

The Ohio State University

Shieldex Crop Safety and Weed Control

Trial ID: 21SHIELDX Location: Western Branch Big E Trial Year: 2021
 Protocol ID: H-SHLDEXVIS2021 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director: Anthony Dobbels
 Sponsor Contact:

General Trial Information

Study Director: Anthony Dobbels

Discipline: H herbicide
 Trial Status: E established

ARM Trial Created On: Mar-30-2021
 Initiation Date: Apr-27-2021

Trial Location

City: South Charleston Country: USA United States
 State/Prov.: Ohio
 Postal Code: 45368

Latitude of LL Corner °: 39.85683 N
 Longitude of LL Corner °: -83.67016 W
 Altitude of LL Corner: 1101.00 FT

Conducted Under GLP: No
 Conducted Under GEP: No

Contacts

Role: STYDIR study director
 Study Director: Anthony Dobbels

Crop Description

Crop 1: C ZEAMX Zea mays Corn
 Entry Date: May-3-2021 Stage Scale: BBCH
 Variety: SCS1111Q
 Attributes: Glyphosate-R, Glufosinate-R
 Planting Date: Apr-27-2021 Planting Rate: 32097 S/A
 Depth: 2 IN
 Rows per Plot: 4 Planting Method: PLANTD planted
 Row Spacing: 30 IN Planting Equipment: FPP finger pickup planter
 Seed Bed: MEDIUM medium
 Soil Temperature: 63 F Soil Moisture: SLIDRY slightly dry
 Emergence Date: May-14-2021

Pest Description

Pest 1 Type: W Code: SETFA Setaria faberi Entry Date: Jun-7-2021
 Common Name: Giant foxtail Stage Scale: BBCH
 Pest 2 Type: W Code: AMBTR Ambrosia trifida Entry Date: Jun-7-2021
 Common Name: Giant ragweed Stage Scale: BBCH
 Pest 3 Type: W Code: CHEAL Chenopodium album Entry Date: Jun-7-2021
 Common Name: common lambsquarters Stage Scale: BBCH
 Pest 4 Type: W Code: AMARE Amaranthus retroflexus Entry Date: Jun-7-2021
 Common Name: Redroot pigweed Stage Scale: BBCH
 Pest 5 Type: W Code: ABUTH Abutilon theophrasti Entry Date: Jun-7-2021
 Common Name: velvetleaf Stage Scale: BBCH

Site and Design

Treated Plot Width: 10 FT Site Type: FIELD field
 Treated Plot Length: 30 FT Experimental Unit: 1 PLOT plot
 Treated Plot Area: 300.0 FT2 Treatments: 6 Tillage Type: CONTIL conventional-till
 Replications: 4 Study Design: RACOB� Randomized Complete Block (RCB)

Previous

No. Crop Year
 1. SOYBEAN 2020

Soil Description

Description Name: Big E
 % Sand: 44 % OM: 3.1 Texture: SICL silty clay loam
 % Silt: 45 pH: 6.6 Soil Name: Kokomo
 % Clay: 11 CEC: 15 Fert. Level: G good
 g o o d

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Application Description

	A	B
Application Date	Apr-28-2021	Jun-6-2021
Appl. Start Time	8:00 AM	10:00 AM
Appl. Stop Time	8:30 AM	10:15 AM
Application Method	SPRAY	SPRAY
Application Timing	PRE	POST
Application Placement	BROSOI	BROFOL
Applied By	Dobbels	Loux
Appl. Entry Date	May-3-2021	Jun-7-2021
Air Temperature Start, Stop	67.7 68.8	83 83 F
% Relative Humidity Start, Stop	63 70	54 54
Wind Velocity+Dir. Start	8 MPH WSW	6 MPH SSW
Wind Velocity+Dir. Stop	8 MPH WSW	6 MPH SSW
Wind Velocity+Dir. Max	9.2 MPH WSW	6 MPH SSW
Wet Leaves (Y/N)	N no	N no
Soil Temperature	58 F	67 F
Soil Moisture	DRY	dry
Soil Surface Condition	MEDIUM	MEDIUN
% Cloud Cover	60	60
Next Moisture Occurred On	Apr-28-2021	Jun-7-2021
Time to Next Moisture	11.5 HR	22.0 HR
Moisture 6 Hours after Appl.	0 IN	0 IN
Moisture 1 Week after Appl.	1.1 IN	0.48 IN

Crop Stage At Each Application

	A		B	
Crop 1 Code, BBCH Scale	ZEAMX	BCOR	ZEAMX	BCOR
Days after Emergence	-16		23	
Stage Majority, Percent	00	100	15	100
Height Average			12	IN
Height Minimum, Maximum			11	13

Pest Stage At Each Application

	A			B		
Pest 1 Code, Type, Scale	SETFA	W	BBCH	SETFA	W	BBCH
Stage Majority, Percent				12		90
Stage Minimum, Percent				11		10
Stage Maximum, Percent				12		90
Height Average				8		IN
Height Minimum, Maximum				6		10
Density Average				253		PLA/m2
Density Minimum, Maximum				232		372
Pest 2 Code, Type, Scale	AMBTR	W	BBCH	AMBTR	W	BBCH
Stage Majority, Percent				18		80
Stage Minimum, Percent				14		10
Stage Maximum, Percent				19		100
Height Average				8		IN
Height Minimum, Maximum				4		10
Density Average				27		PLA/m2
Density Minimum, Maximum				12		48
Pest 3 Code, Type, Scale	CHEAL	W	BBCH	CHEAL	W	BBCH
Stage Majority, Percent				16		80
Stage Minimum, Percent				14		10
Stage Maximum, Percent				19		10
Height Average				3		IN
Height Minimum, Maximum				2		4
Density Average				12		PLA/m2
Density Minimum, Maximum				8		15
Pest 4 Code, Type, Scale	AMARE	W	BBCH	AMARE	W	BBCH
Stage Majority, Percent				13		80
Stage Minimum, Percent				12		10
Stage Maximum, Percent				14		10
Height Average				2		IN
Height Minimum, Maximum				1		3
Density Average				1		PLA/m2
Density Minimum, Maximum				1		1
Pest 5 Code, Type, Scale	ABUTH	W	BBCH	ABUTH	W	BBCH
Stage Majority, Percent				13		90
Stage Minimum, Percent				12		10
Stage Maximum, Percent				13		90
Height Average				3		IN
Height Minimum, Maximum				2		3
Density Average				1		PLA/m2
Density Minimum, Maximum				1		1

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Application Equipment

	A	B
Appl. Equipment	6' TTI	10' AIXR
Equipment Type	BACCAI	BACCAI
Operation Pressure	44 PSI	44 PSI
Nozzle Model	1110015	110015
Nozzle Type	TTI	AI XR
Nozzle TradeName	TeeJet	TeeJet
Nozzle Tip Size, Color	015 green	015 green
Nozzle Spacing	18 IN	18 IN
Boom Length	6.67 FT	10 FT
Boom Height	20 IN	20 IN
Ground Speed	3 MPH	3 MPH
Carrier	WATER	WATER
Water Hardness (ppm CaCO3)		250
Application Amount	15 GAL/AC	15 GAL/AC
Mix Coverage		25 mL
Mix Size	1 L	2 L
Spray pH		7.8
Propellant	COMCO2	COMCO2
Tank Mix (Y/N)		Y yes

Notes

Context	Date	By	Notes
STATUS	Mar-30-2021	Dr. Mark M. Loux	Automatically added by ARM: Trial Status updated to 'S' during trial creation.

Pest Type	Pest Code	Pest Name	W Weed	W Weed	W Weed
			SETFA	ECHCG	AMBTR
			Giant foxtail	Common Giant ragweed	barnyard>
Crop Type, Code		C ZEAMX	C ZEAMX	C ZEAMX	
Crop Name		Corn	Corn	Corn	
Rating Date		Jun-4-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021
Rating Type		PHYSTU	PHYCHL	PHYNEC	CONTRO
Rating Unit/Min/Max		% 0 100	% 0 100	% 0 100	% 0 100
Number of Subsamples		1	1	1	1
Data Entry Date		Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021
Days After First/Last Applic.		37 37	37 37	37 37	37 37
Trt-Eval Interval		37 DA-A	37 DA-A	37 DA-A	
Days After Emergence		21 DE-1	21 DE-1	21 DE-1	21 DE-1
Number of Decimals		0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*
1	Bicep II Magnum	1.67 qt/a		A	0 -	0 -	0 -	70 -	70 -	25 -
2	Bicep II Magnum	1.67 qt/a		A	0 -	0 -	0 -	83 -	83 -	20 -
	Shieldex	1 oz/a		B						
	Atrazine	1 qt/a		B						
	COC	0.6 qt/a		B						
	AMSOL	1.5 qt/a		B						
3	Bicep II Magnum	1.67 qt/a		A	0 -	0 -	0 -	80 -	80 -	38 -
	Impact	0.75 oz/a		B						
	Atrazine	1 qt/a		B						
	COC	0.6 qt/a		B						
	AMSOL	1.5 qt/a		B						
4	Bicep II Magnum	1.67 qt/a		A	0 -	0 -	0 -	70 -	70 -	10 -
	Laudis	3 oz/a		B						
	Atrazine	1 qt/a		B						
	COC	0.6 qt/a		B						
	AMSOL	1.5 qt/a		B						
5	Bicep II Magnum	1.67 qt/a		A	0 -	0 -	0 -	80 -	80 -	25 -
	Shieldex	1 oz/a		B						
	Atrazine	1 qt/a		B						
	Roundup Powermax	30 oz/a		B						
	AMSOL	1.5 qt/a		B						

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Pest Type				W Weed	W Weed	W Weed		
Pest Code				SETFA	ECHCG	AMBTR		
Pest Name				Giant foxtail	Common Giant ragweed	barnyard>		
Crop Type, Code	C ZEAMX	C ZEAMX	C ZEAMX					
Crop Name	Corn	Corn	Corn					
Rating Date	Jun-4-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021	Jun-4-2021		
Rating Type	PHYSTU	PHYCHL	PHYNEC	CONTRO	CONTRO	CONTRO		
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	0 100	% 0 100	% 0 100		
Number of Subsamples	1	1	1	1	1	1		
Data Entry Date	Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021		
Days After First/Last Applic.	37 37	37 37	37 37	37 37	37 37	37 37		
Trt-Eval Interval	37 DA-A	37 DA-A	37 DA-A					
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1		
Number of Decimals	0	0	0	0	0	0		
Trt Treatment No. Name	Other Rate	Other Rate Unit Code	1*	2*	3*	4*	5*	6*
6 Bicep II Magnum	1.67 qt/a	A	0 -	0 -	0 -	74 -	74 -	25 -
Shieldex	1 oz/a	B						
Atrazine	1 qt/a	B						
Liberty	32 oz/a	B						
COC	0.6 qt/a	B						
AMSOL	1.5 qt/a	B						
LSD P=.05						18.1	18.1	24.3
Standard Deviation			0.0	0.0	0.0	12.0	12.0	16.1
CV			0.0	0.0	0.0	15.76	15.76	67.86
Levene's F^						2.091	2.091	0.654
Levene's Prob(F)						0.114	0.114	0.662
Skewness^						-0.1309	-0.1309	-0.4276
Kurtosis^						-0.5668	-0.5668	0.3606
Replicate F			0.000	0.000	0.000	1.050	1.050	6.005
Replicate Prob(F)			1.0000	1.0000	1.0000	0.3993	0.3993	0.0068
Treatment F			0.000	0.000	0.000	0.833	0.833	1.222
Treatment Prob(F)			1.0000	1.0000	1.0000	0.5463	0.5463	0.3463

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Pest Type	W Weed	W Weed						
Pest Code	CHEAL	AMARE						
Pest Name	common lambsqua	Redroot pigweed						
Crop Type, Code					C ZEAMX	C ZEAMX	C ZEAMX	
Crop Name					Corn	Corn	Corn	
Rating Date	Jun-4-2021	Jun-4-2021			Jun-14-2021	Jun-23-2021	Jun-23-2021	
Rating Type	CONTRO	CONTRO			PHYGEN	PHYSTU	PHYCHL	
Rating Unit/Min/Max	% 0 100	% 0 100			% 0 100	% 0 100	% 0 100	
Number of Subsamples	1	1			1	1	1	
Data Entry Date	Jun-24-2021	Jun-24-2021			Jun-24-2021	Jun-24-2021	Jun-24-2021	
Days After First/Last Applic.	37 37	37 37			47 8	56 17	56 17	
Trt-Eval Interval					8 DA-B	17 DA-B		
Days After Emergence	21 DE-1	21 DE-1			31 DE-1	40 DE-1	40 DE-1	
Number of Decimals	0	0			0	0	0	

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	7*	8*	9*	10*	11*
1	Bicep II Magnum	1.67	qt/a	A	68 -	100 -	0 -	0 -	0 -
2	Bicep II Magnum	1.67	qt/a	A	73 -	100 -	0 -	0 -	0 -
	Shieldex	1	oz/a	B					
	Atrazine	1	qt/a	B					
	COC	0.6	qt/a	B					
	AMSOL	1.5	qt/a	B					
3	Bicep II Magnum	1.67	qt/a	A	89 -	100 -	0 -	0 -	0 -
	Impact	0.75	oz/a	B					
	Atrazine	1	qt/a	B					
	COC	0.6	qt/a	B					
	AMSOL	1.5	qt/a	B					
4	Bicep II Magnum	1.67	qt/a	A	68 -	100 -	0 -	0 -	0 -
	Laudis	3	oz/a	B					
	Atrazine	1	qt/a	B					
	COC	0.6	qt/a	B					
	AMSOL	1.5	qt/a	B					
5	Bicep II Magnum	1.67	qt/a	A	83 -	100 -	0 -	0 -	0 -
	Shieldex	1	oz/a	B					
	Atrazine	1	qt/a	B					
	Roundup Powermax	30	oz/a	B					
	AMSOL	1.5	qt/a	B					

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Pest Type	W Weed	W Weed						
Pest Code	CHEAL	AMARE						
Pest Name	common Redroot pigweed							
Crop Type, Code	lambsqau>		C ZEAMX	C ZEAMX	C ZEAMX			
Crop Name			Corn	Corn	Corn			
Rating Date	Jun-4-2021	Jun-4-2021	Jun-14-2021	Jun-23-2021	Jun-23-2021			
Rating Type	CONTRO	CONTRO	PHYGEN	PHYSTU	PHYCHL			
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100			
Number of Subsamples	1	1	1	1	1			
Data Entry Date	Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021			
Days After First/Last Applic.	37 37	37 37	47 8	56 17	56 17			
Trt-Eval Interval			8 DA-B	17 DA-B				
Days After Emergence	21 DE-1	21 DE-1	31 DE-1	40 DE-1	40 DE-1			
Number of Decimals	0	0	0	0	0			
Trt Treatment	Other	Other	Appl	7*	8*	9*	10*	11*
No. Name	Rate	Rate	Unit Code					
6 Bicep II Magnum	1.67 qt/a		A	73 -	100 -	0 -	0 -	0 -
Shieldex	1 oz/a		B					
Atrazine	1 qt/a		B					
Liberty	32 oz/a		B					
COC	0.6 qt/a		B					
AMSOL	1.5 qt/a		B					
LSD P=.05		22.3						
Standard Deviation		14.8		0.0	0.0	0.0	0.0	0.0
CV		19.64		0.0	0.0	0.0	0.0	0.0
Levene's F^		0.38		.	.	.	.	.
Levene's Prob(F)		0.856		.	.	.	.	.
Skewness^		-0.086		.	.	.	.	.
Kurtosis^		-0.5422		.	.	.	.	.
Replicate F		1.099		0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)		0.3801		1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F		1.356		0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)		0.2949		1.0000	1.0000	1.0000	1.0000	1.0000

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Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	ECHCG	AMBTR	CHEAL				
Pest Name	Giant foxtail	Common barnyard>	Giant ragweed	common lambsqua>				
Crop Type, Code	C ZEAMX							
Crop Name	Corn							
Rating Date	Jun-23-2021	Jun-23-2021	Jun-23-2021	Jun-23-2021				
Rating Type	PHYNEC	CONTRO	CONTRO	CONTRO				
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100				
Number of Subsamples	1	1	1	1				
Data Entry Date	Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021				
Days After First/Last Applic.	56 17	56 17	56 17	56 17				
Trt-Eval Interval	17 DA-B							
Days After Emergence	40 DE-1	40 DE-1	40 DE-1	40 DE-1				
Number of Decimals	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate Unit Code	12*	13*	14* dAA	15*	16*
1	Bicep II Magnum	1.67 qt/a	A	0 -	50 c	53 c	30	40 b
2	Bicep II Magnum	1.67 qt/a	A	0 -	99 a	100 a	96 -	100 a
	Shieldex	1 oz/a	B					
	Atrazine	1 qt/a	B					
	COC	0.6 qt/a	B					
	AMSOL	1.5 qt/a	B					
3	Bicep II Magnum	1.67 qt/a	A	0 -	100 a	100 a	89 -	100 a
	Impact	0.75 oz/a	B					
	Atrazine	1 qt/a	B					
	COC	0.6 qt/a	B					
	AMSOL	1.5 qt/a	B					
4	Bicep II Magnum	1.67 qt/a	A	0 -	89 b	89 b	96 -	100 a
	Laudis	3 oz/a	B					
	Atrazine	1 qt/a	B					
	COC	0.6 qt/a	B					
	AMSOL	1.5 qt/a	B					
5	Bicep II Magnum	1.67 qt/a	A	0 -	100 a	100 a	96 -	100 a
	Shieldex	1 oz/a	B					
	Atrazine	1 qt/a	B					
	Roundup Powermax	30 oz/a	B					
	AMSOL	1.5 qt/a	B					

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Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	ECHCG	AMBTR	CHEAL			
Pest Name	Giant foxtail	Common Giant ragweed barnyard>		common lambsqua>			
Crop Type, Code	C ZEAMX						
Crop Name	Corn						
Rating Date	Jun-23-2021	Jun-23-2021	Jun-23-2021	Jun-23-2021			
Rating Type	PHYNEC	CONTRO	CONTRO	CONTRO			
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100			
Number of Subsamples	1	1	1	1			
Data Entry Date	Jun-24-2021	Jun-24-2021	Jun-24-2021	Jun-24-2021			
Days After First/Last Applic.	56 17	56 17	56 17	56 17			
Trt-Eval Interval	17 DA-B						
Days After Emergence	40 DE-1	40 DE-1	40 DE-1	40 DE-1			
Number of Decimals	0	0	0	0			
Trt Treatment No. Name	Other Rate	Other Rate Unit Code	12*	13*	14* dAA	15*	16*
6 Bicep II Magnum	1.67 qt/a	A	0 -	100 a	100 a	97 -	100 a
Shieldex	1 oz/a	B					
Atrazine	1 qt/a	B					
Liberty	32 oz/a	B					
COC	0.6 qt/a	B					
AMSOL	1.5 qt/a	B					
LSD P=.05				7.5	1.6 - 12.6	7.9	11.2
Standard Deviation			0.0	5.0	4.9t	5.1	7.4
CV			0.0	5.55	6.23t	5.41	8.27
Levene's F^			.	2.382	0.875	0.361	13.311
Levene's Prob(F)			.	0.08	0.517	0.832	0.00*
Skewness^			.	0.1927	0.6681	-0.0278	-0.0208
Kurtosis^			.	3.7272*	1.529	-0.4401	3.7163*
Replicate F			0.000	0.029	0.276	2.460	1.048
Replicate Prob(F)			1.0000	0.9930	0.8419	0.1129	0.4000
Treatment F			0.000	63.787	50.192	1.687	43.275
Treatment Prob(F)			1.0000	0.0001	0.0001	0.2173	0.0001

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Pest Type	W Weed	W Weed						W Weed	
Pest Code	AMARE	ABUTH						SETFA	
Pest Name	Redroot pigweed	velvetleaf						Giant foxtail	
Crop Type, Code					C ZEAMX	C ZEAMX	C ZEAMX		
Crop Name					Corn	Corn	Corn		
Rating Date	Jun-23-2021	Jun-23-2021			Jul-7-2021	Jul-7-2021	Jul-7-2021	Jul-7-2021	
Rating Type	CONTRO	CONTRO			PHYSTU	PHYCHL	PHYNEC	CONTRO	
Rating Unit/Min/Max	% 0 100 %	0 100 %			0 100 %	0 100 %	0 100 %	0 100	
Number of Subsamples	1	1			1	1	1	1	
Data Entry Date	Jun-24-2021	Jun-24-2021			Jul-12-2021	Jul-12-2021	Jul-12-2021	Jul-12-2021	
Days After First/Last Applic.	56 17	56 17			70 31	70 31	70 31	70 31	
Trt-Eval Interval					31 DA-B	31 DA-B	31 DA-B		
Days After Emergence	40 DE-1	40 DE-1			54 DE-1	54 DE-1	54 DE-1	54 DE-1	
Number of Decimals	0	0			0	0	0	0	
Trt Treatment	Other	Other	Appl	17*	18*	19*	20*	21*	22*
No. Name	Rate	Rate	Unit Code						dAA
1 Bicep II Magnum	1.67 qt/a		A	98	40	0 -	0 -	0 -	27 b
2 Bicep II Magnum	1.67 qt/a		A	100 -	100 -	0 -	0 -	0 -	98 a
Shieldex	1 oz/a		B						
Atrazine	1 qt/a		B						
COC	0.6 qt/a		B						
AMSOL	1.5 qt/a		B						
3 Bicep II Magnum	1.67 qt/a		A	100 -	100 -	0 -	0 -	0 -	99 a
Impact	0.75 oz/a		B						
Atrazine	1 qt/a		B						
COC	0.6 qt/a		B						
AMSOL	1.5 qt/a		B						
4 Bicep II Magnum	1.67 qt/a		A	100 -	100 -	0 -	0 -	0 -	88 a
Laudis	3 oz/a		B						
Atrazine	1 qt/a		B						
COC	0.6 qt/a		B						
AMSOL	1.5 qt/a		B						
5 Bicep II Magnum	1.67 qt/a		A	100 -	100 -	0 -	0 -	0 -	100 a
Shieldex	1 oz/a		B						
Atrazine	1 qt/a		B						
Roundup Powermax	30 oz/a		B						
AMSOL	1.5 qt/a		B						

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Shieldex Crop Safety and Weed Control
 Location: Western Branch Big E Trial Year: 2021

Trial ID: 21SHIELDEX
 Protocol ID: H-SHLDEXVIS2021 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director: Anthony Dobbels
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	ECHCG	AMBTR	CHEAL	AMARE	ABUTH					
Pest Name	Common barnyard>	Giant ragweed	common lambsqua>	Redroot pigweed	velvetleaf					
Crop Type, Code										
Crop Name										
Rating Date	Jul-7-2021	Jul-7-2021	Jul-7-2021	Jul-7-2021	Jul-7-2021					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTROL					
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100					
Number of Subsamples	1	1	1	1	1 1					
Data Entry Date	Jul-12-2021	Jul-12-2021	Jul-12-2021	Jul-12-2021	Jul-12-2021					
Days After First/Last Applic.	70 31	70 31	70 31	70 31	70 31					
Trt-Eval Interval										
Days After Emergence	54 DE-1	54 DE-1	54 DE-1	54 DE-1	54 DE-1					
Number of Decimals	0	0	0	0	0					
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	23* dAA	24* dAA	25*	26*	27*	28
1	Bicep II Magnum	1.67 qt/a		A	27 c	40 b	38	100 -	55	
2	Bicep II Magnum	1.67 qt/a		A	94 ab	95 a	100 -	100 -	100 -	
	Shieldex	1 oz/a		B						
	Atrazine	1 qt/a		B						
	COC	0.6 qt/a		B						
	AMSOL	1.5 qt/a		B						
3	Bicep II Magnum	1.67 qt/a		A	99 a	93 a	100 -	100 -	100 -	
	Impact	0.75 oz/a		B						
	Atrazine	1 qt/a		B						
	COC	0.6 qt/a		B						
	AMSOL	1.5 qt/a		B						
4	Bicep II Magnum	1.67 qt/a		A	86 b	95 a	100 -	100 -	100 -	
	Laudis	3 oz/a		B						
	Atrazine	1 qt/a		B						
	COC	0.6 qt/a		B						
	AMSOL	1.5 qt/a		B						
5	Bicep II Magnum	1.67 qt/a		A	100 a	97 a	100 -	100 -	100 -	
	Shieldex	1 oz/a		B						
	Atrazine	1 qt/a		B						
	Roundup Powermax	30 oz/a		B						
	AMSOL	1.5 qt/a		B						

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Shieldex Crop Safety and Weed Control

Trial ID: 21SHIELDDEX Location: Western Branch Big E Trial Year: 2021
 Protocol ID: H-SHLDEXVIS2021 Investigator (Creator): Dr. Mark M. Loux
 Project ID: Study Director: Anthony Dobbels
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	ECHCG	AMBTR	CHEAL	AMARE	ABUTH				
Pest Name	Common barnyard>	Giant ragweed	common lambsqua>	Redroot pigweed	velvetleaf				
Crop Type, Code									
Crop Name									
Rating Date	Jul-7-2021	Jul-7-2021	Jul-7-2021	Jul-7-2021	Jul-7-2021				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTROL				
Rating Unit/Min/Max	% 0 100	% 0 100	% 0 100	% 0 100	% 0 100				
Number of Subsamples	1	1	1	1	1				
Data Entry Date	Jul-12-2021	Jul-12-2021	Jul-12-2021	Jul-12-2021	Jul-12-2021				
Days After First/Last Applic.	70 31	70 31	70 31	70 31	70 31				
Trt-Eval Interval									
Days After Emergence	54 DE-1	54 DE-1	54 DE-1	54 DE-1	54 DE-1				
Number of Decimals	0	0	0	0	0				
Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	23* dAA	24* dAA	25*	26*	27*	28
6 Bicep II Magnum	1.67 qt/a		A	99 a	98 a	100 -	100 -	100 -	
Shieldex	1 oz/a		B						
Atrazine	1 qt/a		B						
Liberty	32 oz/a		B						
COC	0.6 qt/a		B						
AMSOL	1.5 qt/a		B						
LSD P=.05				4.9 - 18.1	7.2 - 17.6	.	.	.	.
Standard Deviation				7.2t	6.7t	0.0	0.0	0.0	0.0
CV				10.02t	9.34t	0.0	0.0	0.0	0.0
Levene's F^				1.071	0.484	.	.	.	.
Levene's Prob(F)				0.409	0.784	.	.	.	.
Skewness^				0.3902	0.2116	.	.	.	.
Kurtosis^				-0.2884	0.6908	.	.	.	.
Replicate F				0.274	8.673	0.000	0.000	0.000	0.000
Replicate Prob(F)				0.8430	0.0014	1.0000	1.0000	1.0000	1.0000
Treatment F				34.982	23.521	0.000	0.000	0.000	0.000
Treatment Prob(F)				0.0001	0.0001	1.0000	1.0000	1.0000	1.0000

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Shieldex Crop Safety and Weed Control

Trial ID: 21SHIELDDEX Location: Western Branch Big E Trial Year: 2021
Protocol ID: H-SHLDEXVIS2021 Investigator (Creator): Dr. Mark M. Loux
Project ID: Study Director: Anthony Dobbels
Sponsor Contact:

Pest Type

W, Weed = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, Giant foxtail = US
ECHCG, Echinochloa crus-galli, Common barnyard grass = US
AMBTR, Ambrosia trifida, Giant ragweed = US
CHEAL, Chenopodium album, common lambsquarters = US
AMARE, Amaranthus retroflexus, Redroot pigweed = US
ABUTH, Abutilon theophrasti, velvetleaf = US

Crop Type, Code

C = EPPPO species (Bayer) codes
ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

PHYSTU = phytotoxicity - stunting
PHYCHL = phytotoxicity - chlorosis
PHYNEC = phytotoxicity - necrosis /burn
CONTRO = control / burndown or knockdown
PHYGEN = phytotoxicity - general / injury

Rating Unit/Min/Max

%, 0, 100 = percent