

Tank-Mixtures of Accent and Atrazine with AE 0172747 - Carbondale.

Project Code: 07-ARC-12C 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: 1-23-08**Objective:**

Evaluate the benefit of Accent and atrazine tank-mixtures with AE 0172747 for grass efficacy, specifically broadleaf signalgrass or fall panicum.

Weed Code	Common Name	Scientific Name
1. PANDI	panicum, fall	Panicum dichotomiflorum Michx.
2. SETFA	foxtail, giant	Setaria faberi Herrm.
3. AMARE	pigweed, redroot	Amaranthus retroflexus L.

Crop 1:	ZEAMX corn, field	Variety:	P31G96 RR/HX
Planting Method:	Seeded	Planting Date:	4-23-07
Rate:	28000 S/A	Depth:	1.5 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	25 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2006				
Field Prep./Maintenance:	N 130 LB/A, P205 0 LB/A, K2O 180 LB/A				

Soil Name:	Weir	% OM:	2.6	pH:	6	CEC:	8.1
Texture:	Silt loam	Fert. Level:	P1: 62 LB/A, K: 175 LB/A				

APPLICATION DESCRIPTION**A**

Application Date:	5-27-07
Time of Day:	10:00
Application Method:	Spray
Application Timing:	4"GRASS
Applic. Placement:	BROFOL
Air Temp., Unit:	75 F
% Relative Humidity:	52
Wind Velocity, Unit:	0-2 MPH
Dew Presence (Y/N):	Y
Soil Temp., Unit:	73 F
Soil Moisture:	NORMAL
% Cloud Cover:	90

CROP STAGE AT EACH APPLICATION**A**

Crop 1 Code, Stage:	ZEAMX V4
Height, Unit:	16 IN

WEED STAGE AT EACH APPLICATION**A**

Weed 1 Code:	PANDI
Stage(leaves):	4-9
Height(inches):	4-8
Density:	High

Weed 2 Code:	SETFA
Stage(leaves):	4-9
Height(inches):	4-8
Density:	Low

Weed 3 Code:	AMARE
Stage(leaves):	4-12
Height(inches):	1-7
Density:	High

APPLICATION EQUIPMENT**A**

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

NOTES:

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Weed Code									ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	PANDI	PANDI	SETFA	SETFA										
Crop Code									Moisture	Test wt.	Yield	Injury	Injury	Control	Control	Control	Control										
Rating Data Type									Percent	lb/bu	bu/A	Percent	Percent	Percent	Percent	Percent	Percent										
Rating Unit									9-12-07	9-12-07	9-12-07	6-10-07	6-24-07	6-10-07	6-24-07	6-10-07	6-24-07										
Rating Date									14 DA-A	14 DA-A	14 DA-A	28 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A										
Trt-Eval Interval																											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code																		
1	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	13.1	a	55.2	a	25	d-g	0	a	0	a	10	e	20	c	80	b	86	d
1	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
1	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
2	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	12.5	abc	53.6	cde	11	fg	0	a	0	a	0	f	0	d	90	a	93	bc
2	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																		
2	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
2	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
3	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	12.7	abc	53.2	de	37	cd	0	a	0	a	70	cd	77	b	90	a	95	abc
3	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																		
3	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
3	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
4	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	12.7	abc	53.5	cde	39	bcd	0	a	0	a	67	d	82	ab	90	a	95	abc
4	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																		
4	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																		
4	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
4	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
5	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	13.0	ab	54.6	abc	12	fg	0	a	0	a	17	e	23	c	82	b	96	ab
5	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
5	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
6	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	12.6	abc	55.2	a	12	fg	0	a	0	a	0	f	0	d	88	a	98	ab
6	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																		
6	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
6	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
7	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	12.6	abc	53.4	cde	51	abc	0	a	0	a	78	abc	83	ab	90	a	90	cd
7	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																		
7	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
7	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
8	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS	A	12.7	abc	53.5	cde	55	ab	0	a	0	a	80	ab	87	ab	90	a	90	cd
8	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																		
8	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																		
8	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
8	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
9	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	12.6	abc	55.0	ab	17	efg	0	a	0	a	0	f	0	d	90	a	93	bc
9	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
9	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
10	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	12.5	abc	53.5	cde	11	fg	0	a	0	a	0	f	0	d	90	a	96	ab
10	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																		
10	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
10	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
11	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	12.7	abc	53.6	b-e	27	def	0	a	0	a	75	bcd	80	ab	90	a	93	bc
11	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																		
11	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
11	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
12	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	13.0	a	53.7	b-e	53	abc	0	a	0	a	82	ab	88	ab	90	a	99	a
12	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																		
12	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																		
12	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
12	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
13	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	12.4	bc	54.3	a-d	15	efg	0	a	0	a	0	f	0	d	90	a	99	a
13	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
13	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
14	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	12.8	abc	54.6	abc	15	efg	0	a	0	a	0	f	0	d	90	a	99	a
14	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																		
14	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
14	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		
15	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	12.5	abc	53.1	de	29	de	0	a	0	a	75	bcd	83	ab	90	a	99	a
15	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																		
15	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																		
15	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																		

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Weed Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	PANDI	PANDI	SETFA	SETFA
Crop Code	Moisture	Test wt.	Yield	Injury	Injury	Control	Control	Control	Control
Rating Data Type	Percent	lb/bu	bu/A	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	9-12-07	9-12-07	9-12-07	6-10-07	6-24-07	6-10-07	6-24-07	6-10-07	6-24-07
Rating Date				14 DA-A	28 DA-A	14 DA-A	28 DA-A	14 DA-A	28 DA-A
Trt-Eval Interval									

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code																			
16	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	12.8	abc	53.2	de	60	a	0	a	0	a	85	a	92	a	90	a	99	a	
16	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																			
16	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																			
16	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																			
16	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																			
17	NONTREATED									12.2	c	52.3	e	9	g	0	a	0	a	0	f	0	d	0	c	0	e	
LSD (P=.05)										0.65		1.43		16.1		0.0		0.0		9.2		12.0		1.7		5.6		
Replicate F										6.750		0.736		2.927		0.000		0.000		2.224		2.637		0.000		0.190		
Replicate Prob(F)										0.0036		0.4877		0.0680		1.0000		1.0000		0.1246		0.0871		1.0000		0.8281		
Treatment F										1.110		2.701		10.121		0.000		0.000		143.416		99.139		1360.882		145.135		
Treatment Prob(F)										0.3863		0.0097		0.0001		1.0000		1.0000		0.0001		0.0001		0.0001		0.0001		

Means followed by same letter do not significantly differ (P=.05, LSD)

Tank-Mixtures of Accent and Atrazine with AE 0172747 - Carbondale.

Project Code: 07-ARC-12C Location: Agronomy Research Center
 Investigator: Bryan Young

Weed Code	AMARE	AMARE
Crop Code		
Rating Data Type	Control	Control
Rating Unit	Percent	Percent
Rating Date	6-10-07	6-24-07
Trt-Eval Interval	14 DA-A	28 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code		
1	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
1	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
1	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
2	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
2	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
2	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
2	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
3	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
3	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
3	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
3	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
4	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
4	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
4	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
4	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
4	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
5	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
5	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
5	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
6	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
6	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
6	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
6	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
7	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
7	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
7	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
7	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
8	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		90 a	99 a
8	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
8	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
8	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
8	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
9	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS A		90 a	92 c
9	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
9	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
10	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS A		90 a	93 c
10	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
10	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
10	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
11	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS A		90 a	93 c
11	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
11	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
11	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
12	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS A		90 a	96 b
12	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
12	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
12	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
12	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
13	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS A		90 a	99 a
13	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
13	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
14	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS A		90 a	99 a
14	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
14	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
14	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			
15	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS A		90 a	99 a
15	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
15	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS A			
15	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS A			

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Weed Code	AMARE	AMARE
Crop Code		
Rating Data Type	Control	Control
Rating Unit	Percent	Percent
Rating Date	6-10-07	6-24-07
Trt-Eval Interval	14 DA-A	28 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code		
16	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	90 a	99 a
16	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A		
16	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A		
16	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A		
16	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A		
17	NONTREATED									0 b	0 d
LSD (P=.05)										0.0	2.2
Replicate F										0.000	1.000
Replicate Prob(F)										1.0000	0.3791
Treatment F										0.000	953.554
Treatment Prob(F)										1.0000	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Bayer, Waddington.
2. Ratings: CI/WC 14 + 28 DAT. Other evaluations may be necessary.
3. Yield, destroy grain.
4. Target broadleaf signalgrass or fall panicum data.
5. DA-A = Days after 4"GRASS application.
6. Harvested 9-12-07, (2) 30 inch rows by 22 ft.