

MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711 Study Dir.: Andy Chomas
Conducted: Campus, C-26 Investigator: Christy Sprague

Date Planted: 5/24/2011 Row Spacing: 30 IN
Variety: Pioneer 37Y14 No. of Reps: 4
Population: 30000 S/A % OM: 1.9
Soil Type: LOAM pH: 6.6
Plot Size: 10 X 35 FT Design: RANDOMIZED COMPLETE BLOCK

Tillage: No- Till
Fertilizer: 125 LBS OF 19-19-19 IN ROW AT PLANTING. 300 LBS 44-0-0 ESN BROADCAST.

Crop and Weed Description

Table with 4 columns: Weed, Code, Common Name, Scientific Name. Lists weeds 1-6 and crop code 1.

Application Description

Table with 3 columns: A, B, C. Lists application timing, date treated, time treated, cloud cover, air temp, humidity, wind speed, soil temp, and soil/leaf surface moisture.

Crop Stage at Each Application

Table with 3 columns: A, B, C. Lists crop name (ZEAMX), height (in.), and stage (L) for each application.

Weed Stage at Each Application

Table with 3 columns: A, B, C. Lists weed names (CHEAL, AMBEL, STEME, ERICA, ABUTH, AMARE) and their height and stage at each application.

Weed Density (plants/sq. ft.)

Table with 2 columns: Date, Weed Name, Density. Lists density for STEME, CHEAL, and AMBEL.

Application Equipment

Table with 11 columns: Appl, Sprayer Type, Speed MPH, Nozzle Type, Nozzle Size, Nozzle Height, Nozzle Spacing, Boom Width, GPA, Carrier, PSI. Lists equipment for applications A, B, and C.

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Weed Code								CHEAL	AMBEL	STEME	ERICA	ANGR	CHEAL
Crop Code													
Rating Data Type								control	control	control	control	control	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								5/24/2011	5/24/2011	5/24/2011	5/24/2011	5/31/2011	5/31/2011
Trt-Eval Interval								AT PLANT	AT PLANT	AT PLANT	AT PLANT	7 DAPRE	7 DAPRE
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	UNTREATED						C	0	0	0	0	0	0
2	Authority MTZ	45	WG	14	oz/a	FALL	A	93	25	100	100	96	98
2	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
2	Herbimax	100	L	1	% v/v	FALL	A						
2	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
2	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
2	F9310-6	2	L	9	fl oz/a	PRE	B						
2	Atrazine	4	L	1.5	qt/a	PRE	B						
2	Ammonium Sulfate	100	DF	2.5	lb/a	PRE	B						
3	Authority MTZ	45	WG	8	oz/a	FALL	A	88	28	100	100	85	100
3	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
3	Herbimax	100	L	1	% v/v	FALL	A						
3	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
3	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
3	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
3	Atrazine	4	L	1	pt/a	PRE	B						
3	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
3	Atrazine	4	L	2	pt/a	POST	C						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
3	Herbimax	100	L	1	% v/v	POST	C						
4	Authority MTZ	45	WG	8	oz/a	FALL	A	80	48	100	100	88	100
4	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
4	Basis	75	WG	0.5	oz/a	FALL	A						
4	Herbimax	100	L	1	% v/v	FALL	A						
4	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
4	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
4	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
4	Atrazine	4	L	1	pt/a	PRE	B						
4	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
4	Atrazine	4	L	2	pt/a	POST	C						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
4	Herbimax	100	L	1	% v/v	POST	C						
5	Authority MTZ	45	WG	8	oz/a	FALL	A	84	46	100	100	84	100
5	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
5	Resolve	25	DF	0.5	oz/a	FALL	A						
5	Herbimax	100	L	1	% v/v	FALL	A						
5	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
5	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
5	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
5	Atrazine	4	L	1	pt/a	PRE	B						
5	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
5	Atrazine	4	L	2	pt/a	POST	C						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
5	Herbimax	100	L	1	% v/v	POST	C						

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Weed Code								CHEAL	AMBEL	STEME	ERICA	ANGR	CHEAL
Crop Code													
Rating Data Type								control	control	control	control	control	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								5/24/2011	5/24/2011	5/24/2011	5/24/2011	5/31/2011	5/31/2011
Trt-Eval Interval								AT PLANT	AT PLANT	AT PLANT	AT PLANT	7 DAPRE	7 DAPRE
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
6	Authority MTZ	45	WG	8	oz/a	FALL	A	83	20	100	100	75	100
6	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
6	Express 50 SG	50	SG	0.1	oz/a	FALL	A						
6	Herbimax	100	L	1	% v/v	FALL	A						
6	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
6	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
6	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
6	Atrazine	4	L	1	pt/a	PRE	B						
6	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
6	Atrazine	4	L	2	pt/a	POST	C						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
6	Herbimax	100	L	1	% v/v	POST	C						
7	Autumn	10	WG	0.3	oz/a	FALL	A	35	35	100	89	81	100
7	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
7	Herbimax	100	L	1	% v/v	FALL	A						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
7	Rage D-Tech	4.06	EC	12	oz/a	PRE	B						
7	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
7	Atrazine	4	L	1	pt/a	PRE	B						
7	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
7	Atrazine	4	L	2	pt/a	POST	C						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
7	Herbimax	100	L	1	% v/v	POST	C						
8	Princep	4	L	2	lb ai/a	FALL	A	95	80	100	99	96	100
8	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
8	Authority MTZ	45	WG	5.5	oz/a	PRE	B						
8	Dual Magnum	7.62	L	16	fl oz/a	PRE	B						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
8	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
8	Atrazine	4	L	2	pt/a	POST	C						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
8	Herbimax	100	L	1	% v/v	POST	C						
LSD (P=.05)								27.5	14.8	0.0	10.2	14.6	2.6
Standard Deviation								18.6	10.0	0.0	6.9	9.9	1.8
CV								26.66	28.54	0.0	8.07	13.08	2.03

Means followed by same letter do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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								AMBEL	STEME	AMARE		ANGR	CHEAL
											ZEAMX		
								control	control	control	injury	control	control
								percent	percent	percent	percent	percent	percent
								5/31/2011	5/31/2011	5/31/2011	6/8/2011	6/8/2011	6/8/2011
								7 DAPRE	7 DAPRE	7 DAPRE	15 DAPRE	15 DAPRE	15 DAPRE
								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	UNTREATED						C	0	0	0	0	0	0
2	Authority MTZ	45	WG	14	oz/a	FALL	A	93	100	100	0	100	100
2	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
2	Herbimax	100	L	1	% v/v	FALL	A						
2	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
2	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
2	F9310-6	2	L	9	fl oz/a	PRE	B						
2	Atrazine	4	L	1.5	qt/a	PRE	B						
2	Ammonium Sulfate	100	DF	2.5	lb/a	PRE	B						
3	Authority MTZ	45	WG	8	oz/a	FALL	A	84	100	100	0	100	99
3	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
3	Herbimax	100	L	1	% v/v	FALL	A						
3	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
3	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
3	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
3	Atrazine	4	L	1	pt/a	PRE	B						
3	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
3	Atrazine	4	L	2	pt/a	POST	C						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
3	Herbimax	100	L	1	% v/v	POST	C						
4	Authority MTZ	45	WG	8	oz/a	FALL	A	83	100	100	0	100	100
4	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
4	Basis	75	WG	0.5	oz/a	FALL	A						
4	Herbimax	100	L	1	% v/v	FALL	A						
4	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
4	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
4	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
4	Atrazine	4	L	1	pt/a	PRE	B						
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4	Atrazine	4	L	2	pt/a	POST	C						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
4	Herbimax	100	L	1	% v/v	POST	C						
5	Authority MTZ	45	WG	8	oz/a	FALL	A	80	100	100	0	100	100
5	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
5	Resolve	25	DF	0.5	oz/a	FALL	A						
5	Herbimax	100	L	1	% v/v	FALL	A						
5	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
5	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
5	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
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5	Atrazine	4	L	2	pt/a	POST	C						
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								AMBEL	STEME	AMARE		ANGR	CHEAL
											ZEAMX		
Weed Code								control	control	control	injury	control	control
Crop Code								percent	percent	percent	percent	percent	percent
Rating Data Type								5/31/2011	5/31/2011	5/31/2011	6/8/2011	6/8/2011	6/8/2011
Rating Unit								7 DAPRE	7 DAPRE	7 DAPRE	15 DAPRE	15 DAPRE	15 DAPRE
Rating Date								0	0	0	0	0	0
Trt-Eval Interval													
# Subsamples, Dec.													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
6	Authority MTZ	45	WG	8	oz/a	FALL	A	81	100	100	0	100	100
6	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
6	Express 50 SG	50	SG	0.1	oz/a	FALL	A						
6	Herbimax	100	L	1	% v/v	FALL	A						
6	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
6	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
6	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
6	Atrazine	4	L	1	pt/a	PRE	B						
6	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
6	Atrazine	4	L	2	pt/a	POST	C						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
6	Herbimax	100	L	1	% v/v	POST	C						
7	Autumn	10	WG	0.3	oz/a	FALL	A	88	100	100	0	100	100
7	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
7	Herbimax	100	L	1	% v/v	FALL	A						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
7	Rage D-Tech	4.06	EC	12	oz/a	PRE	B						
7	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
7	Atrazine	4	L	1	pt/a	PRE	B						
7	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
7	Atrazine	4	L	2	pt/a	POST	C						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
7	Herbimax	100	L	1	% v/v	POST	C						
8	Princep	4	L	2	lb ai/a	FALL	A	74	100	100	0	100	99
8	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
8	Authority MTZ	45	WG	5.5	oz/a	PRE	B						
8	Dual Magnum	7.62	L	16	fl oz/a	PRE	B						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
8	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
8	Atrazine	4	L	2	pt/a	POST	C						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
8	Herbimax	100	L	1	% v/v	POST	C						
LSD (P=.05)								14.3	0.0	0.0	0.0	1.0	1.0
Standard Deviation								9.8	0.0	0.0	0.0	0.7	0.7
CV								13.42	0.0	0.0	0.0	0.79	0.8

Means followed by same letter do not significantly differ (P=.05, LSD)  
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Weed Code	AMARE	AMBEL				ANGR
Crop Code			ZEAMX	ZEAMX	ZEAMX	
Rating Data Type	control	control	stunting	chlorosis	necrosis	control
Rating Unit	percent	percent	percent	percent	percent	percent
Rating Date	6/8/2011	6/8/2011	6/14/2011	6/14/2011	6/14/2011	6/14/2011
Trt-Eval Interval	15 DAPRE	15 DAPRE	21 DAPRE	21 DAPRE	21 DAPRE	21 DAPRE
# Subsamples, Dec.	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	AMARE	AMBEL	ZEAMX	ZEAMX	ZEAMX	ANGR
1	UNTREATED						C	0	0	0	0	0	0
2	Authority MTZ	45	WG	14	oz/a	FALL	A	100	99	5	8	1	98
2	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
2	Herbimax	100	L	1	% v/v	FALL	A						
2	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
2	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
2	F9310-6	2	L	9	fl oz/a	PRE	B						
2	Atrazine	4	L	1.5	qt/a	PRE	B						
2	Ammonium Sulfate	100	DF	2.5	lb/a	PRE	B						
3	Authority MTZ	45	WG	8	oz/a	FALL	A	100	88	4	9	1	95
3	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
3	Herbimax	100	L	1	% v/v	FALL	A						
3	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
3	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
3	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
3	Atrazine	4	L	1	pt/a	PRE	B						
3	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
3	Atrazine	4	L	2	pt/a	POST	C						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
3	Herbimax	100	L	1	% v/v	POST	C						
4	Authority MTZ	45	WG	8	oz/a	FALL	A	100	97	1	6	1	95
4	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
4	Basis	75	WG	0.5	oz/a	FALL	A						
4	Herbimax	100	L	1	% v/v	FALL	A						
4	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
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4	Atrazine	4	L	2	pt/a	POST	C						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
4	Herbimax	100	L	1	% v/v	POST	C						
5	Authority MTZ	45	WG	8	oz/a	FALL	A	100	93	1	5	0	96
5	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
5	Resolve	25	DF	0.5	oz/a	FALL	A						
5	Herbimax	100	L	1	% v/v	FALL	A						
5	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
5	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
5	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
5	Atrazine	4	L	1	pt/a	PRE	B						
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5	Atrazine	4	L	2	pt/a	POST	C						
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Weed Code								AMARE	AMBEL				ANGR
Crop Code										ZEAMX	ZEAMX	ZEAMX	
Rating Data Type								control	control	stunting	chlorosis	necrosis	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								6/8/2011	6/8/2011	6/14/2011	6/14/2011	6/14/2011	6/14/2011
Trt-Eval Interval								15 DAPRE	15 DAPRE	21 DAPRE	21 DAPRE	21 DAPRE	21 DAPRE
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
6	Authority MTZ	45	WG	8	oz/a	FALL	A	100	96	5	6	4	92
6	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
6	Express 50 SG	50	SG	0.1	oz/a	FALL	A						
6	Herbimax	100	L	1	% v/v	FALL	A						
6	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
6	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
6	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
6	Atrazine	4	L	1	pt/a	PRE	B						
6	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
6	Atrazine	4	L	2	pt/a	POST	C						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
6	Herbimax	100	L	1	% v/v	POST	C						
7	Autumn	10	WG	0.3	oz/a	FALL	A	100	97	9	6	4	94
7	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
7	Herbimax	100	L	1	% v/v	FALL	A						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
7	Rage D-Tech	4.06	EC	12	oz/a	PRE	B						
7	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
7	Atrazine	4	L	1	pt/a	PRE	B						
7	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
7	Atrazine	4	L	2	pt/a	POST	C						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
7	Herbimax	100	L	1	% v/v	POST	C						
8	Princep	4	L	2	lb ai/a	FALL	A	100	78	6	6	4	98
8	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
8	Authority MTZ	45	WG	5.5	oz/a	PRE	B						
8	Dual Magnum	7.62	L	16	fl oz/a	PRE	B						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
8	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
8	Atrazine	4	L	2	pt/a	POST	C						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
8	Herbimax	100	L	1	% v/v	POST	C						
LSD (P=.05)								0.0	8.3	6.8	11.2	4.6	7.9
Standard Deviation								0.0	5.6	4.6	7.6	3.1	5.4
CV								0.0	6.97	118.2	131.98	167.14	6.47

Means followed by same letter do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711  
Conducted: Campus, C-26

Study Dir.: Andy Chomas  
Investigator: Christy Sprague

Weed Code								CHEAL	AMARE	AMBEL	ABUTH	ZEAMX	ANGR
Crop Code													
Rating Data Type								control	control	control	control	injury	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								6/14/2011	6/14/2011	6/14/2011	6/14/2011	6/22/2011	6/22/2011
Trt-Eval Interval								21 DAPRE	21 DAPRE	21 DAPRE	21 DAPRE	28 DAPRE	28 DAPRE
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	UNTREATED						C	0	0	0	0	0	0
2	Authority MTZ	45	WG	14	oz/a	FALL	A	100	98	93	100	0	99
2	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
2	Herbimax	100	L	1	% v/v	FALL	A						
2	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
2	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
2	F9310-6	2	L	9	fl oz/a	PRE	B						
2	Atrazine	4	L	1.5	qt/a	PRE	B						
2	Ammonium Sulfate	100	DF	2.5	lb/a	PRE	B						
3	Authority MTZ	45	WG	8	oz/a	FALL	A	99	100	80	100	0	95
3	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
3	Herbimax	100	L	1	% v/v	FALL	A						
3	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
3	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
3	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
3	Atrazine	4	L	1	pt/a	PRE	B						
3	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
3	Atrazine	4	L	2	pt/a	POST	C						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
3	Herbimax	100	L	1	% v/v	POST	C						
4	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	75	100	0	98
4	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
4	Basis	75	WG	0.5	oz/a	FALL	A						
4	Herbimax	100	L	1	% v/v	FALL	A						
4	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
4	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
4	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
4	Atrazine	4	L	1	pt/a	PRE	B						
4	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
4	Atrazine	4	L	2	pt/a	POST	C						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
4	Herbimax	100	L	1	% v/v	POST	C						
5	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	74	100	0	98
5	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
5	Resolve	25	DF	0.5	oz/a	FALL	A						
5	Herbimax	100	L	1	% v/v	FALL	A						
5	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
5	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
5	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
5	Atrazine	4	L	1	pt/a	PRE	B						
5	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
5	Atrazine	4	L	2	pt/a	POST	C						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
5	Herbimax	100	L	1	% v/v	POST	C						



MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711  
Conducted: Campus, C-26

Study Dir.: Andy Chomas  
Investigator: Christy Sprague

Weed Code								CHEAL	AMARE	AMBEL	ABUTH	ZEAMX	ANGR
Crop Code													
Rating Data Type								control	control	control	control	injury	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								6/14/2011	6/14/2011	6/14/2011	6/14/2011	6/22/2011	6/22/2011
Trt-Eval Interval								21 DAPRE	21 DAPRE	21 DAPRE	21 DAPRE	28 DAPRE	28 DAPRE
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
6	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	74	98	0	94
6	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
6	Express 50 SG	50	SG	0.1	oz/a	FALL	A						
6	Herbimax	100	L	1	% v/v	FALL	A						
6	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
6	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
6	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
6	Atrazine	4	L	1	pt/a	PRE	B						
6	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
6	Atrazine	4	L	2	pt/a	POST	C						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
6	Herbimax	100	L	1	% v/v	POST	C						
7	Autumn	10	WG	0.3	oz/a	FALL	A	100	100	78	100	0	97
7	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
7	Herbimax	100	L	1	% v/v	FALL	A						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
7	Rage D-Tech	4.06	EC	12	oz/a	PRE	B						
7	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
7	Atrazine	4	L	1	pt/a	PRE	B						
7	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
7	Atrazine	4	L	2	pt/a	POST	C						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
7	Herbimax	100	L	1	% v/v	POST	C						
8	Princep	4	L	2	lb ai/a	FALL	A	100	100	55	98	0	98
8	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
8	Authority MTZ	45	WG	5.5	oz/a	PRE	B						
8	Dual Magnum	7.62	L	16	fl oz/a	PRE	B						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
8	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
8	Atrazine	4	L	2	pt/a	POST	C						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
8	Herbimax	100	L	1	% v/v	POST	C						
LSD (P=.05)								1.3	2.6	9.3	3.4	0.0	3.1
Standard Deviation								0.9	1.8	6.4	2.3	0.0	2.1
CV								1.01	2.03	9.65	2.66	0.0	2.5

Means followed by same letter do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711  
Conducted: Campus, C-26

Study Dir.: Andy Chomas  
Investigator: Christy Sprague

Weed Code	CHEAL	AMARE	AMBEL	ABUTH	ZEAMX	ANGR
Crop Code						
Rating Data Type	control	control	control	control	injury	control
Rating Unit	percent	percent	percent	percent	percent	percent
Rating Date	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/29/2011	6/29/2011
Trt-Eval Interval	28 DAPRE	28 DAPRE	28 DAPRE	28 DAPRE	7 DAPO	7 DAPO
# Subsamples, Dec.	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	CHEAL	AMARE	AMBEL	ABUTH	ZEAMX	ANGR
1	UNTREATED						C	0	0	0	0	0	0
2	Authority MTZ	45	WG	14	oz/a	FALL	A	100	100	84	100	9	100
2	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
2	Herbimax	100	L	1	% v/v	FALL	A						
2	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
2	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
2	F9310-6	2	L	9	fl oz/a	PRE	B						
2	Atrazine	4	L	1.5	qt/a	PRE	B						
2	Ammonium Sulfate	100	DF	2.5	lb/a	PRE	B						
3	Authority MTZ	45	WG	8	oz/a	FALL	A	99	100	71	98	9	100
3	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
3	Herbimax	100	L	1	% v/v	FALL	A						
3	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
3	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
3	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
3	Atrazine	4	L	1	pt/a	PRE	B						
3	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
3	Atrazine	4	L	2	pt/a	POST	C						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
3	Herbimax	100	L	1	% v/v	POST	C						
4	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	76	98	9	100
4	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
4	Basis	75	WG	0.5	oz/a	FALL	A						
4	Herbimax	100	L	1	% v/v	FALL	A						
4	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
4	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
4	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
4	Atrazine	4	L	1	pt/a	PRE	B						
4	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
4	Atrazine	4	L	2	pt/a	POST	C						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
4	Herbimax	100	L	1	% v/v	POST	C						
5	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	76	99	9	99
5	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
5	Resolve	25	DF	0.5	oz/a	FALL	A						
5	Herbimax	100	L	1	% v/v	FALL	A						
5	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
5	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
5	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
5	Atrazine	4	L	1	pt/a	PRE	B						
5	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
5	Atrazine	4	L	2	pt/a	POST	C						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
5	Herbimax	100	L	1	% v/v	POST	C						

MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711  
Conducted: Campus, C-26

Study Dir.: Andy Chomas  
Investigator: Christy Sprague

								CHEAL	AMARE	AMBEL	ABUTH	ZEAMX	ANGR
								control	control	control	control	injury	control
								percent	percent	percent	percent	percent	percent
								6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/29/2011	6/29/2011
								28 DAPRE	28 DAPRE	28 DAPRE	28 DAPRE	7 DAPO	7 DAPO
								0	0	0	0	0	0
Trt	Treatment	Form	Form	Rate	Grow	Appl							
No.	Name	Conc	Type	Unit	Stg	Code							
6	Authority MTZ	45	WG	8	oz/a	FALL A	100	100	76	100	9	99	
6	Rage D-Tech	4.06	EC	12	fl oz/a	FALL A							
6	Express 50 SG	50	SG	0.1	oz/a	FALL A							
6	Herbimax	100	L	1	% v/v	FALL A							
6	Ammonium Sulfate	100	DF	2.5	lb/a	FALL A							
6	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE B							
6	Rage D-Tech	4.06	EC	12	fl oz/a	PRE B							
6	Dual II Magnum	7.64	L	1	pt/a	PRE B							
6	Atrazine	4	L	1	pt/a	PRE B							
6	Cadet	0.91	EC	0.5	fl oz/a	POST C							
6	Atrazine	4	L	2	pt/a	POST C							
6	Roundup PowerMAX	4.5	L	32	fl oz/a	POST C							
6	Herbimax	100	L	1	% v/v	POST C							
7	Autumn	10	WG	0.3	oz/a	FALL A	99	100	76	95	11	100	
7	Rage D-Tech	4.06	EC	12	fl oz/a	FALL A							
7	Herbimax	100	L	1	% v/v	FALL A							
7	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE B							
7	Rage D-Tech	4.06	EC	12	oz/a	PRE B							
7	Dual II Magnum	7.64	L	1	pt/a	PRE B							
7	Atrazine	4	L	1	pt/a	PRE B							
7	Cadet	0.91	EC	0.5	fl oz/a	POST C							
7	Atrazine	4	L	2	pt/a	POST C							
7	Roundup PowerMAX	4.5	L	32	fl oz/a	POST C							
7	Herbimax	100	L	1	% v/v	POST C							
8	Princep	4	L	2	lb ai/a	FALL A	100	100	65	97	7	100	
8	Rage D-Tech	4.06	EC	12	fl oz/a	FALL A							
8	Authority MTZ	45	WG	5.5	oz/a	PRE B							
8	Dual Magnum	7.62	L	16	fl oz/a	PRE B							
8	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE B							
8	Cadet	0.91	EC	0.5	fl oz/a	POST C							
8	Atrazine	4	L	2	pt/a	POST C							
8	Roundup PowerMAX	4.5	L	32	fl oz/a	POST C							
8	Herbimax	100	L	1	% v/v	POST C							
LSD (P=.05)								1.9	0.0	7.7	7.3	4.7	1.4
Standard Deviation								1.3	0.0	5.2	4.9	3.2	1.0
CV								1.51	0.0	7.93	5.76	40.51	1.12

Means followed by same letter do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711  
Conducted: Campus, C-26

Study Dir.: Andy Chomas  
Investigator: Christy Sprague

								CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL
								control	control	control	control	control	control
								percent	percent	percent	percent	percent	percent
								6/29/2011	6/29/2011	6/29/2011	6/29/2011	7/12/2011	7/12/2011
								7 DAPO	7 DAPO	7 DAPO	7 DAPO	20 DAPO	20 DAPO
								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	UNTREATED						C	0	0	0	0	0	0
2	Authority MTZ	45	WG	14	oz/a	FALL	A	100	100	100	100	100	99
2	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
2	Herbimax	100	L	1	% v/v	FALL	A						
2	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
2	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
2	F9310-6	2	L	9	fl oz/a	PRE	B						
2	Atrazine	4	L	1.5	qt/a	PRE	B						
2	Ammonium Sulfate	100	DF	2.5	lb/a	PRE	B						
3	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	99	100	99	100
3	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
3	Herbimax	100	L	1	% v/v	FALL	A						
3	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
3	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
3	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
3	Atrazine	4	L	1	pt/a	PRE	B						
3	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
3	Atrazine	4	L	2	pt/a	POST	C						
3	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
3	Herbimax	100	L	1	% v/v	POST	C						
4	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	98	100	99	100
4	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
4	Basis	75	WG	0.5	oz/a	FALL	A						
4	Herbimax	100	L	1	% v/v	FALL	A						
4	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
4	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
4	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
4	Atrazine	4	L	1	pt/a	PRE	B						
4	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
4	Atrazine	4	L	2	pt/a	POST	C						
4	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
4	Herbimax	100	L	1	% v/v	POST	C						
5	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	98	100	100	100
5	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
5	Resolve	25	DF	0.5	oz/a	FALL	A						
5	Herbimax	100	L	1	% v/v	FALL	A						
5	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
5	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
5	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
5	Atrazine	4	L	1	pt/a	PRE	B						
5	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
5	Atrazine	4	L	2	pt/a	POST	C						
5	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
5	Herbimax	100	L	1	% v/v	POST	C						

MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711  
Conducted: Campus, C-26

Study Dir.: Andy Chomas  
Investigator: Christy Sprague

								CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL
								control	control	control	control	control	control
								percent	percent	percent	percent	percent	percent
								6/29/2011	6/29/2011	6/29/2011	6/29/2011	7/12/2011	7/12/2011
								7 DAPO	7 DAPO	7 DAPO	7 DAPO	20 DAPO	20 DAPO
								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
6	Authority MTZ	45	WG	8	oz/a	FALL	A	100	100	98	100	98	100
6	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
6	Express 50 SG	50	SG	0.1	oz/a	FALL	A						
6	Herbimax	100	L	1	% v/v	FALL	A						
6	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
6	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B						
6	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
6	Atrazine	4	L	1	pt/a	PRE	B						
6	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
6	Atrazine	4	L	2	pt/a	POST	C						
6	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
6	Herbimax	100	L	1	% v/v	POST	C						
7	Autumn	10	WG	0.3	oz/a	FALL	A	100	100	97	100	99	100
7	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
7	Herbimax	100	L	1	% v/v	FALL	A						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
7	Rage D-Tech	4.06	EC	12	oz/a	PRE	B						
7	Dual II Magnum	7.64	L	1	pt/a	PRE	B						
7	Atrazine	4	L	1	pt/a	PRE	B						
7	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
7	Atrazine	4	L	2	pt/a	POST	C						
7	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
7	Herbimax	100	L	1	% v/v	POST	C						
8	Princep	4	L	2	lb ai/a	FALL	A	100	100	98	100	100	100
8	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A						
8	Authority MTZ	45	WG	5.5	oz/a	PRE	B						
8	Dual Magnum	7.62	L	16	fl oz/a	PRE	B						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B						
8	Cadet	0.91	EC	0.5	fl oz/a	POST	C						
8	Atrazine	4	L	2	pt/a	POST	C						
8	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C						
8	Herbimax	100	L	1	% v/v	POST	C						
LSD (P=.05)								0.0	0.0	2.8	0.0	2.3	1.5
Standard Deviation								0.0	0.0	1.9	0.0	1.5	1.0
CV								0.0	0.0	2.25	0.0	1.77	1.14

Means followed by same letter do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

## MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711

Study Dir.: Andy Chomas

Conducted: Campus, C-26

Investigator: Christy Sprague

Weed Code	AMBEL	ABUTH	
Crop Code			ZEAMX
Rating Data Type	control	control	yield
Rating Unit	percent	percent	bu/ac
Rating Date	7/12/2011	7/12/2011	10/17/2011
Trt-Eval Interval	20 DAPO	20 DAPO	HARVEST
# Subsamples, Dec.	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	AMBEL	ABUTH	ZEAMX
1	UNTREATED						C	0	0	1
2	Authority MTZ	45	WG	14	oz/a	FALL	A	94	100	195
2	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A			
2	Herbimax	100	L	1	% v/v	FALL	A			
2	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A			
2	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B			
2	F9310-6	2	L	9	fl oz/a	PRE	B			
2	Atrazine	4	L	1.5	qt/a	PRE	B			
2	Ammonium Sulfate	100	DF	2.5	lb/a	PRE	B			
3	Authority MTZ	45	WG	8	oz/a	FALL	A	90	100	204
3	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A			
3	Herbimax	100	L	1	% v/v	FALL	A			
3	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A			
3	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B			
3	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B			
3	Dual II Magnum	7.64	L	1	pt/a	PRE	B			
3	Atrazine	4	L	1	pt/a	PRE	B			
3	Cadet	0.91	EC	0.5	fl oz/a	POST	C			
3	Atrazine	4	L	2	pt/a	POST	C			
3	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C			
3	Herbimax	100	L	1	% v/v	POST	C			
4	Authority MTZ	45	WG	8	oz/a	FALL	A	94	100	207
4	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A			
4	Basis	75	WG	0.5	oz/a	FALL	A			
4	Herbimax	100	L	1	% v/v	FALL	A			
4	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A			
4	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B			
4	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B			
4	Dual II Magnum	7.64	L	1	pt/a	PRE	B			
4	Atrazine	4	L	1	pt/a	PRE	B			
4	Cadet	0.91	EC	0.5	fl oz/a	POST	C			
4	Atrazine	4	L	2	pt/a	POST	C			
4	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C			
4	Herbimax	100	L	1	% v/v	POST	C			
5	Authority MTZ	45	WG	8	oz/a	FALL	A	92	100	206
5	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A			
5	Resolve	25	DF	0.5	oz/a	FALL	A			
5	Herbimax	100	L	1	% v/v	FALL	A			
5	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A			
5	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B			
5	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B			
5	Dual II Magnum	7.64	L	1	pt/a	PRE	B			
5	Atrazine	4	L	1	pt/a	PRE	B			
5	Cadet	0.91	EC	0.5	fl oz/a	POST	C			
5	Atrazine	4	L	2	pt/a	POST	C			
5	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C			
5	Herbimax	100	L	1	% v/v	POST	C			

## MSU Weed Science Research Program

WEED CONTROL IN NO-TILL CORN WITH AUTHORITY AND SULFENTROZONE, 2010-2011

Trial ID: C1711

Study Dir.: Andy Chomas

Conducted: Campus, C-26

Investigator: Christy Sprague

Weed Code	AMBEL	ABUTH	
Crop Code			ZEAMX
Rating Data Type	control	control	yield
Rating Unit	percent	percent	bu/ac
Rating Date	7/12/2011	7/12/2011	10/17/2011
Trt-Eval Interval	20 DAPO	20 DAPO	HARVEST
# Subsamples, Dec.	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	AMBEL	ABUTH	ZEAMX
6	Authority MTZ	45	WG	8	oz/a	FALL	A	94	100	184
6	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A			
6	Express 50 SG	50	SG	0.1	oz/a	FALL	A			
6	Herbimax	100	L	1	% v/v	FALL	A			
6	Ammonium Sulfate	100	DF	2.5	lb/a	FALL	A			
6	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B			
6	Rage D-Tech	4.06	EC	12	fl oz/a	PRE	B			
6	Dual II Magnum	7.64	L	1	pt/a	PRE	B			
6	Atrazine	4	L	1	pt/a	PRE	B			
6	Cadet	0.91	EC	0.5	fl oz/a	POST	C			
6	Atrazine	4	L	2	pt/a	POST	C			
6	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C			
6	Herbimax	100	L	1	% v/v	POST	C			
7	Autumn	10	WG	0.3	oz/a	FALL	A	96	100	178
7	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A			
7	Herbimax	100	L	1	% v/v	FALL	A			
7	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B			
7	Rage D-Tech	4.06	EC	12	oz/a	PRE	B			
7	Dual II Magnum	7.64	L	1	pt/a	PRE	B			
7	Atrazine	4	L	1	pt/a	PRE	B			
7	Cadet	0.91	EC	0.5	fl oz/a	POST	C			
7	Atrazine	4	L	2	pt/a	POST	C			
7	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C			
7	Herbimax	100	L	1	% v/v	POST	C			
8	Princep	4	L	2	lb ai/a	FALL	A	98	100	189
8	Rage D-Tech	4.06	EC	12	fl oz/a	FALL	A			
8	Authority MTZ	45	WG	5.5	oz/a	PRE	B			
8	Dual Magnum	7.62	L	16	fl oz/a	PRE	B			
8	Roundup PowerMAX	4.5	L	32	fl oz/a	PRE	B			
8	Cadet	0.91	EC	0.5	fl oz/a	POST	C			
8	Atrazine	4	L	2	pt/a	POST	C			
8	Roundup PowerMAX	4.5	L	32	fl oz/a	POST	C			
8	Herbimax	100	L	1	% v/v	POST	C			
LSD (P=.05)								5.8	0.0	34.2
Standard Deviation								3.9	0.0	23.2
CV								4.78	0.0	13.64

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.