

Evaluation of AE 0172747 Programs - 1.

Project Code: 06-ARC-13-E70 Location: Agronomy Research Center
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Carbondale IL 62901 USA
Trial Status: Final Updated: 3-5-07

Objective:

Evaluate the efficacy of AE 0172747 and related programs for control of broadleaf and grass species, specifically broadleaf signalgrass.

Weed Code	Common Name	Scientific Name
1. PANDI	panicum, fall	Panicum dichotomiflorum Michx.
2. BRAPP	signalgrass, broadleaf	Brachiaria platyphylla (Griseb.) Nash

Crop 1:	ZEAMX corn, field	Variety:	P31G96 RR/HX
Planting Method:	Seeded	Planting Date:	5-19-06
Rate:	28000 S/A	Depth:	1.5 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	33 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Field Prep./Maintenance:	N 158 LB/A, P205 46 LB/A, K20 60 LB/A				

Soil Name:	Weir	% OM:	1.4	pH:	6.1	CEC:	74
Texture:	Silt loam	Fert. Level:	P1: 69 LB/A, K: 402 LB/A				

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	5-20-06	6-14-06	6-14-06	6-14-06
Time of Day:	9:30	13:00	13:00	13:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PRE	1-3"W	3-4"W-1	3-4"W-2
Applic. Placement:	BROSOI	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	65 F	85 F	85 F	85 F
% Relative Humidity:	52	55	55	55
Wind Velocity, Unit:	5 MPH	5 MPH	5 MPH	5 MPH
Dew Presence (Y/N):	N	N	N	N
Soil Moisture:	NORMAL	BELNOR	BELNOR	BELNOR
% Cloud Cover:	75	10	10	10

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	ZEAMX NA	ZEAMX V6	ZEAMX V6	ZEAMX V6
Height, Unit:	NA NA	8 IN	8 IN	8 IN

WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code:		PANDI	PANDI	PANDI
Stage (leaves):		3-5	3-7	2-7
Height (inches):		1-5	2-5	3-5
Density:		High	High	High
Weed 2 Code:		BRAPL	BRAPL	BRAPL
Stage (leaves):		3-6	3-6	2-4
Height (inches):		1-5	2-4	2-4
Density:		Medium	Medium	Medium

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	8003	8002	8002	8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA	20 GPA	20 GPA

NOTES:

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Weed Code								PANDI	PANDI	PANDI	BRAPP	BRAPP	BRAPP					
Crop Code	Rating Data Type							ZEAMX	ZEAMX	ZEAMX								
Rating Unit	Rating Date							Injury	Injury	Injury	Control	Control	Control					
Trt-Eval Interval								Percent	Percent	Percent	Percent	Percent	Percent					
								6-21-06	7-12-06	8-9-06	6-21-06	7-12-06	8-9-06					
								7 DAT	28 DAT	56 DAT	7 DAT	28 DAT	56 DAT					
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			
2	RADIUS	4	SC	0.56	lb ai/a	18	fl oz/a	PRE	A	0	0	0	91	88	90			
2	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	3-4"W-2	D									
2	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	3-4"W-2	D									
2	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	3-4"W-2	D									
3	RADIUS	4	SC	0.25	lb ai/a	8	fl oz/a	PRE	A	0	0	0	63	79	55			
3	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	3-4"W-2	D									
3	AATREX	90	WG	0.75	lb ai/a	0.83	lb/a	3-4"W-2	D									
3	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	3-4"W-2	D									
3	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	3-4"W-2	D									
4	BALANCE PRO	4	SC	0.047	lb ai/a	1.5	fl oz/a	PRE	A	0	0	0	78	76	77			
4	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	3-4"W-2	D									
4	AATREX	90	WG	0.75	lb ai/a	0.83	lb/a	3-4"W-2	D									
4	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	3-4"W-2	D									
4	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	3-4"W-2	D									
5	BALANCE PRO	4	SC	0.047	lb ai/a	1.5	fl oz/a	PRE	A	0	0	0	13	3	8			
5	AATREX	90	WG	1	lb ai/a	1.11	lb/a	PRE	A									
5	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	3-4"W-2	D									
5	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	3-4"W-2	D									
5	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	3-4"W-2	D									
6	DEFINE	4	SC	0.656	lb ai/a	21	fl oz/a	PRE	A	0	0	0	62	71	65			
6	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	3-4"W-2	D									
6	AATREX	90	WG	0.75	lb ai/a	0.83	lb/a	3-4"W-2	D									
6	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	3-4"W-2	D									
6	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	3-4"W-2	D									
7	AE 0172747	5.25	SC	0.041	lb ai/a	1	fl oz/a	3-4"W-1	C	0	0	0	97	92	96			
7	LIBERTY	1.67	EC	0.417	lb ai/a	32	fl oz/a	3-4"W-1	C									
7	AMS	100	DRY	2	% w/w	17	lb/100 gal	3-4"W-1	C									
8	LIBERTY	1.67	EC	0.417	lb ai/a	32	fl oz/a	3-4"W-1	C	0	0	0	97	93	96			
8	AATREX	90	WG	0.75	lb ai/a	0.83	lb/a	3-4"W-1	C									
8	AMS	100	DRY	2	% w/w	17	lb/100 gal	3-4"W-1	C									
9	AE 0172747	5.25	SC	0.041	lb ai/a	1	fl oz/a	3-4"W-1	C	0	0	0	99	99	99			
9	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4"W-1	C									
9	AMS	100	DRY	1	% w/w	8.5	lb/100 gal	3-4"W-1	C									
10	ROUNDUP W-MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	3-4"W-1	C	0	0	0	99	99	99			
10	AATREX	90	WG	0.5	lb ai/a	0.556	lb/a	3-4"W-1	C									
10	AMS	100	DRY	1	% w/w	8.5	lb/100 gal	3-4"W-1	C									
11	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	1-3"W	B	0	0	0	33	78	27			
11	OPTION	35	WG	0.0328	lb ai/a	1.5	oz/a	1-3"W	B									
11	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	1-3"W	B									
11	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	1-3"W	B									
12	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	1-3"W	B	0	0	0	15	72	15			
12	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	1-3"W	B									
12	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	1-3"W	B									
12	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	1-3"W	B									
13	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	1-3"W	B	0	0	0	8	0	7			
13	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	1-3"W	B									
13	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	1-3"W	B									
14	AE 0172747	5.25	SC	0.123	lb ai/a	3	fl oz/a	1-3"W	B	0	0	0	15	0	7			
14	AATREX	90	WG	0.75	lb ai/a	0.83	lb/a	1-3"W	B									
14	DESTINY MSO	100	LIQ	1	% v/v	1	% v/v	1-3"W	B									
14	28% UAN	100	LIQ	1.5	qt/a	1.5	qt/a	1-3"W	B									
LSD (P=.05)										0.0	0.0	0.0	16.2	10.5	12.1	6.1	2.9	5.7
Replicate F										0.000	0.000	0.000	1.215	0.669	1.504	0.066	0.222	0.265
Replicate Prob(F)										1.0000	1.0000	1.0000	0.3131	0.5208	0.2410	0.9359	0.8022	0.7691
Treatment F										0.000	0.000	0.000	49.280	123.815	95.267	177.723	663.245	195.971
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Trial Comments

1. Protocol: Bayer (JNA).
2. Ratings: CI/WC 7, 28 + 56 DAT (POST).
3. Crop destruct after final evaluation.