

Johnsongrass Control with AE F130360 Tank-mixes with Distinct.

00-MURPHY-W60

OBJECTIVE: Evaluate rhizome johnsongrass control with tank-mixtures of AE F130360 and Distinct.

SUMMARY: No corn injury was observed for any treatment. Control of rhizome johnsongrass was the greatest with herbicides applied at the 18" weed timing, followed by the 10" timing, and least with the 4" timing. The lack of johnsongrass control at the earlier application timings was due to newly emerging johnsongrass and possibly insufficient translocation of the herbicide to suppress rhizome growth. Although not statistically significant, AE F130360-02 tended to provide less johnsongrass control late season than AE F130360-01, especially when applied with COC or in tank-mix with low rates of Distinct.

HERBICIDES

ACCENT 75 WG
AE F130360 01 70 WG
AE F130360 02 62 WG
DISTINCT 70 WG

WEEDS

JOHNSONGRASS

CROP

CORN, FIELD

Bryan Young and Julie Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Johnsongrass Control with AE F130360 Tank-mixes with Distinct.

Project Code: 00-MURPHY-W60 Location: Murphysboro IL

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

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

	A	B	C
Application Date:	May-17-00	May-25-00	May-31-00
Time of Day:	10:00	12:00	12:00
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	4"GR	10"GR	18"GR
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	70 F	76 F	85 F
Wind Velocity, Unit:	5 MPH	5 MPH	5 MPH
Dew Presence (Y/N):	N	N	N
Soil Temp., Unit:	75 F	74 F	80 F
Soil Moisture:	NORMAL	WET	
% Cloud Cover:	90	80	

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX V2	ZEAMX V4	ZEAMX V5
Height, Unit:	5-6 IN	11-12 IN	16 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code:	SORHA	SORHA	SORHA
Stage(leaves):	1-5	2-5	2-6
Height(inches):	1-7	2-15	4-24
Density:	HIGH	HIGH	

APPLICATION EQUIPMENT

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

NOTES:

Not harvested.

TABLE. JOHNSONGRASS CONTROL WITH AE F130360 TANK-MIXES WITH DISTINCT. PROJECT CODE:00-MURPHY-W60

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	AE F130360 01	70	WG	0.05469	LB A/A	1.25	OZ/A	4"GR	A	0	0	0	78	32	37
2	DESTINY MSO	100	LIQ	1.0	% V/V	1.0	%V/V	4"GR	A						
2	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	4"GR	A						
3	ACCENT	75	WG	0.031	LB A/A	0.66	OZ/A	4"GR	A	0	0	0	83	50	43
3	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	%V/V	4"GR	A						
3	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	4"GR	A						
4	AE F130360 02	62	WG	0.04844	LB A/A	1.25	OZ/A	4"GR	A	0	0	0	83	37	30
4	DESTINY MSO	100	LIQ	1.0	% V/V	1.0	%V/V	4"GR	A						
4	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	4"GR	A						
5	AE F130360 01	70	WG	0.05469	LB A/A	1.25	OZ/A	10"GR	B	0	0	0	87	78	82
5	DESTINY MSO	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	ACCENT	75	WG	0.031	LB A/A	0.66	OZ/A	10"GR	B	0	0	0	81	83	89
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	AE F130360 02	62	WG	0.04844	LB A/A	1.25	OZ/A	10"GR	B	0	0	0	80	75	67
7	DESTINY MSO	100	LIQ	1.0	% V/V	1.0	%V/V	10"GR	B						
7	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	10"GR	B						
8	AE F130360 01	70	WG	0.05469	LB A/A	1.25	OZ/A	18"GR	C	0	0	0	58	88	88
8	DESTINY MSO	100	LIQ	1.0	% V/V	1.0	%V/V	18"GR	C						
8	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	18"GR	C						
9	ACCENT	75	WG	0.031	LB A/A	0.66	OZ/A	18"GR	C	0	0	0	62	90	88
9	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	%V/V	18"GR	C						
9	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	18"GR	C						
10	AE F130360 02	62	WG	0.04844	LB A/A	1.25	OZ/A	18"GR	C	0	0	0	55	88	87
10	DESTINY MSO	100	LIQ	1.0	% V/V	1.0	%V/V	18"GR	C						
10	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	18"GR	C						
11	AE F130360 01	70	WG	0.05469	LB A/A	1.25	OZ/A	10"GR	B	0	0	0	73	75	78
11	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	%V/V	10"GR	B						
11	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	10"GR	B						
12	AE F130360 02	62	WG	0.04844	LB A/A	1.25	OZ/A	10"GR	B	0	0	0	68	63	55
12	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	%V/V	10"GR	B						
12	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	10"GR	B						
13	AE F130360 01	70	WG	0.05469	LB A/A	1.25	OZ/A	10"GR	B	0	0	0	77	78	82
13	DISTINCT	70	WG	0.0875	LB A/A	2.0	OZ/A	10"GR	B						
13	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	%V/V	10"GR	B						
13	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	10"GR	B						
14	AE F130360 02	62	WG	0.04844	LB A/A	1.25	OZ/A	10"GR	B	0	0	0	73	70	65
14	DISTINCT	70	WG	0.0875	LB A/A	2.0	OZ/A	10"GR	B						
14	PRIME OIL COC	100	LIQ	1.0	% V/V	1.0	%V/V	10"GR	B						
14	28% UAN	100	LIQ	2.5	% V/V	2.5	%V/V	10"GR	B						

(CONTINUED)

TABLE. JOHNSONGRASS CONTROL WITH AE F130360 TANK-MIXES WITH DISTINCT. PROJECT CODE:00-MURPHY-W60 (CONTINUED)

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
							%	%	%	%	%	%
15 AE F130360 01	70 WG	0.05469	LB A/A	1.25 OZ/A	10"GR	B	0	0	0	65	65	70
15 DISTINCT	70 WG	0.1313	LB A/A	3.0 OZ/A	10"GR	B						
15 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	10"GR	B						
15 28% UAN	100 LIQ	2.5	% V/V	2.5 %V/V	10"GR	B						
16 AE F130360 02	62 WG	0.04844	LB A/A	1.25 OZ/A	10"GR	B	0	0	0	67	65	70
16 DISTINCT	70 WG	0.1313	LB A/A	3.0 OZ/A	10"GR	B						
16 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	10"GR	B						
16 28% UAN	100 LIQ	2.5	% V/V	2.5 %V/V	10"GR	B						
17 AE F130360 01	70 WG	0.05469	LB A/A	1.25 OZ/A	10"GR	B	0	0	0	72	65	73
17 DISTINCT	70 WG	0.175	LB A/A	4.0 OZ/A	10"GR	B						
17 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	10"GR	B						
17 28% UAN	100 LIQ	2.5	% V/V	2.5 %V/V	10"GR	B						
18 AE F130360 02	62 WG	0.04844	LB A/A	1.25 OZ/A	10"GR	B	0	0	0	73	70	70
18 DISTINCT	70 WG	0.175	LB A/A	4.0 OZ/A	10"GR	B						
18 PRIME OIL COC	100 LIQ	1.0	% V/V	1.0 %V/V	10"GR	B						
18 28% UAN	100 LIQ	2.5	% V/V	2.5 %V/V	10"GR	B						
LSD							0	0	0	8	11	18
P							1.0	1.0	1.0	0.01	0.01	0.01

1. PROTOCOL: AVENTIS CET AND 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.