LIQ	1.0	% V/V	1.0	%V/V	10"GR B						
4 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	10"GR B						
5 BEACON	75 WG	0.036	LB A/A	0.77	OZ/A	10"GR B	0	0	0	73	65	63
5 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	10"GR B						
5 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	10"GR B						
6 SPIRIT	57 WG	0.036	LB A/A	1.0	OZ/A	10"GR B	0	0	0	85	75	86
6 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	10"GR B						
6 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	10"GR B						
7 NORTHSTAR	47.4 WG	0.148	LB A/A	5.0	OZ/A	10"GR B	0	0	0	75	70	75
7 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	%V/V	10"GR B						
7 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	10"GR B						
8 ROUNDUP ULTRA	3 SL	0.75	LB AE/A	2.0	PT/A	10"GR B	99	99	99	98	87	50
8 AMS	100 DRY	2.0	% W/W	2.0	%W/W	10"GR B						
9 LIBERTY	1.67 EC	0.444	LB A/A	34.0	OZ/A	4"GR A	0	0	0	63	27	23
9 AMS	100 DRY	3.0	LB/A	3.0	LB/A	4"GR A						
10 LIGHTNING	70 WG	0.056	LB A/A	1.28	OZ/A	4"GR A	87	96	75	83	65	40
10 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	4"GR A						
10 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	4"GR A						
11 BASIS GOLD	90 WG	0.788	LB A/A	14.0	OZ/A	4"GR A	0	0	0	87	75	84
11 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0	%V/V	4"GR A						
11 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	4"GR A						
12 CELEBRITY PLUS	70 WG	0.206	LB A/A	4.7	OZ/A	10"GR B	0	0	0	83	87	92
12 ACTIVATOR 90	100 LIQ	0.25	% V/V	0.25	%V/V	10"GR B						
12 28% UAN	100 LIQ	2.5	% V/V	2.5	%V/V	10"GR B						
LSD							3	1	2	7	13	18
P							0.01	0.01	0.01	0.01	0.01	0.01

1. PROTOCOL: SIU-BGY.

2. RATING DATES:

14 DAYS AFTER 4"GR AND 10"GR APPLICATIONS ON MAY-31-00 AND JUN-8-00, RESPECTIVELY.

28 DAYS AFTER 4"GR AND 10"GR APPLICATIONS ON JUN-14-00 AND JUN-22-00, RESPECTIVELY.

56 DAYS AFTER 10"GR ON JUL-20-00.