

Weed control programs with Shieldex in corn

Trial ID: C02-19 Study Dir.: Burns, Craft
 Conducted: Campus C-28 Investigator: Erin Burns

Planting Date: May-15-2019 **Row Spacing:** 30 IN
Variety: DKC 48-56-RIB **No. of Reps:** 4
Population: 31500 S/A **% OM:** 2.9
Soil Type: SL sandy loam **pH:** 5.9
Plot Size: 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Spring chisel plowed: spring soil finished twice
Fertilizer: 300 lbs/A urea incorporated
 157 lbs/A 19-19-19 starter

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	ANGR	mainly foxtail species	Annual grass
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
Application Timing:	PRE	POST
Date Treated:	May-15-2019	Jun-23-2019
Time Treated:	11:50 AM	2:15 PM
% Cloud Cover:	60	60
Air Temp., Unit:	74.3 F	86 F
% Relative Humidity:	47	86
Wind Speed/Unit/Dir:	2.5 MPH S	5.2 MPH SW
Soil Temp, Unit:	60 F	80 F
Leaf Moist/Dew Presence (Y/N):	N	N
Soil Moist:	3	2

Crop Stage at Each Application

	A	B
Crop 1 Name:	ZEAMX	ZEAMX
Height:		
Stage:	PRE	V5

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height:	5 IN	
Stage:	5 L	
Weed 2 Name:	CHEAL	CHEAL
Height:	2 IN	
Stage:	7 L	
Weed 3 Name:	AMAPO	AMAPO
Height:	1 IN	
Stage:	5 L	
Weed 4 Name:	AMBEL	AMBEL
Height:	3 IN	
Stage:	9 L	
Weed 5 Name:	ABUTH	ABUTH
Height:	4 IN	
Stage:	4 L	

Weed Density

	1	2	3	4	5
Date:	Jun-23-2019	Jun-23-2019	Jun-23-2019	Jun-23-2019	Jun-23-2019
Weed Name:	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
Density:	19 FT2	8 FT2	3 FT2	1 FT2	1 FT2

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 GPA	WATER	30 PSI
B	CUB	3.8 MPH	AIXR	11003	24 "	20 "	100 "	19 GPA	WATER	30 PSI

Comments:

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Pest Code				ANGR	CHEAL	AMAPO	AMBEL	ABUTH		
Crop Type, Code			ZEAMX						ZEAMX	
Rating Date			Jun-27-2019	Jun-27-2019	Jun-27-2019	Jun-27-2019	Jun-27-2019	Jun-27-2019	Jul-12-2019	
Rating Type			injury	Control	Control	Control	Control	Control	injury	
Rating Unit			percent	percent	percent	percent	percent	percent	percent	
Trt-Eval Interval			4 DA-B	4 DA-B	4 DA-B	4 DA-B	4 DA-B	4 DA-B	19 DA-B	
Trt No.	Treatment Name	Rate Unit	Appl Code							
1	Bicep Lite II Magnum	1.67 qt/a	A	0.0	100.0	80.0	95.0	80.0	80.0	0.0
2	Bicep Lite II Magnum	1.67 qt/a	A	0.0	100.0	80.0	95.0	80.0	80.0	0.0
	2 Shieldex	1 fl oz/a	B							
	2 Atrazine	0.55 lb/a	B							
	2 MSO	1 % v/v	B							
	2 AMS	8.5 lb/100 gal	B							
3	Bicep Lite II Magnum	1.67 qt/a	A	0.0	100.0	80.0	95.0	80.0	80.0	0.0
	3 Shieldex	1.3 fl oz/a	B							
	3 Atrazine	0.55 lb/a	B							
	3 MSO	1 % v/v	B							
	3 AMS	8.5 lb/100 gal	B							
4	Untreated			0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Bicep Lite II Magnum	1.67 qt/a	A	0.0	100.0	80.0	95.0	80.0	80.0	0.0
	5 Impact	1 fl oz/a	B							
	5 Atrazine	0.55 lb/a	B							
	5 MSO	1 % v/v	B							
	5 AMS	8.5 lb/100 gal	B							
6	Bicep Lite II Magnum	1.67 qt/a	A	0.0	100.0	80.0	95.0	80.0	80.0	0.0
	6 Laudis	3 fl oz/a	B							
	6 Atrazine	0.55 lb/a	B							
	6 MSO	1 % v/v	B							
	6 AMS	8.5 lb/100 gal	B							
7	Bicep Lite II Magnum	1.67 qt/a	A	0.0	100.0	80.0	95.0	80.0	80.0	0.0
	7 Callisto	3 fl oz/a	B							
	7 Atrazine	0.55 lb/a	B							
	7 Surfactant	0.25 % v/v	B							
	7 AMS	8.5 lb/100 gal	B							
LSD P=.05				0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Deviation				0.0	0.0	0.0	0.0	0.0	0.0	0.0
CV				0.0	0.0	0.0	0.0	0.0	0.0	0.0

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,13 because error mean square = 0.

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Pest Code			ANGR	CHEAL	AMAPO	AMBEL	ABUTH		ANGR	CHEAL	
Crop Type, Code								ZEAMX			
Rating Date			Jul-12-2019	Jul-12-2019	Jul-12-2019	Jul-12-2019	Jul-12-2019	Jul-22-2019	Jul-22-2019	Jul-22-2019	
Rating Type			Control	Control	Control	Control	Control	injury	Control	Control	
Rating Unit			percent	percent	percent	percent	percent	percent	percent	percent	
Trt-Eval Interval			19 DA-B	19 DA-B	19 DA-B	19 DA-B	19 DA-B	29 DA-B	29 DA-B	29 DA-B	
Trt No.	Treatment Name	Rate Unit	Appl Code								
1	Bicep Lite II Magnum	1.67 qt/a	A	93.8	91.3	90.0	81.3	85.0	0.0	100.0	76.3
2	Bicep Lite II Magnum	1.67 qt/a	A	100.0	100.0	100.0	100.0	100.0	0.0	98.8	100.0
	2 Shieldex	1 fl oz/a	B								
	2 Atrazine	0.55 lb/a	B								
	2 MSO	1 % v/v	B								
	2 AMS	8.5 lb/100 gal	B								
3	Bicep Lite II Magnum	1.67 qt/a	A	99.5	99.5	100.0	99.5	99.5	0.0	98.8	99.5
	3 Shieldex	1.3 fl oz/a	B								
	3 Atrazine	0.55 lb/a	B								
	3 MSO	1 % v/v	B								
	3 AMS	8.5 lb/100 gal	B								
4	Untreated			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Bicep Lite II Magnum	1.67 qt/a	A	99.5	98.5	100.0	99.5	98.3	0.0	100.0	98.8
	5 Impact	1 fl oz/a	B								
	5 Atrazine	0.55 lb/a	B								
	5 MSO	1 % v/v	B								
	5 AMS	8.5 lb/100 gal	B								
6	Bicep Lite II Magnum	1.67 qt/a	A	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0
	6 Laudis	3 fl oz/a	B								
	6 Atrazine	0.55 lb/a	B								
	6 MSO	1 % v/v	B								
	6 AMS	8.5 lb/100 gal	B								
7	Bicep Lite II Magnum	1.67 qt/a	A	99.0	100.0	100.0	100.0	100.0	0.0	99.0	100.0
	7 Callisto	3 fl oz/a	B								
	7 Atrazine	0.55 lb/a	B								
	7 Surfactant	0.25 % v/v	B								
	7 AMS	8.5 lb/100 gal	B								
LSD P=.05				2.94	4.82	4.58	3.48	2.74	.	2.14	2.96
Standard Deviation				1.98	3.24	3.09	2.34	1.84	0.00	1.44	1.99
CV				2.34	3.85	3.66	2.83	2.21	0.0	1.69	2.43

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Pest Code			AMAPO	AMBEL	ABUTH	
Crop Type, Code						
Rating Date			Jul-22-2019	Jul-22-2019	Jul-22-2019	
Rating Type			Control	Control	Control	
Rating Unit			percent	percent	percent	
Trt-Eval Interval			29 DA-B	29 DA-B	29 DA-B	
Trt No.	Treatment Name	Rate Unit	Appl Code			
1	Bicep Lite II Magnum	1.67 qt/a	A	75.0	58.8	68.8
2	Bicep Lite II Magnum	1.67 qt/a	A	100.0	100.0	99.5
	2 Shieldex	1 fl oz/a	B			
	2 Atrazine	0.55 lb/a	B			
	2 MSO	1 % v/v	B			
	2 AMS	8.5 lb/100 gal	B			
3	Bicep Lite II Magnum	1.67 qt/a	A	99.5	99.5	99.5
	3 Shieldex	1.3 fl oz/a	B			
	3 Atrazine	0.55 lb/a	B			
	3 MSO	1 % v/v	B			
	3 AMS	8.5 lb/100 gal	B			
4	Untreated			0.0	0.0	0.0
5	Bicep Lite II Magnum	1.67 qt/a	A	100.0	98.8	99.5
	5 Impact	1 fl oz/a	B			
	5 Atrazine	0.55 lb/a	B			
	5 MSO	1 % v/v	B			
	5 AMS	8.5 lb/100 gal	B			
6	Bicep Lite II Magnum	1.67 qt/a	A	100.0	100.0	100.0
	6 Laudis	3 fl oz/a	B			
	6 Atrazine	0.55 lb/a	B			
	6 MSO	1 % v/v	B			
	6 AMS	8.5 lb/100 gal	B			
7	Bicep Lite II Magnum	1.67 qt/a	A	100.0	100.0	100.0
	7 Callisto	3 fl oz/a	B			
	7 Atrazine	0.55 lb/a	B			
	7 Surfactant	0.25 % v/v	B			
	7 AMS	8.5 lb/100 gal	B			
LSD P=.05				5.22	6.70	3.67
Standard Deviation				3.52	4.51	2.47
CV				4.28	5.67	3.05

Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,13 because error mean square = 0.