

Syngenta Corn Bareground

Trial ID: 15ACURONBG	Location: Western Branch E-1	Trial Year: 2015
Protocol ID: 15ACURONBG	Investigator: Dr. Mark M. Loux	
Project ID: ZCOR82AD-2015US	Study Director: Anthony Dobbels	
	Sponsor Contact: Dain Bruns, Syngenta	

**General Trial Information**

**Study Director:** Anthony Dobbels  
**Investigator:** Dr. Mark M. Loux

**Trial Location**

**City:** South Charleston **Country:** USA United States  
**State/Prov.:** Ohio  
**Postal Code:** 45368 **Climate Zone:** USWARM US Warm Continental

**Latitude of LL Corner** °: 39.85959 N  
**Longitude of LL Corner** °: -83.66902 W

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

**Contacts**

**Study Director:** Anthony Dobbels  
**Investigator:** Dr. Mark M. Loux

**Pest Description**

- Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 2 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Common barnyardgrass
- Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 4 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters
- Pest 5 Type:** W **Code:** AMARE *Amaranthus retroflexus*  
**Common Name:** Redroot pigweed
- Pest 6 Type:** W **Code:** ABUTH *Abutilon theophrasti*  
**Common Name:** velvetleaf

**Site and Design**

<b>Treated Plot Width:</b> 10 FT	<b>Site Type:</b> FIELD field
<b>Treated Plot Length:</b> 50 FT	<b>Experimental Unit:</b> 1 PLOT plot
<b>Treated Plot Area:</b> 500 FT <sup>2</sup>	<b>Tillage Type:</b> CONTIL conventional-till
<b>Replications:</b> 1	<b>Study Design:</b> RACOBL Randomized Complete Block (RCB)
<b>Treatments:</b> 5	

**No. Previous Crop Year**  
1. Soybean 2014

**Soil Description**

<b>Description Name:</b> E-1	<b>Texture:</b> SICL silty clay loam
<b>% OM:</b> 3.5	<b>Soil Name:</b> Kokomo
<b>pH:</b> 6.6	<b>Fert. Level:</b> G good
<b>CEC:</b> 22	<b>Soil Drainage:</b> G good

**Application Description**

**A**

**Application Date:** 5-15-2015  
**Appl. Start Time:** 9:00 AM  
**Appl. Stop Time:** 9:15 AM  
**Application Method:** SPRAY  
**Application Timing:** PRE  
**Application Placement:** BROSOI  
**Applied By:** Ackley  
**Air Temperature, Unit:** 63 F  
**% Relative Humidity:** 75  
**Wind Velocity, Unit:** 2 MPH  
**Wind Direction:** E  
**Dew Presence (Y/N):** N no  
**Soil Temperature, Unit:** 59 F  
**Soil Moisture:** NORMAL  
**% Cloud Cover:** 80  
**Next Moisture Occurred On:** 5-18-2015  
**Time to Next Moisture, Unit:** 3 DAY

**Pest Stage At Each Application**

**A**

**Pest 1 Code, Type, Scale:** SETFA W  
**Density, Unit:** 186 M2  
**Pest 2 Code, Type, Scale:** ECHCG W  
**Density, Unit:** 56 M2  
**Pest 3 Code, Type, Scale:** AMBTR W  
**Density, Unit:** 2 M2  
**Pest 4 Code, Type, Scale:** CHEAL W  
**Density, Unit:** 8 M2  
**Pest 5 Code, Type, Scale:** AMARE W  
**Density, Unit:** 12 M2  
**Pest 6 Code, Type, Scale:** ABUTH W  
**Density, Unit:** 1 M2

**Application Equipment**

**A**

**Appl. Equipment:** 6 FOOT BOOM  
**Equipment Type:** SPRBAC  
**Operation Pressure, Unit:** 46 PSI  
**Nozzle Type:** AI XR  
**Nozzle Size:** 110015  
**Nozzle Spacing, Unit:** 18 IN  
**Boom Length, Unit:** 10 FT  
**Boom Height, Unit:** 20 IN  
**Ground Speed, Unit:** 3 MPH  
**Carrier:** WATER  
**Spray Volume, Unit:** 15 GPA  
**Mix Size, Unit:** 1 Liters  
**Propellant:** CO2

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	AMARE
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed
Rating Date	6-11-2015	6-11-2015	6-11-2015	6-11-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	27 27	27 27	27 27	27 27
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Description	1	2	3	4
1	Acuron	3 qt/a		A	PRE		84	84	90	100
2	Lexar EZ	3.5 qt/a		A	PRE		83	85	100	100
3	Corvus	5.6 oz/a		A	PRE		50	50	100	60
4	Surestart II	3 pt/a		A	PRE		85	83	85	100
5	Verdict	18 oz/a		A	PRE		80	70	100	100
	LSD P=.05						.	.	.	.
	Standard Deviation						.	.	.	.
	CV						.	.	.	.
	Grand Mean						76.4	74.4	95.0	92.0
	Bartlett's X2						.	.	.	.
	P(Bartlett's X2)						.	.	.	.
	Skewness						-2.1504*	-1.486	-0.8839	-2.2361*
	Kurtosis						4.6758*	1.5616	-1.75	5.0*

Means followed by same letter do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
Could not calculate LSD (% mean diff) for columns 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16 because error mean square = 0.

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ABUTH	SETFA	AMBTR	CHEAL
Pest Scientific Name	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>
Rating Date	6-11-2015	6-26-2015	6-26-2015	6-26-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	27 27	42 42	42 42	42 42
Trt-Eval Interval	27 DA-A	42 DA-A	42 DA-A	42 DA-A
Number of Decimals	0	0	0	0
Trt Treatment	Other	Other	Appl	Appl
No. Name	Rate	Rate	Unit Code	Description
			5	6
			7	8
1 Acuron	3 qt/a	A	PRE	100 84 84 90
2 Lexar EZ	3.5 qt/a	A	PRE	100 83 85 100
3 Corvus	5.6 oz/a	A	PRE	100 50 50 100
4 Surestart II	3 pt/a	A	PRE	85 85 83 85
5 Verdict	18 oz/a	A	PRE	100 80 70 100
LSD P=.05	.	.	.	.
Standard Deviation	.	.	.	.
CV	.	.	.	.
Grand Mean	97.0	76.4	74.4	95.0
Bartlett's X2	.	.	.	.
P(Bartlett's X2)	.	.	.	.
Skewness	-2.2361*	-2.1504*	-1.486	-0.8839
Kurtosis	5.0*	4.6758*	1.5616	-1.75

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	ABUTH	SETFA	AMBTR
Pest Scientific Name	Amaranthus ret>	Abutilon theop>	Setaria faberi	Ambrosia trifi>
Pest Name	Redroot pigweed	velvetleaf	Giant foxtail	Giant ragweed
Rating Date	6-26-2015	6-26-2015	7-10-2015	7-10-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	42 42	42 42	56 56	56 56
Trt-Eval Interval	42 DA-A	42 DA-A	56 DA-A	56 DA-A
Number of Decimals	0	0	0	0
Trt Treatment	Other	Other	Appl	Appl
No. Name	Rate	Rate	Unit Code	Description
			9	10
			11	12
1 Acuron	3 qt/a	A	PRE	100 100 80 75
2 Lexar EZ	3.5 qt/a	A	PRE	100 100 80 70
3 Corvus	5.6 oz/a	A	PRE	60 100 60 50
4 Surestart II	3 pt/a	A	PRE	100 85 85 50
5 Verdict	18 oz/a	A	PRE	100 100 75 40
LSD P=.05	.	.	.	.
Standard Deviation	.	.	.	.
CV	.	.	.	.
Grand Mean	92.0	97.0	76.0	57.0
Bartlett's X2	.	.	.	.
P(Bartlett's X2)	.	.	.	.
Skewness	-2.2361*	-2.2361*	-1.5175	0.3103
Kurtosis	5.0*	5.0*	2.6077	-2.2701

Pest Type					W Weed	W Weed	W Weed	W Weed		
Pest Code					CHEAL	AMARE	ABUTH	ECHCG		
Pest Scientific Name					Chenopodium al>	Amaranthus ret>	Abutilon theop>	Echinochloa cr>		
Pest Name					Common lambsqu>	Redroot pigweed	velvetleaf	Common barnyar>		
Rating Date					7-10-2015	7-10-2015	7-10-2015	7-10-2015		
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit					%	%	%	%		
Number of Subsamples					1	1	1	1		
Days After First/Last Applic.					56 56	56 56	56 56	56 56		
Trt-Eval Interval					56 DA-A	56 DA-A	56 DA-A	56 DA-A		
Number of Decimals					0	0	0	0		
Trt No.	Treatment Name	Other Rate	Other Rate	Unit	Appl Code	Appl Description	13	14	15	16
1	Acuron	3 qt/a		A	PRE		80	100	80	50
2	Lexar EZ	3.5 qt/a		A	PRE		80	100	100	40
3	Corvus	5.6 oz/a		A	PRE		30	80	60	15
4	Surestart II	3 pt/a		A	PRE		75	100	60	70
5	Verdict	18 oz/a		A	PRE		75	100	100	25
LSD P=.05							.	.	.	.
Standard Deviation							.	.	.	.
CV							.	.	.	.
Grand Mean							68.0	96.0	80.0	40.0
Bartlett's X2							.	.	.	.
P(Bartlett's X2)							.	.	.	.
Skewness							-2.1601*	-2.2361*	0.0	0.377
Kurtosis							4.729*	5.0*	-3.0	-0.6297

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Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, *Setaria faberi*, = US

AMBTR, *Ambrosia trifida*, = US

CHEAL, *Chenopodium album*, = US

AMARE, *Amaranthus retroflexus*, = US

ABUTH, *Abutilon theophrasti*, = US

ECHCG, *Echinochloa crus-galli*, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent