

**Soil-applied (PRE) weed control programs in corn**

Trial ID: C02-16 Study Dir.: Sprague, Powell, Stiles  
 Conducted: Campus T-17 Investigator: Christy Sprague

**Planting Date:** May-18-2016 **Row Spacing:** 30 IN  
**Variety:** P9807 **No. of Reps:** 4  
**Population:** 32000 seeds/A **% OM:** 3.3  
**Soil Type:** L loam **pH:** 6.2  
**Plot Size:** 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

**Tillage/Previous Crops:** Fall chisel plowed; spring soil finished twice  
**Fertilizer:** 300 lb urea incorporated 200 lb 19-19-19 starter

**Crop and Weed Description**

Weed	Code	Common Name	Scientific Name
1	ANGR	mainly foxtail species	Annual grass
2	CHEAL	lambsquarters, common	Chenopodium album
3	AMAPO	amaranth, Powell	Amaranthus powellii
4	AMBEL	ragweed, common	Ambrosia artemisiifolia
5	ABUTH	velvetleaf	Abutilon theophrasti
Crop	Code	Common Name	
1	ZEAMX	Corn	

**Application Description**

**Application Timing:** A PRE  
**Date Treated:** May-18-2016  
**Time Treated:** 5:45 PM  
**% Cloud Cover:** 40  
**Air Temp., Unit:** 62 F  
**% Relative Humidity:** 38  
**Wind Speed/Unit/Dir:** 4 mph E  
**Soil Temp, Unit:** 52 F  
**Leaf Moist/Dew Presence (Y/N):** 5  
**Soil Moist:** 4

**Crop Stage at Each Application**

**A**  
**Crop 1 Name:** ZEAMX  
**Height:**  
**Stage:**

**Weed Stage at Each Application**

**A**  
**Weed 1 Name:** ANGR  
**Height:**  
**Stage:**  
**Weed 2 Name:** CHEAL  
**Height:**  
**Stage:**  
**Weed 3 Name:** AMAPO  
**Height:**  
**Stage:**  
**Weed 4 Name:** AMBEL  
**Height:**  
**Stage:**  
**Weed 5 Name:** ABUTH  
**Height:**  
**Stage:**

**Application Equipment**

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.8 mph	AIXR	11003	22 "	20 "	100 "	19 GAL/AC	WATER	30 PSI

**Comments:**

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Study Director: Sprague, Powell, Stiles

Pest Code		ANGR	CHEAL	AMAPO	AMBEL	ABUTH	
Crop Code	ZEAMX						ZEAMX
Rating Date	Jun-16-2016	Jun-16-2016	Jun-16-2016	Jun-16-2016	Jun-16-2016	Jun-16-2016	Jul-18-2016
Rating Type	injury	control	control	control	control	control	injury
Rating Unit	percent	percent	percent	percent	percent	percent	percent
Trt-Eval Interval	29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A	61 DA-A
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Appl Unit	Code							
1	Bicep II Magnum	2.1 qt/a	A		0	98	88	100	71	89	0
2	Lumax EZ	2.7 qt/a	A		0	92	93	100	88	100	0
3	Acuron Flexi	2.25 qt/a	A		0	98	86	100	90	98	0
4	Acuron	3 qt/a	A		0	98	92	100	88	96	0
5	Instigate	6 oz/a	A		0	95	72	89	71	93	0
6	Resicore	2.75 qt/a	A		0	94	82	99	95	98	0
7	SureStart II	3 pt/a	A		0	95	68	93	81	90	0
8	Untreated				0	0	0	0	0	0	0
9	Corvus	5.6 fl oz/a	A		0	96	75	88	91	93	0
10	Corvus	5.6 fl oz/a	A		0	96	95	96	95	98	0
10	Atrazine	1.67 lb/a	A								
11	Balance Flexx	4 fl oz/a	A		0	96	71	93	80	93	0
11	Dual II Magnum	1.33 pt/a	A								
12	Verdict	15 fl oz/a	A		0	95	70	100	90	85	0
13	Sharpen	3 fl oz/a	A		0	99	72	93	82	100	0
13	Zidua	2.5 oz/a	A								
14	Verdict	15 fl oz/a	A		0	92	88	100	83	89	0
14	Zidua	2 oz/a	A								
14	Atrazine	1.67 lb/a	A								
LSD P=.05					.	9.9	9.9	8.7	10.5	10.2	.
Standard Deviation					0.0	6.9	6.9	6.1	7.3	7.1	0.0
CV					0.0	7.81	9.25	6.81	9.27	8.19	0.0

Could not calculate LSD (% mean diff) for columns 1,7 because error mean square = 0.

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Location: Campus T-17

Investigator: Christy Sprague

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Pest Code	ANGR	CHEAL	AMAPO	AMBEL	ABUTH		
Crop Code						ZEAMX	ZEAMX
Rating Date	Jul-18-2016	Jul-18-2016	Jul-18-2016	Jul-18-2016	Jul-18-2016	Oct-19-2016	Oct-19-2016
Rating Type	control	control	control	control	control	test weight	moisture
Rating Unit	percent	percent	percent	percent	percent	lbs/bu	percent
Trt-Eval Interval	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A	154 DA-A	154 DA-A
Number of Decimals	0	0	0	0	0	1	1

Trt No.	Treatment Name	Rate	Appl Unit	Code							
1	Bicep II Magnum	2.1 qt/a	A		97	89	96	72	69	53.1	19.7
2	Lumax EZ	2.7 qt/a	A		93	96	100	85	97	52.8	19.4
3	Acuron Flexi	2.25 qt/a	A		99	85	97	85	100	53.8	19.4
4	Acuron	3 qt/a	A		99	96	100	91	96	52.8	19.6
5	Instigate	6 oz/a	A		90	75	89	66	88	53.1	19.7
6	Resicore	2.75 qt/a	A		95	82	100	87	96	53.2	19.5
7	SureStart II	3 pt/a	A		90	66	84	66	71	53.3	19.6
8	Untreated				0	0	0	0	0	52.3	20.3
9	Corvus	5.6 fl oz/a	A		99	74	86	70	88	53.6	19.6
10	Corvus	5.6 fl oz/a	A		96	93	98	96	96	52.8	19.6
10	Atrazine	1.67 lb/a	A								
11	Balance Flexx	4 fl oz/a	A		87	70	90	71	95	53.3	19.6
11	Dual II Magnum	1.33 pt/a	A								
12	Verdict	15 fl oz/a	A		91	68	100	73	78	53.1	20.0
13	Sharpen	3 fl oz/a	A		89	70	81	68	100	53.2	19.2
13	Zidua	2.5 oz/a	A								
14	Verdict	15 fl oz/a	A		91	84	100	85	87	53.1	19.5
14	Zidua	2 oz/a	A								
14	Atrazine	1.67 lb/a	A								
LSD P=.05					9.6	10.2	12.2	9.6	10.2	1.10	0.67
Standard Deviation					6.7	7.2	8.6	6.7	7.1	0.77	0.47
CV					7.75	9.56	9.82	9.26	8.58	1.44	2.39

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Pest Code	
Crop Code	ZEAMX
Rating Date	Oct-19-2016
Rating Type	yield
Rating Unit	bu/acre
Trt-Eval Interval	at 15% M
Number of Decimals	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	
1	Bicep II Magnum	2.1	qt/a	A	225
2	Lumax EZ	2.7	qt/a	A	234
3	Acuron Flexi	2.25	qt/a	A	235
4	Acuron	3	qt/a	A	242
5	Instigate	6	oz/a	A	223
6	Resicore	2.75	qt/a	A	245
7	SureStart II	3	pt/a	A	230
8	Untreated				143
9	Corvus	5.6	fl oz/a	A	228
10	Corvus	5.6	fl oz/a	A	237
10	Atrazine	1.67	lb/a	A	
11	Balance Flexx	4	fl oz/a	A	232
11	Dual II Magnum	1.33	pt/a	A	
12	Verdict	15	fl oz/a	A	223
13	Sharpen	3	fl oz/a	A	231
13	Zidua	2.5	oz/a	A	
14	Verdict	15	fl oz/a	A	246
14	Zidua	2	oz/a	A	
14	Atrazine	1.67	lb/a	A	
LSD	P=.05				21.8
Standard Deviation					15.2
CV					6.71