

PREEMERGENCE WEED CONTROL IN CORN, 2010

Trial ID: C1810 Protocol ID: C1810  
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-5-10  
**Rate, Unit:** 30000 S/A  
**Row Spacing, Unit:** 30 IN

**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:** 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

**Trial Initiation Comments:**  
Fall Chisel, Spring Field Cultivate X2

**Soil Description**

**% OM:** 2.8 **Texture:** L loam  
**pH:** 6.2  
**Analyzed By:**  
300 lbs/A 46-0-0, 125 lbs/A 19-19-19

**Application Description**

**Application Date:** May-5-10  
**Time of Day:** 10:10 am  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROADC  
**Air Temperature, Unit:** 76 F  
**% Relative Humidity:** 57  
**Wind Velocity, Unit:** 7.5 MPH  
**Wind Direction:** W  
**Soil Temperature, Unit:** 60 F  
**Soil Moisture:** 3  
**% Cloud Cover:** 85

**Crop Stage At Each Application**

**Crop 1 Code, BBCH Scale:** ZEAMX BCOR

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**Pest Stage At Each Application**

**A**

**Pest 1 Code, Type, Scale:** ANGR W  
**Pest 2 Code, Type, Scale:** CHEAL W  
**Pest 3 Code, Type, Scale:** AMARE W  
**Pest 4 Code, Type, Scale:** AMBEL W  
**Pest 5 Code, Type, Scale:** ABUTH W

**Application Equipment**

**Equipment Type:** BKPK  
**Operating Pressure, Unit:** 30 PSI  
**Nozzle Type:** FF  
**Nozzle Size:** 8003  
**Nozzle Spacing, Unit:** 20 IN  
**Boom Length, Unit:** 100 IN  
**Boom Height, Unit:** 18 IN  
**Ground Speed, Unit:** 3.5 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 20 gal/ac  
**Mix Size, Unit:** 1 gallons

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Pest Type	W	Weed	W	Weed	W	Weed	W	Weed	W	Weed	W	Weed	W	Weed
Pest Code	ZEAMX						ZEAMX			ZEAMX				
Crop Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL
Rating Date	Jun-2-10	Jun-2-10	Jun-2-10	Jun-2-10	Jun-2-10	Jun-2-10	Jun-2-10	Jun-2-10	Jun-2-10	Jun-2-10	Jun-16-10	Jun-16-10	Jun-16-10	Jun-16-10
Rating Type	injury	control	control	control	control	control	control	control	control	control	injury	control	control	control
Rating Unit	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Trt-Eval Interval	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	28 DAE	28 DAE	28 DAE	28 DAE

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8	9
1	Non-Treated						0	0	0	0	0	0	0	0	0
2	Lumax	3.94	SE	3	qt/a	PRE	0	97	100	100	97	100	0	95	100
3	Lexar	3.7	L	3.5	qt/a	PRE	0	95	100	100	96	98	0	94	100
4	Integrity	5.6	L	13	fl oz/a	PRE	0	98	90	100	66	90	0	86	74
5	Sharpen	2.9	L	2.5	fl oz/a	PRE	0	97	100	100	71	91	0	90	98
5	Guardsman Max	5	L	1.5	pt/a	PRE									
6	Integrity	5.6	L	13	fl oz/a	PRE	0	95	100	100	70	95	0	95	99
6	Guardsman Max	5	L	1.5	pt/a	PRE									
	LSD (P=.05)						0.0	3.4	5.0	0.0	7.5	7.3	0.0	5.3	3.6
	Standard Deviation						0.0	2.2	3.3	0.0	5.0	4.9	0.0	3.5	2.4
	CV						0.0	2.78	4.08	0.0	7.48	6.16	0.0	4.58	3.08

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL	ABUTH				
Crop Code												
Rating Date	Jun-16-10	Jun-16-10	Jun-16-10	Jul-14-10	Jul-14-10	Jul-14-10	Jul-14-10	Jul-14-10	Jul-14-10	Jul-14-10	Jul-14-10	Jul-14-10
Rating Type	control	control	control	control	control	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%	%	%	%	%
Trt-Eval Interval	28 DAE	28 DAE	28 DAE	56 DAE	56 DAE	56 DAE	56 DAE	56 DAE	56 DAE	56 DAE	56 DAE	56 DAE

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	10	11	12	13	14	15	16	17
1	Non-Treated						0	0	0	0	0	0	0	0
2	Lumax	3.94	SE	3	qt/a	PRE	100	94	100	91	98	100	83	98
3	Lexar	3.7	L	3.5	qt/a	PRE	100	92	95	86	99	99	83	100
4	Integrity	5.6	L	13	fl oz/a	PRE	93	66	73	89	76	100	25	51
5	Sharpen	2.9	L	2.5	fl oz/a	PRE	95	74	76	86	89	90	45	65
5	Guardsman Max	5	L	1.5	pt/a	PRE								
6	Integrity	5.6	L	13	fl oz/a	PRE	99	71	84	89	99	99	44	88
6	Guardsman Max	5	L	1.5	pt/a	PRE								
	LSD (P=.05)						4.6	5.3	10.7	8.8	12.3	7.4	12.3	16.2
	Standard Deviation						3.1	3.5	7.1	5.8	8.2	4.9	8.1	10.7
	CV						3.78	5.31	9.94	7.91	10.65	6.07	17.49	16.07