

**Weed control programs with Shieldex in Corn**

Trial ID: C08-21 Study Dir.: Burns  
 Conducted: Campus C-27 Investigator: Burns

**Planting Date:** May-11-2021 **Row Spacing:** 30 IN  
**Variety:** P9880 AM **No. of Reps:** 4  
**Population:** 31500 S/A **% OM:** 2.5  
**Soil Type:** SL sandy loam **pH:** 6.1  
**Plot Size:** 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

**Tillage/Previous Crops:** Fall chisel plowed: spring soil finished twice  
**Fertilizer:** 300 lbs/A urea incorporated  
 12 G/A 19-19-19 starter

**Crop and Weed Description**

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

**Application Description**

	A	B
<b>Application Timing:</b>	PRE	POST
<b>Date Treated:</b>	May-12-2021	Jun-15-2021
<b>Time Treated:</b>	4:45 PM	11:50 AM
<b>% Cloud Cover:</b>	35	10
<b>Air Temp., Unit:</b>	72.3 F	70.7 F
<b>% Relative Humidity:</b>	22.1	38.5
<b>Wind Speed/Unit/Dir:</b>	3.3 MPH NW	5.4 MPH N
<b>Soil Temp, Unit:</b>	65 F	74 F
<b>Leaf Moist/Dew Presence (Y/N):</b>		
<b>Soil Moist:</b>	4	4

**Crop Stage at Each Application**

	A	B
<b>Crop 1 Name:</b>	ZEAMX	ZEAMX
<b>Height:</b>		7.5 IN
<b>Stage:</b>		V4-5

**Weed Stage at Each Application**

	A	B
<b>Weed 1 Name:</b>	ANGR	ANGR
<b>Height:</b>		4 IN
<b>Stage:</b>		8 L
<b>Weed 2 Name:</b>	CHEAL	CHEAL
<b>Height:</b>		3.5 IN
<b>Stage:</b>		12 L
<b>Weed 3 Name:</b>	AMAPO	AMAPO
<b>Height:</b>		3 IN
<b>Stage:</b>		12 L
<b>Weed 4 Name:</b>	AMBEL	AMBEL
<b>Height:</b>		4 IN
<b>Stage:</b>		18 L
<b>Weed 5 Name:</b>	ABUTH	ABUTH
<b>Height:</b>		3 IN
<b>Stage:</b>		8 L

**Application Equipment**

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	BKPK	3 MPH	AIXR	11003	22.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	32 PSI
B	BKPK	3 MPH	AIXR	11003	24.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	32 PSI

Comments:



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 Project ID:      Study Director: Burns  
                                  Sponsor Contact:

Pest Type	ABUTH		ANGR	CHEAL	AMAPO	AMBEL
Pest Code	velvetleaf		annual grasses	common lambsquarters	Powell amaranth	Common ragweed
Pest Name		ZEAMX				
Crop Type, Code		Corn				
Crop Name						
Rating Date	Jul-2-2021	Jul-16-2021	Jul-16-2021	Jul-16-2021	Jul-16-2021	Jul-16-2021
Rating Type	Control	Injury	Control	Control	Control	Control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Trt-Eval Interval	17 DA-B	31 DA-B	31 DA-B	31 DA-B	31 DA-B	31 DA-B

Trt No.	Treatment Name	Rate	Appl Unit	Code						
1	Bicep II Magnum	1.67 qt/a	A		95.0	0.0	53.8	85.0	88.8	90.0
2	Bicep II Magnum	1.67 qt/a	A		99.5	0.0	91.3	100.0	100.0	100.0
	2 Shieldex	1 fl oz/a	B							
	2 Atrazine	1.1 lb/a	B							
	2 COC	1 % v/v	B							
3	Bicep II Magnum	1.67 qt/a	A		95.8	0.0	83.8	100.0	100.0	95.0
	3 Impact	0.75 fl oz/a	B							
	3 Atrazine	1.1 lb/a	B							
	3 COC	1 % v/v	B							
4	Bicep II Magnum	1.67 qt/a	A		100.0	0.0	91.3	100.0	100.0	100.0
	4 Laudis	3 fl oz/a	B							
	4 Atrazine	1.1 lb/a	B							
	4 COC	1 % v/v	B							
5	Bicep II Magnum	1.67 qt/a	A		100.0	0.0	95.0	100.0	100.0	100.0
	5 Shieldex	1 fl oz/a	B							
	5 Atrazine	1.1 lb/a	B							
	5 Roundup PowerMax	30 fl oz/a	B							
6	Bicep II Magnum	1.67 qt/a	A		100.0	0.0	100.0	100.0	100.0	100.0
	6 Shieldex	1 fl oz/a	B							
	6 Atrazine	1.1 lb/a	B							
	6 Liberty	32 fl oz/a	B							
	6 COC	1 % v/v	B							
	LSD P=.05				1.07	.	3.89	.	1.54	.
	Standard Deviation				0.71	0.00	2.58	0.00	1.02	0.00
	CV				0.72	0.0	3.01	0.0	1.04	0.0

Could not calculate LSD (% mean diff) for columns 2,4,5,8,10,12,14,16 because error mean square = 0.  
 ^Calculated from residual.

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Pest Type	ABUTH	ANGR	CHEAL	AMAPO	AMBEL
Pest Code	velvetleaf	annual grasses	common lambsquarters	Powell amaranth	Common ragweed
Pest Name					
Crop Type, Code	ZEAMX				
Crop Name	Corn				
Rating Date	Jul-16-2021	Jul-30-2021	Jul-30-2021	Jul-30-2021	Jul-30-2021
Rating Type	Control	Injury	Control	Control	Control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Trt-Eval Interval	31 DA-B	45 DA-B	45 DA-B	45 DA-B	45 DA-B

Trt No.	Treatment Name	Rate	Appl Code						
		Rate Unit							
1	Bicep II Magnum	1.67 qt/a	A	86.3	0.0	31.3	80.0	80.0	81.3
2	Bicep II Magnum	1.67 qt/a	A	100.0	0.0	86.3	100.0	100.0	100.0
	2 Shieldex	1 fl oz/a	B						
	2 Atrazine	1.1 lb/a	B						
	2 COC	1 % v/v	B						
3	Bicep II Magnum	1.67 qt/a	A	95.0	0.0	71.3	100.0	99.5	99.0
	3 Impact	0.75 fl oz/a	B						
	3 Atrazine	1.1 lb/a	B						
	3 COC	1 % v/v	B						
4	Bicep II Magnum	1.67 qt/a	A	100.0	0.0	75.0	100.0	100.0	100.0
	4 Laudis	3 fl oz/a	B						
	4 Atrazine	1.1 lb/a	B						
	4 COC	1 % v/v	B						
5	Bicep II Magnum	1.67 qt/a	A	100.0	0.0	95.0	100.0	100.0	100.0
	5 Shieldex	1 fl oz/a	B						
	5 Atrazine	1.1 lb/a	B						
	5 Roundup PowerMax	30 fl oz/a	B						
6	Bicep II Magnum	1.67 qt/a	A	100.0	0.0	95.0	100.0	100.0	100.0
	6 Shieldex	1 fl oz/a	B						
	6 Atrazine	1.1 lb/a	B						
	6 Liberty	32 fl oz/a	B						
	6 COC	1 % v/v	B						
	LSD P=.05			1.54	.	4.68	.	0.62	1.77
	Standard Deviation			1.02	0.00	3.11	0.00	0.41	1.17
	CV			1.05	0.0	4.11	0.0	0.42	1.21

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Pest Type  
 Pest Code      ABUTH  
 Pest Name      velvetleaf  
 Crop Type, Code  
 Crop Name  
 Rating Date      Jul-30-2021  
 Rating Type      Control  
 Rating Unit/Min/Max      %, 0, 100  
 Trt-Eval Interval      45 DA-B

Trt No.	Treatment Name	Rate	Unit	Appl Code	
1	Bicep II Magnum	1.67	qt/a	A	80.0
2	Bicep II Magnum	1.67	qt/a	A	100.0
	2 Shieldex	1	fl oz/a	B	
	2 Atrazine	1.1	lb/a	B	
	2 COC	1	% v/v	B	
3	Bicep II Magnum	1.67	qt/a	A	99.5
	3 Impact	0.75	fl oz/a	B	
	3 Atrazine	1.1	lb/a	B	
	3 COC	1	% v/v	B	
4	Bicep II Magnum	1.67	qt/a	A	100.0
	4 Laudis	3	fl oz/a	B	
	4 Atrazine	1.1	lb/a	B	
	4 COC	1	% v/v	B	
5	Bicep II Magnum	1.67	qt/a	A	100.0
	5 Shieldex	1	fl oz/a	B	
	5 Atrazine	1.1	lb/a	B	
	5 Roundup PowerMax	30	fl oz/a	B	
6	Bicep II Magnum	1.67	qt/a	A	100.0
	6 Shieldex	1	fl oz/a	B	
	6 Atrazine	1.1	lb/a	B	
	6 Liberty	32	fl oz/a	B	
	6 COC	1	% v/v	B	
	LSD P=.05				0.62
	Standard Deviation				0.41
	CV				0.42

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