

Glyphosate-Resistant Marestail or Waterhemp Control

Southern Illinois University

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
City State Zip Country: Murphysboro IL 62966 USA
Trial Status: FINAL **Initiation Date:** 04-17-10

Objectives: Evaluate herbicide programs using Authority MTZ and Cadet for control of grass and broadleaf weeds in no-till corn.

Crop 1: ZEAMD Dent corn **Variety:** H-9145 **Description:** GT/LL (3000GT)
Planting Method: SEEDED **Planting Date:** 04-22-10
Rate, Unit: 28000 S/A **Depth, Unit:** 2.0 IN
Row Spacing, Unit: 30 IN

Pest 1 Type: W	Code: LAMAM	Lamium amplexicaule L.	henbit
Pest 2 Type: W	Code: CAPBP	Capsella bursa-pastoris (L.) Med	shepherdspurse
Pest 3 Type: W	Code: THLAR	Thlaspi arvense L.	pennycress, field
Pest 4 Type: W	Code: GERCA	Geranium carolinianum L.	geranium, Carolina
Pest 5 Type: W	Code: MEDLU	Medicago lupulina L.	medic, black
Pest 6 Type: W	Code: ERICA	Conyza canadensis (L.) Crong.	horseweed
Pest Description:		glyphosate-resistant marestail	
Pest 7 Type: W	Code: AMASS	Amaranthus species	amaranthus species

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 25 FT **Tillage Type:** NO-TILL
Replications: 4 **Study Design:** Randomized Complete Block

Prior Crops, Year
1. GLXMA 2009

Field Prep./Maintenance: N 209 LB/A, P205 152 LB/A, K2O 402 LB/A

% OM: 2.2	Texture: VERY FINE SANDY LOAM
pH: 6.8	Soil Name: ALVIN
CEC: 10	Fert. Level: P1 160 LB/A, K 120 LB/A

	Application Description	
	A	B
Application Date:	04-17-10	05-17-10
Time of Day:	10:30	19:30
Application Method:	Spray	Spray
Application Timing:	7DBP	POST
Application Placement:	BROFOL	BROFOL
Applied By:	NVH	NVH
Air Temperature, Unit:	64 F	63 F
% Relative Humidity:	52	78
Wind Velocity, Unit:	6 MPH	3 MPH
Wind Direction:	S	NW
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	62 F	70 F
Soil Moisture:	NORMAL	NORMAL
% Cloud Cover:	0	100

	04-17-10	05-17-10
Crop stage at application:	NA	V3-V4
Height Min, Max (inch):	5	8

Cadet Tank-Mixtures in Corn.

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Location: Young Res. Center

	Pest Stage At Each Application			
Application Date:	04-17-10	05-17-10		
Weed Code:	LAMAM	LAMAM		
Stage Majority (leaves):	16	NA		
Stage Min, Max:	8 36			
Height Majority:	8 IN			
Height Min, Max:	6 10			
Density, Unit:	2 FT2			
Weed Code:	CAPBP	CAPBP		
Stage Majority (leaves):	80	NA		
Stage Min, Max:	60 150			
Height Majority:	15 IN			
Height Min, Max:	11 20			
Density, Unit:	0.3 FT2			
Weed Code:	THLAR	THLAR		
Stage Majority (leaves):	60	NA		
Stage Min, Max:	40 120			
Height Majority:	15 IN			
Height Min, Max:	8 22			
Density, Unit:	0.3 FT2			
Weed Code:	GERCA	GERCA		
Stage Majority (leaves):	10	NA		
Stage Min, Max:	6 20			
Height Majority:	6 IN			
Height Min, Max:	4 10			
Density, Unit:	0.2 FT2			
Weed Code:	MEDLU	MEDLU		
Stage Majority (leaves):	60	100		
Stage Min, Max:	20 200	45 140		
Height Majority:	8 IN	12 IN		
Height Min, Max:	6 12	8 18		
Density, Unit:	0.2 FT2	1 FT2		
Weed Code:	ERICA	ERICA		
Stage Majority (leaves):	4	10		
Stage Min, Max:	COTY 10	4 20		
Height Majority:	2 IN	4 IN		
Height Min, Max:	0.5 4	2 6		
Density, Unit:	2 FT2	0.1 FT2		
Weed Code:	AMASS	AMASS		
Stage Majority (leaves):	NA	6		
Stage Min, Max:		2 8		
Height Majority:		4 IN		
Height Min, Max:		1 6		
Density, Unit:		30 FT2		

Application Equipment

Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	AI 11002	XR 8002
Boom Length, Unit:	6.67 FT	6.67 FT
Spray Volume, Unit:	15 GPA	15 GPA

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

ZEAMD ZEAMD ZEAMD
09-08-10 09-08-10 09-08-10
Moisture Test wt. Yield
Percent lb/bu bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	14.4 a	60.6 a	141 a
1	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B			
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	POST	B			
1	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B			
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	POST	B			
1	AMS	100	SG	2	% w/w	2	% w/w	POST	B			
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	14.4 a	60.6 a	157 a
2	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			
2	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B			
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B			
2	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B			
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B			
2	AMS	100	SG	2	% w/w	2	% w/w	POST	B			
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	14.4 a	60.5 a	149 a
3	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			
3	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B			
3	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	POST	B			
3	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	POST	B			
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B			
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	14.3 a	60.6 a	157 a
4	BICEP II MAGNUM	5.5	SC	2.2	lb ai/a	1.6	qt/a	7DBP	A			
4	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B			
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B			
4	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B			
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B			
4	AMS	100	SG	2	% w/w	2	% w/w	POST	B			
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	15.0 a	60.0 a	145 a
5	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B			
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B			
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	POST	B			
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B			
5	AMS	100	SG	2	% w/w	2	% w/w	POST	B			
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	14.2 a	60.7 a	135 a
6	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	7DBP	A			
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DBP	A			
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	13.9 a	60.7 a	141 a
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	7DBP	A			
7	AMS	100	SG	2	% w/w	2	% w/w	7DBP	A			
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B			
7	AMS	100	SG	2	% w/w	2	% w/w	POST	B			
LSD (P=.05)										1.19	0.72	41.7
Replicate F										2.803	3.298	0.608
Replicate Prob(F)										0.0694	0.0442	0.6187
Treatment F										0.703	0.875	0.368
Treatment Prob(F)										0.6513	0.5320	0.8899

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

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

															LAMAM	LAMAM							
Pest Code																							
Crop Code															ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD				
Rating Date															05-06-10	05-17-10	05-24-10	05-31-10	06-16-10	04-24-10	05-01-10		
Rating Data Type															Injury	Injury	Injury	Injury	Injury	Control	Control		
Rating Unit															Percent	Percent	Percent	Percent	Percent	Percent	Percent		
Rating Timing																							
Trt-Eval Interval															14 DAP	0 DA-B	7 DA-B	14 DA-B	30 DA-B	7 DA-A	14 DA-A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code														
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	0	a	0	a	5	b	0	b	0	b	90	b	99	a
1	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A														
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B														
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	POST	B														
1	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B														
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	POST	B														
1	AMS	100	SG	2	% w/w	2	% w/w	POST	B														
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	0	a	0	a	7	b	0	b	0	b	93	ab	99	a
2	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A														
2	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B														
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B														
2	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B														
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B														
2	AMS	100	SG	2	% w/w	2	% w/w	POST	B														
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	0	a	0	a	6	b	2	b	0	b	92	ab	99	a
3	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A														
3	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B														
3	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	POST	B														
3	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	POST	B														
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B														
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	0	a	0	a	6	b	3	b	0	b	93	ab	99	a
4	BICEP II MAGNUM	5.5	SC	2.2	lb ai/a	1.6	qt/a	7DBP	A														
4	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B														
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B														
4	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B														
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B														
4	AMS	100	SG	2	% w/w	2	% w/w	POST	B														
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	0	a	0	a	26	a	17	a	3	a	93	ab	99	a
5	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A														
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B														
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B														
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	POST	B														
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B														
5	AMS	100	SG	2	% w/w	2	% w/w	POST	B														
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	0	a	0	a	0	c	0	b	0	b	95	a	99	a
6	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	7DBP	A														
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DBP	A														
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	0	a	0	a	0	c	0	b	0	b	48	c	99	a
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	7DBP	A														
7	AMS	100	SG	2	% w/w	2	% w/w	7DBP	A														
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B														
7	AMS	100	SG	2	% w/w	2	% w/w	POST	B														
LSD (P=.05)										0.0	0.0	4.2	2.6	1.2	4.0	0.3							
Replicate F										0.000	0.000	0.954	0.437	1.000	2.764	1.000							
Replicate Prob(F)										1.0000	1.0000	0.4354	0.7291	0.4155	0.0719	0.4155							
Treatment F										0.000	0.000	40.010	49.221	7.118	159.335	1.000							
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0005	0.0001	0.4552							

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

Pest Code	CAPBP	CAPBP	THLAR	THLAR
Crop Code				
Rating Date	04-24-10	05-01-10	04-24-10	05-01-10
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	7 DA-A	14 DA-A	7 DA-A	14 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	97 a	99 a	83 b	88 c
1	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A				
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	POST	B				
1	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B				
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	POST	B				
1	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	84 ab	97 a
2	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A				
2	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
2	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B				
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
2	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	86 ab	97 ab
3	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A				
3	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
3	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	POST	B				
3	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	POST	B				
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	91 a	96 ab
4	BICEP II MAGNUM	5.5	SC	2.2	lb ai/a	1.6	qt/a	7DBP	A				
4	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
4	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B				
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
4	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	88 ab	99 a
5	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A				
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	POST	B				
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
5	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	91 a	99 a
6	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	7DBP	A				
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DBP	A				
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	35 b	98 b	25 c	91 bc
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	7DBP	A				
7	AMS	100	SG	2	% w/w	2	% w/w	7DBP	A				
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
7	AMS	100	SG	2	% w/w	2	% w/w	POST	B				

LSD (P=.05)

5.7 0.6 7.5 6.0

Replicate F

1.083 1.000 0.575 0.524

Replicate Prob(F)

0.3816 0.4155 0.6387 0.6712

Treatment F

156.327 3.000 87.807 4.074

Treatment Prob(F)

0.0001 0.0327 0.0001 0.0094

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

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

Pest Code	GERCA	GERCA	GERCA	GERCA	GERCA	GERCA
Crop Code						
Rating Date	04-24-10	05-01-10	05-17-10	05-24-10	05-31-10	06-16-10
Rating Data Type	Control	Control	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing						
Trt-Eval Interval	7 DA-A	14 DA-A	0 DA-B	7 DA-B	14 DA-B	30 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	99 a	99 a	99 a	99 a
1	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	POST	B						
1	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	POST	B						
1	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
2	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
2	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
2	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
2	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	99 a	99 a	99 ab	99 ab
3	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
3	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
3	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	POST	B						
3	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	POST	B						
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	99 a	99 a	99 a	99 a
4	BICEP II MAGNUM	5.5	SC	2.2	lb ai/a	1.6	qt/a	7DBP	A						
4	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
4	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
4	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	97 a	99 a	99 a	99 a	99 a	99 a
5	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	POST	B						
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
5	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	98 a	99 a	99 a	99 a	99 a	99 a
6	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	7DBP	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DBP	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	25 b	88 b	90 b	90 b	98 b	99 b
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	7DBP	A						
7	AMS	100	SG	2	% w/w	2	% w/w	7DBP	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
7	AMS	100	SG	2	% w/w	2	% w/w	POST	B						

LSD (P=.05)

3.4 1.4 0.3 0.0 0.9 0.4

Replicate F

1.416 1.479 1.000 0.000 0.391 0.391

Replicate Prob(F)

0.2706 0.2537 0.4155 1.0000 0.7607 0.7607

Treatment F

568.709 78.425 1285.000 0.000 1.696 1.696

Treatment Prob(F)

0.0001 0.0001 0.0001 1.0000 0.1794 0.1794

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

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

Pest Code									MEDLU	MEDLU	MEDLU	MEDLU	MEDLU	MEDLU
Crop Code									04-24-10	05-01-10	05-17-10	05-24-10	05-31-10	06-16-10
Rating Date									Control	Control	Control	Control	Control	Control
Rating Data Type									Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit														
Rating Timing														
Trt-Eval Interval									7 DA-A	14 DA-A	0 DA-B	7 DA-B	14 DA-B	30 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	95 a	98 abc	97 ab	99 ab	99 a
1	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A					
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B					
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	POST	B					
1	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B					
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	POST	B					
1	AMS	100	SG	2	% w/w	2	% w/w	POST	B					
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	95 a	97 c	94 b	97 c	99 a
2	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A					
2	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B					
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B					
2	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B					
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B					
2	AMS	100	SG	2	% w/w	2	% w/w	POST	B					
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	95 a	97 bc	96 ab	97 c	96 b
3	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A					
3	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B					
3	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	POST	B					
3	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	POST	B					
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B					
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	97 a	99 ab	99 a	99 a	99 a
4	BICEP II MAGNUM	5.5	SC	2.2	lb ai/a	1.6	qt/a	7DBP	A					
4	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B					
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B					
4	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B					
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B					
4	AMS	100	SG	2	% w/w	2	% w/w	POST	B					
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	95 a	97 c	96 ab	98 abc	99 a
5	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A					
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B					
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B					
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	POST	B					
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B					
5	AMS	100	SG	2	% w/w	2	% w/w	POST	B					
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	96 a	99 a	99 a	99 a	99 a
6	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	7DBP	A					
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DBP	A					
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	58 b	94 d	96 ab	98 bc	98 ab
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	7DBP	A					
7	AMS	100	SG	2	% w/w	2	% w/w	7DBP	A					
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B					
7	AMS	100	SG	2	% w/w	2	% w/w	POST	B					
LSD (P=.05)										3.6	1.7	3.5	1.2	2.5
Replicate F										1.320	1.022	3.787	0.471	1.029
Replicate Prob(F)										0.2987	0.4061	0.0288	0.7063	0.4032
Treatment F										142.688	8.508	2.557	3.279	2.046
Treatment Prob(F)										0.0001	0.0002	0.0571	0.0233	0.1119

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

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

										ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR	ERICA-HR
Pest Code										04-24-10	05-01-10	05-17-10	05-24-10	05-31-10	06-16-10
Crop Code										Control	Control	Control	Control	Control	Control
Rating Date										Percent	Percent	Percent	Percent	Percent	Percent
Rating Data Type															
Rating Unit															
Rating Timing															
Trt-Eval Interval										7 DA-A	14 DA-A	0 DA-B	7 DA-B	14 DA-B	30 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	96 a	93 ab	95 ab	98 a	99 a	99 a
1	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	POST	B						
1	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B						
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	POST	B						
1	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	99 a	99 a	98 a	98 a	98 a
2	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
2	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
2	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
2	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	95 a	99 a	99 a	99 a	99 a	97 ab
3	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
3	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
3	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	POST	B						
3	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	POST	B						
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	99 a
4	BICEP II MAGNUM	5.5	SC	2.2	lb ai/a	1.6	qt/a	7DBP	A						
4	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
4	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B						
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
4	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	99 a	99 a	99 a	99 a	99 a	97 ab
5	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A						
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B						
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	POST	B						
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B						
5	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	97 a	99 a	99 a	99 a	99 a	98 a
6	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	7DBP	A						
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DBP	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	27 b	85 b	90 b	92 b	94 b	95 b
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	7DBP	A						
7	AMS	100	SG	2	% w/w	2	% w/w	7DBP	A						
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B						
7	AMS	100	SG	2	% w/w	2	% w/w	POST	B						
LSD (P=.05)										6.2	9.1	5.9	3.6	3.0	2.6
Replicate F										0.743	1.999	1.707	0.765	0.346	0.712
Replicate Prob(F)										0.5528	0.1524	0.2014	0.5284	0.7921	0.5573
Treatment F										190.675	3.279	3.358	4.238	3.214	2.809
Treatment Prob(F)										0.0001	0.0249	0.0212	0.0078	0.0252	0.0415

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

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

Pest Code	AMASS	AMASS	AMASS	AMASS
Crop Code				
Rating Date	05-17-10	05-24-10	05-31-10	06-16-10
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	0 DA-B	7 DA-B	14 DA-B	30 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	56	bc	97	a
1	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			98	a
1	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	POST	B				
1	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B				
1	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	POST	B				
1	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	45	c	97	a
2	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			98	a
2	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
2	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
2	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B				
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
2	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	64	b	89	ab
3	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			94	a
3	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
3	PROWL H2O	3.8	CS	0.95	lb ai/a	2	pt/a	POST	B				
3	ACCENT	75	WG	0.031	lb ai/a	0.66	oz/a	POST	B				
3	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	94	a	99	a
4	BICEP II MAGNUM	5.5	SC	2.2	lb ai/a	1.6	qt/a	7DBP	A				
4	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
4	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
4	AATREX	4	SC	1	lb ai/a	32	fl oz/a	POST	B				
4	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
4	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	56	bc	95	ab
5	AUTHORITY MTZ	45	WG	0.155	lb ai/a	5.5	oz/a	7DBP	A			96	a
5	CADET	0.91	EC	0.00356	lb ai/a	0.5	oz/a	POST	B				
5	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	POST	B				
5	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	POST	B				
5	AMS	100	SG	2	% w/w	2	% w/w	POST	B				
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	7DBP	A	95	a	86	b
6	LEXAR	3.7	SC	2.78	lb ai/a	3	qt/a	7DBP	A			80	b
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	7DBP	A				
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	7DBP	A	97	a	98	a
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	2	qt/a	7DBP	A				
7	AMS	100	SG	2	% w/w	2	% w/w	7DBP	A				
7	ROUNDUP WEATHERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	POST	B				
7	AMS	100	SG	2	% w/w	2	% w/w	POST	B				

LSD (P=.05)	17.7	9.5	12.7	16.4
Replicate F	0.005	0.098	0.665	0.938
Replicate Prob(F)	0.9995	0.9599	0.5841	0.4429
Treatment F	13.933	2.332	2.402	3.101
Treatment Prob(F)	0.0001	0.0765	0.0698	0.0289

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

Trial Comments

1. Protocol: FMC (FLUT COR 10 JPR01c).
2. Ratings: WC 7 + 14 DA-A.
CI 14 DAP. CI + WC 0, 7, 14 + 30 DA-B.
3. Planting instructions: Plant corn at least 2 inch deep.
4. AMASS = Amaranth species including AMATA (common waterhemp) and AMARE (redroot pigweed).
ERICA-HR = Herbicide-resistant marestail (glyphosate).

Cadet Tank-Mixtures in Corn.

Trial ID: 10-YRC-FMCcorn

Location: Young Res. Center

5. By 5-17-10 LAMAM, CAPBP, and THLAR were senescing naturally in the nontreated plots and could no longer be evaluated.
Evaluation of ERICA size at application B was confounded by a heavy AMASS population.
6. Injury at 7 DA-B and 14 DA-B was growth reduction, chlorosis and necrosis, at 30 DA-B injury was growth reduction.
7. Harvested 9-8-10, (2) 30 inch rows by 21.5 ft.