

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

Project Code: 07-2C-M90 Location: Belleville Research Center  
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 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 fall panicum.

Weed Code	Common Name	Scientific Name
1. PANDI	panicum, fall	Panicum dichotomiflorum Michx.
2. SETFA	foxtail, giant	Setaria faberi Herrm.
3. AMATA	waterhemp, common	Amaranthus rudis Sauer

Crop 1:	ZEAMX corn, field	Variety:	33K44
Planting Method:	Seeded	Planting Date:	5-24-07
Rate:	28000 S/A	Depth:	1.5 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	3
Tillage Type:	Reduced-Till	Study Design:	Non-randomized		
Previous Crop, Year:	ZEAMX, 2006				
Field Prep./Maintenance:	N 150 LB/A, P2O5 0 LB/A, K2O 100 LB/A				

Soil Name:	Weir	% OM:	2.2	pH:	6.2	CEC:	8
Texture:	Silt loam	Fert. Level:	Pl: 117 LB/A, K: 318 LB/A				

**APPLICATION DESCRIPTION**

**A**

Application Date:	6-12-07
Time of Day:	8:30
Application Method:	Spray
Application Timing:	4"GRASS
Applic. Placement:	BROFOL
Air Temp., Unit:	72 F
% Relative Humidity:	70
Wind Velocity, Unit:	0 MPH
Dew Presence (Y/N):	N
Soil Moisture:	NORMAL
% Cloud Cover:	0

**CROP STAGE AT EACH APPLICATION**

**A**

Crop 1 Code, Stage:	ZEAMX V3-V4
Height, Unit:	10-12 IN

**WEED STAGE AT EACH APPLICATION**

**A**

Weed 1 Code:	PANDI
Stage(leaves):	2-4
Height(inches):	1-5
Density:	High
Weed 2 Code:	SETFA
Stage(leaves):	2-4
Height(inches):	1-5
Density:	High
Weed 3 Code:	AMATA
Stage(leaves):	4-8
Height(inches):	0-3
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										PANDI	PANDI	SETFA	SETFA				
Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	ZEAMX Moisture Percent	ZEAMX Yield bu/A	ZEAMX Injury Percent	ZEAMX Injury Percent	Control Percent	Control Percent	Control Percent	Control Percent					
					10-2-07	10-2-07	6-26-07 14 DA-A	7-10-07 28 DA-A	6-26-07 14 DA-A	7-10-07 28 DA-A	6-26-07 14 DA-A	7-10-07 28 DA-A					
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code								
1	NONTREATED									18.2 abc	45 e	0 a	0 a	0 c	0 d	0 b	0 b
2	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		17.7 abc	68 de	0 a	0 a	0 c	0 d	99 a	99 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		17.0 bc	80 cde	0 a	0 a	0 c	0 d	99 a	99 a
3	AATREX	90	WG	0.5	lb ai/a	8.9	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		18.8 ab	140 ab	0 a	0 a	88 ab	80 abc	99 a	99 a
4	ACCENT	75	WG	0.0117	lb ai/a	0.25	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		17.7 abc	144 ab	0 a	0 a	90 a	83 abc	99 a	99 a
5	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A									
5	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A									
5	PRIME OIL COC	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		17.1 bc	59 de	0 a	0 a	0 c	0 d	99 a	99 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		16.5 c	65 de	0 a	0 a	0 c	0 d	99 a	99 a
7	AATREX	90	WG	0.5	lb ai/a	8.9	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		18.9 ab	155 a	0 a	0 a	89 ab	90 a	99 a	99 a
8	ACCENT	75	WG	0.0117	lb ai/a	0.25	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	0.082	lb ai/a	3	fl oz/a	4"GRASS A		18.4 abc	147 ab	0 a	0 a	86 b	87 ab	99 a	99 a
9	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A									
9	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A									
9	DESTINY MSO	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		17.5 bc	84 cde	0 a	0 a	0 c	0 d	99 a	99 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		17.6 abc	89 cd	0 a	0 a	0 c	0 d	99 a	99 a
11	AATREX	90	WG	0.5	lb ai/a	8.9	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		19.2 ab	139 ab	0 a	0 a	87 ab	75 c	99 a	99 a
12	ACCENT	75	WG	0.0117	lb ai/a	0.25	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		18.3 abc	142 ab	0 a	0 a	87 ab	78 bc	99 a	99 a
13	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A									
13	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A									
13	PRIME OIL COC	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		18.0 abc	68 de	0 a	0 a	0 c	0 d	99 a	99 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		18.0 abc	84 cde	0 a	0 a	0 c	0 d	99 a	99 a
15	AATREX	90	WG	0.5	lb ai/a	8.9	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									PANDI	PANDI	SETFA	SETFA
Crop Code									Control	Control	Control	Control
Rating Data Type									Percent	Percent	Percent	Percent
Rating Unit									6-26-07	7-10-07	6-26-07	7-10-07
Rating Date									14 DA-A	28 DA-A	14 DA-A	28 DA-A
Trt-Eval Interval									14 DA-A	28 DA-A	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	19.0	ab	136	ab	0	a	0	a	88	ab	84	abc	99	a	99	a
16	ACCENT	75	WG	0.0117	lb ai/a	0.25	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	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	19.7	a	111	bc	0	a	0	a	87	ab	74	c	99	a	99	a
17	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A																
17	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A																
17	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A																
17	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A																
LSD (P=.05)										2.22		41.5		0.0		0.0		3.7		10.9		0.0		0.0	
Replicate F										2.315		3.052		0.000		0.000		2.286		0.866		0.000		0.000	
Replicate Prob(F)										0.1150		0.0612		1.0000		1.0000		0.1180		0.4302		1.0000		1.0000	
Treatment F										1.237		6.720		0.000		0.000		1274.698		123.655		0.000		0.000	
Treatment Prob(F)										0.2946		0.0001		1.0000		1.0000		0.0001		0.0001		1.0000		1.0000	

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

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

Project Code: 07-2C-M90 Location: Belleville Research Center  
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Weed Code	AMATA	AMATA
Crop Code		
Rating Data Type	Control	Control
Rating Unit	Percent	Percent
Rating Date	6-26-07	7-10-07
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		
1	NONTREATED									0 b	0 b
2	AE 0172747	3.5	SC	0.082	lb ai/a	3	fl oz/a	4"GRASS A		99 a	99 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		99 a	99 a
3	AATREX	90	WG	0.5	lb ai/a	8.9	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		99 a	99 a
4	ACCENT	75	WG	0.0117	lb ai/a	0.25	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		99 a	99 a
5	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
5	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
5	PRIME OIL COC	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		99 a	99 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		99 a	99 a
7	AATREX	90	WG	0.5	lb ai/a	8.9	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		99 a	99 a
8	ACCENT	75	WG	0.0117	lb ai/a	0.25	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	0.082	lb ai/a	3	fl oz/a	4"GRASS A		99 a	99 a
9	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
9	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
9	DESTINY MSO	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		99 a	99 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		99 a	99 a
11	AATREX	90	WG	0.5	lb ai/a	8.9	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		99 a	99 a
12	ACCENT	75	WG	0.0117	lb ai/a	0.25	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		99 a	99 a
13	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS A			
13	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS A			
13	PRIME OIL COC	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		99 a	99 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		99 a	99 a
15	AATREX	90	WG	0.5	lb ai/a	8.9	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	AMATA	AMATA
Crop Code		
Rating Data Type	Control	Control
Rating Unit	Percent	Percent
Rating Date	6-26-07	7-10-07
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	99	a
16	ACCENT	75	WG	0.0117	lb ai/a	0.25	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	AE 0172747	3.5	SC	0.0547	lb ai/a	2	fl oz/a	4"GRASS	A	99	a
17	ACCENT	75	WG	0.0117	lb ai/a	0.25	oz/a	4"GRASS	A		
17	AATREX	90	WG	0.5	lb ai/a	8.9	oz/a	4"GRASS	A		
17	DESTINY MSO	100	LIQ	1.0	% v/v	1	% v/v	4"GRASS	A		
17	28% UAN	100	LIQ	2.5	% v/v	2.5	% v/v	4"GRASS	A		
LSD (P=.05)										0.0	0.0
Replicate F										0.000	0.000
Replicate Prob(F)										1.0000	1.0000
Treatment F										0.000	0.000
Treatment Prob(F)										1.0000	1.0000

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. Target fall panicum data.
4. DA-A = Days after 4"GRASS application.
5. Harvested 10-2-07, (2) 30 inch rows by 25 ft.