

WEED CONTROL PROGRAMS COMPARISONS IN CORN, 2010

Trial ID: C0610 Protocol ID: C0610
 Location: Campus Study Director: Andy Chomas
 Project ID: Investigator: Wesley Everman

General Trial Information

Study Director: Andy Chomas
Investigator: Wesley Everman

Personnel

Study Director: Andy Chomas
Investigator: Wesley Everman

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: P37Y14
BBCH Scale: BCOR **Planting Date:** May-4-10
Row Spacing, Unit: 30 IN
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 35 FT

Pest Description

- Pest 1 Type:** W **Code:** ANGR
Common Name: annual grass
- Pest 2 Type:** W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters
- Pest 3 Type:** W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed
- Pest 4 Type:** W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed
- Pest 5 Type:** W **Code:** ABUTH Abutilon theophrasti
Common Name: Velvetleaf

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 35 FT
Plot Area, Unit: 350 FT2 **Tillage Type:** CONTIL conventional-till
Replications: 6 **Study Design:** RACOB� Randomized Complete Block (RCB)

Trial Initiation Comments:
 Fall Chisel, Spring Field Cultivate X2

Soil Description

% OM: 3.7 **Texture:** L loam
pH: 6.7
Analyzed By:
 300 lb/A 46-0-0, 125 lb/A 19-19-19 in Row

Application Description

	A	B	C	D
Application Date:	May-4-10	May-28-10	Jun-4-10	Jun-10-10
Time of Day:	6:40 pm	10:00 am	4:30 pm	8:00 pm
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EP	MP	LP
Application Placement:	BROADC	BROADC	BROADC	BROADC
Air Temperature, Unit:	78 F	78 F	82 F	81 F
% Relative Humidity:	31	55	59	82
Wind Velocity, Unit:	2.5 MPH	2 MPH	5 MPH	2 MPH
Wind Direction:	SW	N	SW	E
Soil Temperature, Unit:	61 F	70 F	72 F	68 F
Soil Moisture:	4	5	2	2
% Cloud Cover:	5	0	95	78

Crop Stage At Each Application

	A		B		C		D	
Crop 1 Code, BBCH Scale:	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR
Stage Scale Used:			BBCH		BBCH		BBCH	
Stage Majority, Percent:			V2		V4		V5	
Stage Minimum, Percent:			V2				V4	
Stage Maximum, Percent:			V3				V5	
Height, Unit:			5 IN		10 IN		16 IN	
Height Minimum, Maximum:			4 7		8 12		14 18	

WEED CONTROL PROGRAMS COMPARISONS IN CORN, 2010

Trial ID: C0610 Protocol ID: C0610
 Location: Campus Study Director: Andy Chomas
 Project ID: Investigator: Wesley Everman

Pest Stage At Each Application

	A		B		C		D	
Pest 1 Code, Type, Scale:	ANGR	W	ANGR	W	ANGR	W	ANGR	W
Stage Majority, Percent:			L2		L4		L3	
Stage Minimum, Percent:			L1		L4		L3	
Stage Maximum, Percent:			L3		L6		L4	
Height, Unit:			1	IN	5	IN	2	IN
Height Minimum, Maximum:			0.5	3	0.5	8	1	4
Density, Unit:			6	FT2	5	FT2		
Pest 2 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			L4		L6		L6	
Stage Minimum, Percent:			COT		L4		L4	
Stage Maximum, Percent:			L6		L8		L8	
Height, Unit:			1	IN	3	IN	3	IN
Height Minimum, Maximum:			0.25	2	0.5	5	1	4
Density, Unit:			73	FT2	60	FT2		
Pest 3 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W	AMARE	W
Stage Majority, Percent:			L2		L6		L6	
Stage Minimum, Percent:			COT		L5		L6	
Stage Maximum, Percent:			L4		L9		L10	
Height, Unit:			0.5	IN	5	IN	3	IN
Height Minimum, Maximum:			0.25	1	1	7	3	6
Density, Unit:			2	FT2	1	FT2		
Pest 4 Code, Type, Scale:	AMBEL	W	AMBEL	W	AMBEL	W	AMBEL	W
Stage Majority, Percent:			L4		L4		L4	
Stage Minimum, Percent:			COT		L4		L4	
Stage Maximum, Percent:			L4		L6		L6	
Height, Unit:			1	IN	4	IN	2	IN
Height Minimum, Maximum:			0.5	2	1	6	1	5
Density, Unit:			15	FT2	17	FT2		
Pest 5 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			COT		L3		L4	
Stage Minimum, Percent:			COT		L3		L4	
Stage Maximum, Percent:			L2		L4		L6	
Height, Unit:			0.5	IN	3	IN	4	IN
Height Minimum, Maximum:			0.5	1	3	5	2	4
Density, Unit:			1	FT2	1	FT2		

Application Equipment

	B		C		D	
Equipment Type:	CUB	CUB	CUB	CUB	CUB	CUB
Operating Pressure, Unit:	30	PSI	30	PSI	30	PSI
Nozzle Type:	FF	FF	FF	FF	FF	FF
Nozzle Size:	8003	8003	8003	8003	8003	8003
Nozzle Spacing, Unit:	20	IN	20	IN	20	IN
Boom Length, Unit:	100	IN	100	IN	100	IN
Boom Height, Unit:	18	IN	21	IN	32	IN
Ground Speed, Unit:	3.5	MPH	3.5	MPH	3.5	MPH
Carrier:	WATER	WATER	WATER	WATER	WATER	WATER
Spray Volume, Unit:	20	gal/ac	20	gal/ac	20	gal/ac
Mix Size, Unit:	1.5	gallons	1.5	gallons	1.5	gallons

MSU Weed Science Research Program

WEED CONTROL PROGRAMS COMPARISONS IN CORN, 2010

Trial ID: C0610 Protocol ID: C0610
 Location: Campus Study Director: Andy Chomas
 Project ID: Investigator: Wesley Everman

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE
Crop Code								
Rating Date	Jun-18-10	Jun-18-10	Jun-18-10	Jun-18-10	Jun-18-10	Jul-14-10	Jul-14-10	Jul-14-10
Rating Type	control	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%
Trt-Eval Interval	14 DAMP	14 DAMP	14 DAMP	14 DAMP	14 DAMP	40 DAMP	40 DAMP	40 DAMP

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	9	10	11	12	13	14	15	16
26	Capreno	3.45	SC	3	fl oz/a	MP	99	100	100	100	100	91	100	100
26	Atrazine	4	L	1	qt/a	MP								
26	Herbimax	100	L	1	% v/v	MP								
26	28% UAN	100	L	1.5	qt/a	MP								
27	Weed Free						98	82	93	92	97	100	100	100
	LSD (P=.05)						2.7	4.4	3.0	2.9	3.5	6.1	5.7	4.0
	Standard Deviation						2.4	3.8	2.6	2.5	3.0	5.4	5.0	3.5
	CV						2.52	4.11	2.73	2.73	3.25	5.89	5.5	3.69

MSU Weed Science Research Program

WEED CONTROL PROGRAMS COMPARISONS IN CORN, 2010

Trial ID: C0610 Protocol ID: C0610
 Location: Campus Study Director: Andy Chomas
 Project ID: Investigator: Wesley Everman

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	ZEAMX
Pest Code	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL	ABUTH	
Crop Code								
Rating Date	Jul-14-10	Jul-14-10	Aug-17-10	Aug-17-10	Aug-17-10	Aug-17-10	Aug-17-10	Oct-6-10
Rating Type	control	control	control	control	control	control	control	yield
Rating Unit	%	%	%	%	%	%	%	bu/ac
Trt-Eval Interval	40 DAMP	40 DAMP	74 DAMP	74 DAMP	74 DAMP	74 DAMP	74 DAMP	HARVEST

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	17	18	19	20	21	22	23	24
26	Capreno	3.45	SC	3	fl oz/a	MP	100	100	88	100	100	100	100	206
26	Atrazine	4	L	1	qt/a	MP								
26	Herbimax	100	L	1	% v/v	MP								
26	28% UAN	100	L	1.5	qt/a	MP								
27	Weed Free						100	100	100	100	100	99	100	223
	LSD (P=.05)						6.4	4.5	7.1	6.2	3.9	6.0	3.8	15.9
	Standard Deviation						5.6	4.0	6.2	5.4	3.4	5.2	3.3	13.9
	CV						6.45	4.25	6.91	6.2	3.59	6.28	3.52	6.91

MSU Weed Science Research Program

WEED CONTROL PROGRAMS COMPARISONS IN CORN, 2010

Trial ID: C0610 Protocol ID: C0610
 Location: Campus Study Director: Andy Chomas
 Project ID: Investigator: Wesley Everman

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	28	29
1	Harness Xtra 5.6	5.6 L		1 qt/a		PRE		
1	Yukon	67.5 WG		4 oz/a		MP		
1	Roundup PowerMAX	4.5 L		22 fl oz/a		MP		
1	Activator 90	100 L		0.125 % v/v		MP		
1	Ammonium Sulfate	100 DF		8.5 lb/100 gal		MP		
2	Bicep II Magnum	5.5 L		1.6 pt/a		PRE		
2	Impact	2.8 SC		0.75 fl oz/a		MP		
2	Atrazine	4 L		0.5 qt/a		MP		
3	Harness Xtra 5.6	5.6 L		1.5 qt/a		PRE		
3	Roundup PowerMAX	4.5 L		22 fl oz/a		MP		
3	Ammonium Sulfate	100 DF		17 lb/100 gal		MP		
4	Integrity	5.6 L		16 fl oz/a		PRE		
4	Roundup PowerMAX	4.5 L		22 fl oz/a		MP		
4	Ammonium Sulfate	100 DF		17 lb/100 gal		MP		
5	Guardsman Max	5 L		2.5 pt/a		PRE		
5	Roundup PowerMAX	4.5 L		22 fl oz/a		MP		
5	Status	56 DF		2.5 oz/a		MP		
5	Ammonium Sulfate	100 DF		17 lb/100 gal		MP		
6	Resolve Q	22.4 DG		1 oz/a		EP		
6	Atrazine	4 L		0.75 qt/a		EP		
6	Roundup PowerMAX	4.5 L		22 fl oz/a		EP		
6	Ammonium Sulfate	100 DF		17 lb/100 gal		EP		
7	SureStart	4.18 SE		1.75 pt/a		PRE		
7	Durango DMA	4 L		24 fl oz/a		LP		
7	Ammonium Sulfate	100 DF		2 % w/w		LP		
8	Bicep II Magnum	5.5 L		1.6 pt/a		PRE		
8	Impact	2.8 SC		0.5 fl oz/a		LP		
8	Roundup PowerMAX	4.5 L		22 fl oz/a		LP		
8	Ammonium Sulfate	100 DF		8.5 lb/100 gal		LP		
9	Degree Xtra	4 L		2 qt/a		PRE		
9	Roundup PowerMAX	4.5 L		22 fl oz/a		MP		
9	Ammonium Sulfate	100 DF		17 lb/100 gal		MP		
10	Lumax	3.94 SE		3 qt/a		PRE		
10	Atrazine	4 L		1 qt/a		PRE		
11	Callisto Xtra	3.7 SC		24 fl oz/a		MP		
11	Touchdown Total	4.17 L		24 fl oz/a		MP		
11	Ammonium Sulfate	100 DF		8.5 lb/100 gal		MP		
11	Activator 90	100 L		0.25 % v/v		MP		
12	Breakfree ATZ Lite	5.5 L		2.2 qt/a		PRE		
12	Resolve	25 DF		1 oz/a		PRE		
13	Ignite	1.67 EC		22 fl oz/a		MP		
13	Ammonium Sulfate	100 DF		8.5 lb/100 gal		MP		
13	Ignite	1.67 EC		22 fl oz/a		LP		
13	Ammonium Sulfate	100 DF		8.5 lb/100 gal		LP		

MSU Weed Science Research Program

WEED CONTROL PROGRAMS COMPARISONS IN CORN, 2010

Trial ID: C0610 Protocol ID: C0610
 Location: Campus Study Director: Andy Chomas
 Project ID: Investigator: Wesley Everman

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	28	29
14	Halex GT	4.39	L	3.6	pt/a	MP		
14	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP		
14	Activator 90	100	L	0.25	% v/v	MP		
15	Guardsman Max	5	L	4	pt/a	PRE		
15	Status	56	DF	5	oz/a	MP		
15	Activator 90	100	L	0.25	% v/v	MP		
15	Ammonium Sulfate	100	DF	17	lb/100 gal	MP		
16	Non-Treated							
17	Laudis	3.5	SC	3	fl oz/a	MP		
17	Atrazine	4	L	2	qt/a	MP		
17	MSO	100	L	1	% v/v	MP		
17	28% UAN	100	L	1.5	qt/a	MP		
18	Roundup PowerMAX	4.5	L	22	fl oz/a	MP		
18	Status	56	DF	2.5	oz/a	MP		
18	Prowl H2O	3.8	L	2	pt/a	MP		
18	Ammonium Sulfate	100	DF	17	lb/100 gal	MP		
19	SureStart	4.18	SE	1.75	pt/a	PRE		
19	Durango DMA	4	L	24	fl oz/a	EP		
19	Ammonium Sulfate	100	DF	2	% w/w	EP		
20	Harness Xtra 5.6	5.6	L	1.5	qt/a	EP		
20	Roundup PowerMAX	4.5	L	22	fl oz/a	EP		
20	Ammonium Sulfate	100	DF	17	lb/100 gal	EP		
21	Bicep II Magnum	5.5	L	1.1	qt/a	PRE		
21	Halex GT	4.39	L	3.6	pt/a	MP		
21	Ammonium Sulfate	100	DF	8.5	lb/100 gal	MP		
21	Activator 90	100	L	0.25	% v/v	MP		
22	Steadfast Q 1.5 oz							
22	Steadfast	75	WG	0.5625	oz ai/a	MP		
22	Isoxadifen-Ethyl	50	DF	0.125	oz ai/a	MP		
22	Atrazine	4	L	1	qt/a	MP		
22	Status	56	DF	2.5	oz/a	MP		
22	Herbimax	100	L	1	% v/v	MP		
22	Ammonium Sulfate	100	DF	2	lb/a	MP		
23	Roundup PowerMAX	4.5	L	22	fl oz/a	EP		
23	Ammonium Sulfate	100	DF	17	lb/100 gal	EP		
23	Roundup PowerMAX	4.5	L	22	fl oz/a	MP		
23	Ammonium Sulfate	100	DF	17	lb/100 gal	MP		
24	Ignite	1.67	EC	22	fl oz/a	MP		
24	Atrazine	4	F	1.5	qt/a	MP		
24	Ammonium Sulfate	100	DF	3	lb/a	MP		
25	Resolve	25	DF	1	oz/a	PRE		
25	Atrazine	4	L	0.75	qt/a	PRE		
25	Roundup PowerMAX	4.5	L	22	fl oz/a	MP		
25	Ammonium Sulfate	100	DF	17	lb/100 gal	MP		

