

University Showcase treatments
 Trial ID: 18 SHOWCASE
 Protocol ID: 18 SHOWCASE
 Project ID: H050SMAD/SULFSOY

The Ohio State University

Location: Trial Year: 2018
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

General Trial Information

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Discipline: H herbicide
Trial Status: E established
Initiation Date: May-11-2018

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 °: 39.85704 N
Longitude of LL Corner °: 83.67013 W
Altitude of LL Corner, Unit: 1075.00 FT

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Cooperator: Alice Harris
Organization: BASF

E-mail: alice.harris@basf.com

Cooperator/Landowner

Crop 1: GLXMA Glycine max
Variety: Pioneer 36T36X
Description: Pioneer

Crop Description
 Soybean
BBCH Scale: BSOY

Planting Rate, Unit: 162000 S/A
Depth, Unit: 1.25 IN
Row Spacing, Unit: 15 IN
Soil Temperature, Unit: 60 F
Soil Moisture: NORMAL normal, adequate
Seed Bed: MEDIUM medium

Planting Date: May-11-2018
Planting Method: PLANTD planted
Planting Equipment: FE field equipment
Emergence Date: May-17-2018

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 barnyard grass

Pest 3 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 4 Type: W **Code:** ABUTH *Abutilon theophrasti*
Common Name: velvetleaf

Pest 5 Type: W **Code:** SIDSP *Sida spinosa*
Common Name: Prickly sida

Pest 6 Type: W **Code:** AMARE *Amaranthus retroflexus*
Common Name: Redroot pigweed

Pest 7 Type: W **Code:** CHEAL *Chenopodium album*
Common Name: common lambsquarters

Pest 8 Type: W **Code:** IPOHE *Ipomoea hederacea*
Common Name: ivy-leaf morning glory

Pest 9 Type: W **Code:** XANST *Xanthium strumarium*
Common Name: Common cocklebur

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT² **Treatments:** 16
Replications: 4

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: CONTIL conventional-till
Study Design: RACOBL Randomized Complete Block (RCB)

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No. Previous Crop Year
 1. Corn 2017

Soil Description

Description Name: BIG E
% Sand: 45 **% OM:** 3.1 **Texture:** L loam
% Silt: 45 **pH:** 6.6 **Soil Name:** KOKOMO SILTY CLAY LOAM
% Clay: 11 **CEC:** 15.2 **Fert. Level:** G good
Soil Drainage: G good

Application Description

	A	B	C	D
Application Date:	May-11-2018	May-29-2018	Jun-6-2018	Jun-28-2018
Appl. Start Time:	7:30 AM	11:00 AM	11:00 AM	9:55 AM
Appl. Stop Time:	7:45 AM	11:10 AM	11:30 AM	10:05 AM
Interval to Prev. Appl., Unit:		18 DAYS	8 DAYS	22 DAYS
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V2-V3	28DAPL	LPOST
Application Placement:	BROSOL	BROFOL	BROFOL	BROFOL
Applied By:	Boden,Bruce	Reeb	Fisher,Reeb	Reeb
Air Temperature, Unit:	56 F	81 F	71 F	78 F
% Relative Humidity:	90	63	55	79
Wind Velocity, Unit:	7 MPH	9 MPH	6 MPH	2 MPH
Wind Direction:	E	SE	S	NW
Dew Presence (Y/N):	N no	N no	N no	Y yes
Soil Temperature, Unit:	60 F	80 F	71 F	70 F
Soil Moisture:	NORMAL	SLIDRY	NORMAL	SLIWET
% Cloud Cover:	20	40	90	10
Next Moisture Occurred On:	May-15-2018	May-30-2018	Jun-8-2018	Jul-2-2018
Time to Next Moisture, Unit:	4 DAY	1 DAY	2 DAY	4 YR
Moisture 1 Week after Appl.:	0.43 IN	0.60 IN	1.62 IN	0.76 IN

Crop Stage At Each Application

	A		B		C		D	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:			BBCH		BBCH		BBCH	
Stage Majority, Percent:			12	100	13	100	60	100
Height, Unit:			4	IN	7	IN	17	IN
Height Minimum, Maximum:			2	4	7	7.5	15	19

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Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:	15 100	14 100	17 100	
Height, Unit:	2 IN	8 IN	11 IN	
Height Minimum, Maximum:	2 4	3 8	8 15	
Density, Unit:			181 PLA/m2	
Pest 2 Code, Type, Scale:	ECHCG W	ECHCG W	ECHCG W	ECHCG W
Stage Majority, Percent:	15 100	25 100	17 100	
Height, Unit:	2 IN	6 IN	19 IN	
Height Minimum, Maximum:	2 4	6 8	18 20	
Density, Unit:			131 PLA/m2	
Pest 3 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:	16 100	18 100	19 100	
Height, Unit:	4 IN	10 IN	10 IN	
Height Minimum, Maximum:	3 8	8 12	2 18	
Density, Unit:			16 PLA/m2	
Pest 4 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:	13 100	14 100		
Height, Unit:	2 IN	5 IN		
Height Minimum, Maximum:	1 3	4 7		
Pest 5 Code, Type, Scale:	SIDSP W	SIDSP W	SIDSP W	SIDSP W
Stage Majority, Percent:	11 100			16 100
Height, Unit:	0.75 IN			2.5 IN
Height Minimum, Maximum:	0.5 2			2 3
Pest 6 Code, Type, Scale:	AMARE W	AMARE W	AMARE W	AMARE W
Stage Majority, Percent:				18 100
Height, Unit:				5 IN
Height Minimum, Maximum:				4 6
Pest 7 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W	CHEAL W
Stage Majority, Percent:			19 100	
Height, Unit:			5 IN	
Height Minimum, Maximum:			3 5	
Density, Unit:			2 PLA/m2	
Pest 8 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W	IPOHE W
Stage Majority, Percent:			16 100	18 100
Height, Unit:			3 IN	4 IN
Height Minimum, Maximum:			3 5	3 5
Pest 9 Code, Type, Scale:	XANST W	XANST W	XANST W	XANST W
Stage Majority, Percent:			16 100	
Height, Unit:			6 IN	
Height Minimum, Maximum:			4 6	

Application Equipment

	A	B	C	D
Appl. Equipment:	10' BACKPACK	10' BACKPACK	10' BACKPACK	10' BACKPACK
Equipment Type:	BACCAI	BACCAI	BACCAI	BACCAI
Operation Pressure, Unit:	46 PSI	46 PSI	46 PSI	44 PSI
Nozzle Type:	TTI	TTI	TTI	AIXR
Nozzle Size:	11015	11015	11015	11015
Nozzle Spacing, Unit:	18 IN	18 IN	18 IN	18 IN
Nozzles/Row:	4	4	4	6
Boom Length, Unit:	10 FT	10 FT	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	15 gal/ac	15 gal/ac	15 gal/ac	15 gal/ac
Mix Size, Unit:	2 L	2 L	2 L	2 L
Propellant:	COMCO2	COMCO2	COMCO2	COMCO2

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Pest Type	O Other	W Weed	W Weed	W Weed	W Weed
Pest Code		SETFA	ECHCG	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>
Rating Date	May-31-2018	May-31-2018	May-31-2018	May-31-2018	May-31-2018
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	20 2	20 2	20 2	20 2	20 2
Plant-Eval Interval	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	14 DE-1	14 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*
1	Boundary	1.8 pt/a		A	1.9 -	77.5 a	75.0 a	32.5 -	92.6 -
	Flexstar GT 3.5	3.5 pt/a		C					
	MSO	0.6 qt/a		C					
	N-pak ams	1.5 qt/a		C					
2	Boundary	1.8 pt/a		A	1.9 -	86.5 a	86.5 a	17.5 -	91.8 -
	Prefix	2 pt/a		C					
	Roundup Power Max	26 oz/a		C					
	N-pak ams	1.5 qt/a		C					
3	Boundary	1.8 pt/a		A	1.4 -	78.5 a	78.5 a	17.5 -	92.5 -
	Tavium	56.5 oz/a		C					
	Roundup Power Max	26 oz/a		C					
	Class Act Ridion	19.2 oz/a		C					
4	Boundary	1.8 pt/a		A	0.3 -	87.8 a	87.8 a	30.0 -	90.9 -
	Prefix	2 pt/a		C					
	Xtendimax	22 oz/a		C					
	Roundup Power Max	26 oz/a		C					
	Class Act Ridion	19.2 oz/a		C					
5	Authority MTZ	14 oz/a		A	0.0 -	15.0 b	15.0 b	20.0 -	99.4 -
	Roundup Power Max	32 oz/a		B					
	N-pak ams	1.5 qt/a		B					
6	Authority First	6.4 oz/a		A	1.4 -	30.0 b	30.0 b	52.5 -	100.0 -
	Roundup Power Max	32 oz/a		B					
	N-pak ams	1.5 qt/a		B					
7	Authority XL	4 oz/a		A	0.0 -	12.5 b	12.5 b	45.0 -	100.0 -
	Roundup Power Max	32 oz/a		B					
	N-pak ams	1.5 qt/a		B					
8	Authority First	6.4 oz/a		A	0.6 -	35.0 b	35.0 b	52.5 -	99.8 -
	Xtendimax	22 oz/a		B					
	Roundup Power Max	32 oz/a		B					
	Class Act Ridion	19.2 oz/a		B					
	Roundup Power Max	32 oz/a		D					
	N-pak ams	1.5 qt/a		D					
9	Authority XL	4 oz/a		A	0.6 -	15.0 b	15.0 b	25.0 -	100.0 -
	Xtendimax	22 oz/a		B					
	Roundup Power Max	32 oz/a		B					
	Class Act Ridion	19.2 oz/a		B					
	Roundup Power Max	32 oz/a		D					
	N-pak ams	1.5 qt/a		D					
10	Authority MTZ	14 oz/a		A	0.4 -	15.0 b	15.0 b	15.0 -	99.7 -
	Anthem Maxx	3 oz/a		B					
	Xtendimax	22 oz/a		B					
	Roundup Power Max	32 oz/a		B					
	Class Act Ridion	19.2 oz/a		B					
	Roundup Power Max	32 oz/a		D					
	N-pak ams	1.5 qt/a		D					
11	Zidua Pro	6 oz/a		A	1.9 -	71.3 a	71.3 a	20.0 -	99.2 -
	Engenia	12.8 oz/a		B					
	Roundup Power Max	32 oz/a		B					
	Zidua WG	1.25 oz/a		B					
	Class Act Ridion	19.2 oz/a		B					

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Pest Name		Giant foxtail	Common barnyar>	Giant ragweed	common lambsqu>			
Rating Date	May-31-2018	May-31-2018	May-31-2018	May-31-2018	May-31-2018			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	20 2	20 2	20 2	20 2	20 2			
Plant-Eval Interval	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1			
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	14 DE-1	14 DE-1			
Trt Treatment	Other	Other	Appl					
No. Name	Rate	Rate	Unit Code	1*	2*			
				3*	4*			
				5*				
12 Valor XLT @ 4 oz			A	2.2 -	40.0 b	40.0 b	45.0 -	99.4 -
Valor SX	2.35 oz/a		A					
Classic	1.65 oz/a		A					
Roundup Power Max	32 oz/a		B					
N-pak ams	1.5 qt/a		B					
13 Sonic			A	0.9 -	27.5 b	27.5 b	55.0 -	93.7 -
Metribuzin	.000019 oz ai/unit		A					
Durango DMA	1 qt/a		C					
N-pak ams	1.5 qt/a		C					
14 Envive @ 3.5oz			A	1.1 -	37.5 b	37.5 b	30.0 -	100.0 -
Classic	1.28 oz/a		A					
Thifensulfuron	0.208 oz/a		A					
Valor SX	1.96 oz/a		A					
Abundit Edge	1 qt/a		C					
N-pak ams	1.5 qt/a		C					
15 Trivence @ 8oz			A	2.8 -	42.5 b	42.5 b	42.5 -	100.0 -
Classic	1.25 oz/a		A					
Metribuzin	4.76 oz/a		A					
Valor SX	2 oz/a		A					
Abundit Edge	1 qt/a		C					
N-pak ams	1.5 qt/a		C					
16 Sonic			A	0.0 -	12.5 b	12.5 b	47.5 -	100.0 -
Everprex	1 qt/a		B					
Abundit Edge	1 qt/a		B					
N-pak ams	1.5 qt/a		B					
LSD P=.05				1.93 - 2.23	24.12	24.40	28.74	7.17 - 8.94
Standard Deviation				0.28t	16.93	17.13	20.18	10.91t
CV				98.22t	39.61	40.22	58.97	13.03t
Levene's F				0.988	0.335	0.314	0.35	3.462
Levene's Prob(F)				0.482	0.988	0.991	0.985	0.001*
Skewness				0.6481*	0.3274	0.3422	0.381	-1.9191*
Kurtosis				-1.0827	-1.0207	-0.9983	-0.351	2.6996*
Replicate F				7.479	2.505	2.587	3.361	2.323
Replicate Prob(F)				0.0004	0.0711	0.0647	0.0268	0.0877
Treatment F				1.955	11.038	10.632	1.987	1.681
Treatment Prob(F)				0.0423	0.0001	0.0001	0.0386	0.0900

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Pest Type	W Weed	W Weed	O Other	W Weed	W Weed	W Weed
Pest Code	AMARE	ABUTH		SETFA	ECHCG	AMBTR
Pest Scientific Name	Amaranthus ret>	Abutilon theop>		Setaria faberi	Echinochloa cr>	Ambrosia trifi>
Pest Name	Redroot pigweed	velvetleaf		Giant foxtail	Common barnyar>	Giant ragweed
Rating Date	May-31-2018	May-31-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jun-21-2018
Rating Type	CONTRO	CONTRO	PHYNEC	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	20 2	20 2	41 15	41 15	41 15	41 15
Plant-Eval Interval	20 DP-1	20 DP-1	41 DP-1	41 DP-1	41 DP-1	41 DP-1
Days After Emergence	14 DE-1	14 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	6*	7*	8*	9*	10*	11*
1	Boundary	1.8 pt/a		A	100.0 -	97.1 -	5.3 ab	99.5 a	90.4 abc	81.3 a-d
	Flexstar GT 3.5	3.5 pt/a		C						
	MSO	0.6 qt/a		C						
	N-pak ams	1.5 qt/a		C						
2	Boundary	1.8 pt/a		A	98.8 -	97.1 -	7.5 a	100.0 a	98.7 a	78.8 a-d
	Prefix	2 pt/a		C						
	Roundup Power Max	26 oz/a		C						
	N-pak ams	1.5 qt/a		C						
3	Boundary	1.8 pt/a		A	100.0 -	97.1 -	3.3 bc	99.9 a	97.0 ab	93.8 ab
	Tavium	56.5 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
4	Boundary	1.8 pt/a		A	100.0 -	97.1 -	7.0 a	100.0 a	98.7 a	100.0 a
	Prefix	2 pt/a		C						
	Xtendimax	22 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
5	Authority MTZ	14 oz/a		A	100.0 -	90.7 -	0.0 c	42.4 c	42.4 d	62.5 cd
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
6	Authority First	6.4 oz/a		A	100.0 -	100.0 -	0.0 c	42.4 c	42.4 d	56.3 d
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
7	Authority XL	4 oz/a		A	100.0 -	99.8 -	0.0 c	58.0 c	55.1 d	67.5 bcd
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
8	Authority First	6.4 oz/a		A	100.0 -	99.8 -	0.0 c	67.6 c	67.6 cd	86.3 a-d
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
9	Authority XL	4 oz/a		A	98.8 -	100.0 -	0.0 c	52.5 c	52.5 d	74.5 a-d
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
10	Authority MTZ	14 oz/a		A	97.5 -	100.0 -	0.8 c	92.2 ab	90.2 abc	76.3 a-d
	Anthem Maxx	3 oz/a		B						
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
11	Zidua Pro	6 oz/a		A	100.0 -	100.0 -	1.8 bc	86.7 b	88.4 abc	75.0 a-d
	Engenia	12.8 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Zidua WG	1.25 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						

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Pest Scientific Name	Amaranthus ret>	Abutilon theop>		Setaria faberi	Echinochloa cr>	Ambrosia trifi>				
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Rating Type	CONTRO	CONTRO	PHYNEC	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.	20 2	20 2	41 15	41 15	41 15	41 15				
Plant-Eval Interval	20 DP-1	20 DP-1	41 DP-1	41 DP-1	41 DP-1	41 DP-1				
Days After Emergence	14 DE-1	14 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1				
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	6*	7*	8*	9*	10*	11*
12	Valor XLT @ 4 oz			A	100.0 -	99.4 -	0.0 c	88.1 b	39.8 d	60.0 cd
	Valor SX	2.35 oz/a		A						
	Classic	1.65 oz/a		A						
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
13	Sonic	4 oz/a		A	97.5 -	97.1 -	2.8 bc	100.0 a	89.3 abc	96.8 ab
	Metribuzin	.000019 oz ai/unit		A						
	Durango DMA	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
14	Envive @ 3.5oz			A	100.0 -	100.0 -	3.5 bc	100.0 a	79.1 bc	84.5 a-d
	Classic	1.28 oz/a		A						
	Thifensulfuron	0.208 oz/a		A						
	Valor SX	1.96 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
15	Trivence @ 8oz			A	100.0 -	100.0 -	2.0 bc	100.0 a	84.5 abc	90.0 abc
	Classic	1.25 oz/a		A						
	Metribuzin	4.76 oz/a		A						
	Valor SX	2 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
16	Sonic	4 oz/a		A	97.0 -	100.0 -	2.5 bc	100.0 a	94.7 ab	75.0 a-d
	Everprex	1 qt/a		B						
	Abundit Edge	1 qt/a		B						
	N-pak ams	1.5 qt/a		B						
	LSD P=.05				3.38	7.15 - 9.11	2.59	4.00 - 19.98	8.34 - 19.91	17.62
	Standard Deviation				2.37	10.89t	1.82	8.10t	8.06t	12.37
	CV				2.39	12.78t	80.17	11.19t	12.8t	15.73
	Levene's F				0.768	0.626	3.23	4.071	0.897	0.878
	Levene's Prob(F)				0.704	0.838	0.001*	0.001*	0.572	0.591
	Skewness				-3.7827*	-2.5132*	1.2556*	-0.6372*	-0.0111	-0.241
	Kurtosis				13.6376*	4.9398*	0.9299	-1.1606	-0.8147	-1.1256
	Replicate F				2.533	5.455	0.838	2.261	9.604	0.494
	Replicate Prob(F)				0.0689	0.0028	0.4800	0.0943	0.0001	0.6885
	Treatment F				0.842	1.043	7.674	23.629	15.290	4.396
	Treatment Prob(F)				0.6286	0.4325	0.0001	0.0001	0.0001	0.0001

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The Ohio State University

University Showcase treatments
 Trial ID: 18 SHOWCASE
 Protocol ID: 18 SHOWCASE
 Project ID: H050SMAD/SULFSOY

Location: Trial Year: 2018
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

Pest Type	W Weed	W Weed	W Weed	O Other	W Weed	W Weed
Pest Code	CHEAL	AMARE	ABUTH		SETFA	ECHCG
Pest Scientific Name	Chenopodium al-	Amaranthus ret-	Abutilon theop-		Setaria faberi	Echinochloa cr-
Pest Name	common lambsqu>	Redroot pigweed	velvetleaf		Giant foxtail	Common barnyar>
Rating Date	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jul-2-2018	Jul-2-2018	Jul-2-2018
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	41 15	41 15	41 15	52 4	52 4	52 4
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	52 DP-1	52 DP-1	52 DP-1
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	46 DE-1	46 DE-1	46 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	12*	13*	14*	15*	16*	17*
1	Boundary	1.8 pt/a		A	100.0 -	100.0 -	100.0 a	0.0 -	99.4 ab	96.2 abc
	Flexstar GT 3.5	3.5 pt/a		C						
	MSO	0.6 qt/a		C						
	N-pak ams	1.5 qt/a		C						
2	Boundary	1.8 pt/a		A	100.0 -	100.0 -	100.0 a	2.0 -	99.9 a	99.9 a
	Prefix	2 pt/a		C						
	Roundup Power Max	26 oz/a		C						
	N-pak ams	1.5 qt/a		C						
3	Boundary	1.8 pt/a		A	100.0 -	100.0 -	99.5 a	0.2 -	100.0 a	99.8 a
	Tavium	56.5 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
4	Boundary	1.8 pt/a		A	100.0 -	100.0 -	98.8 a	2.0 -	98.7 ab	98.7 ab
	Prefix	2 pt/a		C						
	Xtendimax	22 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
5	Authority MTZ	14 oz/a		A	100.0 -	100.0 -	100.0 a	0.0 -	66.4 d	57.6 fg
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
6	Authority First	6.4 oz/a		A	100.0 -	100.0 -	100.0 a	0.0 -	63.0 d	60.2 efg
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
7	Authority XL	4 oz/a		A	100.0 -	100.0 -	95.0 b	0.0 -	70.2 cd	70.2 d-g
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
8	Authority First	6.4 oz/a		A	100.0 -	100.0 -	100.0 a	0.0 -	96.2 ab	85.8 a-f
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
9	Authority XL	4 oz/a		A	100.0 -	97.5 -	100.0 a	0.2 -	87.4 bc	75.5 c-g
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
10	Authority MTZ	14 oz/a		A	100.0 -	98.8 -	100.0 a	0.0 -	98.7 ab	97.7 ab
	Anthem Maxx	3 oz/a		B						
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
11	Zidua Pro	6 oz/a		A	100.0 -	100.0 -	100.0 a	0.1 -	98.7 ab	98.7 ab
	Engenia	12.8 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Zidua WG	1.25 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						

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The Ohio State University

University Showcase treatments
 Trial ID: 18 SHOWCASE
 Protocol ID: 18 SHOWCASE
 Project ID: H050SMAD/SULFSOY

Location: Trial Year: 2018
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

Pest Type	W Weed	W Weed	W Weed	O Other	W Weed	W Weed				
Pest Code	CHEAL	AMARE	ABUTH		SETFA	ECHCG				
Pest Scientific Name	Chenopodium al-	Amaranthus ret>	Abutilon theop>		Setaria faberi	Echinochloa cr>				
Pest Name	common lambsqu>	Redroot pigweed	velvetleaf		Giant foxtail	Common barnyar>				
Rating Date	Jun-21-2018	Jun-21-2018	Jun-21-2018	Jul-2-2018	Jul-2-2018	Jul-2-2018				
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.	41 15	41 15	41 15	52 4	52 4	52 4				
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	52 DP-1	52 DP-1	52 DP-1				
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	46 DE-1	46 DE-1	46 DE-1				
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Unit Code	12*	13*	14*	15*	16*	17*
12	Valor XLT @ 4 oz			A	99.3 -	99.3 -	98.8 a	0.0 -	69.1 cd	52.6 g
	Valor SX	2.35 oz/a		A						
	Classic	1.65 oz/a		A						
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
13	Sonic			A	100.0 -	100.0 -	100.0 a	1.0 -	98.7 ab	88.1 a-e
	Metribuzin	.000019 oz ai/unit		A						
	Durango DMA	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
14	Envive @ 3.5oz			A	100.0 -	100.0 -	100.0 a	1.6 -	99.6 a	79.0 b-g
	Classic	1.28 oz/a		A						
	Thifensulfuron	0.208 oz/a		A						
	Valor SX	1.96 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
15	Trivence @ 8oz			A	100.0 -	100.0 -	100.0 a	0.3 -	99.9 a	94.8 a-d
	Classic	1.25 oz/a		A						
	Metribuzin	4.76 oz/a		A						
	Valor SX	2 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
16	Sonic			A	99.5 -	100.0 -	100.0 a	0.0 -	99.9 a	94.7 a-d
	Everprex	1 qt/a		B						
	Abundit Edge	1 qt/a		B						
	N-pak ams	1.5 qt/a		B						
	LSD P=.05				0.65	2.02	2.43	1.55 - 1.80	3.55 - 16.93	6.81 - 21.98
	Standard Deviation				0.46	1.42	1.70	3.80t	7.62t	9.29t
	CV				0.46	1.43	1.71	153.05t	9.93t	13.27t
	Levene's F				0.938	0.905	7.704	1.251	1.791	1.512
	Levene's Prob(F)				0.53	0.563	0.001*	0.27	0.064	0.139
	Skewness				-5.8581*	-5.83*	-4.2242*	1.4146*	-0.869*	-0.1503
	Kurtosis				34.5654*	36.335*	17.7946*	0.2078	-0.5391	-1.3181*
	Replicate F				0.678	1.577	1.134	2.038	5.002	1.785
	Replicate Prob(F)				0.5699	0.2080	0.3455	0.1220	0.0044	0.1636
	Treatment F				0.920	0.938	2.239	2.764	13.069	9.096
	Treatment Prob(F)				0.5497	0.5313	0.0189	0.0043	0.0001	0.0001

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The Ohio State University

University Showcase treatments
 Trial ID: 18 SHOWCASE
 Protocol ID: 18 SHOWCASE
 Project ID: H050SMAD/SULFSOY

Location: Trial Year: 2018
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

Pest Type	W Weed	W Weed	W Weed	W Weed	O Other	W Weed
Pest Code	AMBTR	CHEAL	AMARE	ABUTH		SETFA
Pest Scientific Name	Ambrosia trif>	Chenopodium al>	Amaranthus ret>	Abutilon theop>		Setaria faberi
Pest Name	Giant ragweed	common lambsqu>	Redroot pigweed	velvetleaf		Giant foxtail
Rating Date	Jul-2-2018	Jul-2-2018	Jul-2-2018	Jul-2-2018	Jul-30-2018	Jul-30-2018
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	52 4	52 4	52 4	52 4	80 32	80 32
Plant-Eval Interval	52 DP-1	52 DP-1	52 DP-1	52 DP-1	80 DP-1	80 DP-1
Days After Emergence	46 DE-1	46 DE-1	46 DE-1	46 DE-1	74 DE-1	74 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	18*	19*	20*	21*	22*	23*
1	Boundary	1.8 pt/a		A	93.0 ab	100.0 -	100.0 -	100.0 -	0.0 -	99.9 a
	Flexstar GT 3.5	3.5 pt/a		C						
	MSO	0.6 qt/a		C						
	N-pak ams	1.5 qt/a		C						
2	Boundary	1.8 pt/a		A	87.6 abc	100.0 -	100.0 -	100.0 -	0.0 -	97.1 a
	Prefix	2 pt/a		C						
	Roundup Power Max	26 oz/a		C						
	N-pak ams	1.5 qt/a		C						
3	Boundary	1.8 pt/a		A	96.2 a	100.0 -	100.0 -	77.5 -	0.0 -	100.0 a
	Tavium	56.5 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
4	Boundary	1.8 pt/a		A	100.0 a	100.0 -	100.0 -	98.8 -	0.0 -	99.4 a
	Prefix	2 pt/a		C						
	Xtendimax	22 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
5	Authority MTZ	14 oz/a		A	39.1 d	100.0 -	100.0 -	100.0 -	0.0 -	73.4 b
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
6	Authority First	6.4 oz/a		A	37.0 d	100.0 -	100.0 -	100.0 -	0.0 -	71.4 b
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
7	Authority XL	4 oz/a		A	58.0 bcd	100.0 -	100.0 -	100.0 -	0.0 -	75.7 b
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
8	Authority First	6.4 oz/a		A	100.0 a	100.0 -	100.0 -	100.0 -	0.0 -	100.0 a
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
9	Authority XL	4 oz/a		A	93.4 ab	100.0 -	100.0 -	100.0 -	0.0 -	100.0 a
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
10	Authority MTZ	14 oz/a		A	97.4 a	100.0 -	100.0 -	100.0 -	0.0 -	100.0 a
	Anthem Maxx	3 oz/a		B						
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
11	Zidua Pro	6 oz/a		A	78.4 a-d	100.0 -	100.0 -	100.0 -	0.0 -	99.9 a
	Engenia	12.8 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Zidua WG	1.25 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						

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The Ohio State University

University Showcase treatments
 Trial ID: 18 SHOWCASE
 Protocol ID: 18 SHOWCASE
 Project ID: H050SMAD/SULFSOY

Location: Trial Year: 2018
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

Pest Type	W Weed	W Weed	W Weed	W Weed	O Other	W Weed
Pest Code	AMBTR	CHEAL	AMARE	ABUTH		SETFA
Pest Scientific Name	Ambrosia trif>	Chenopodium al>	Amaranthus ret>	Abutilon theop>		Setaria faberi
Pest Name	Giant ragweed	common lambsqu>	Redroot pigweed	velvetleaf		Giant foxtail
Rating Date	Jul-2-2018	Jul-2-2018	Jul-2-2018	Jul-2-2018	Jul-30-2018	Jul-30-2018
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	52 4	52 4	52 4	52 4	80 32	80 32
Plant-Eval Interval	52 DP-1	52 DP-1	52 DP-1	52 DP-1	80 DP-1	80 DP-1
Days After Emergence	46 DE-1	46 DE-1	46 DE-1	46 DE-1	74 DE-1	74 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	18*	19*	20*	21*	22*	23*
12	Valor XLT @ 4 oz			A	37.0 d	100.0 -	99.7 -	100.0 -	0.0 -	72.6 b
	Valor SX	2.35 oz/a		A						
	Classic	1.65 oz/a		A						
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
13	Sonic	4 oz/a		A	94.9 a	98.7 -	98.7 -	100.0 -	0.0 -	100.0 a
	Metribuzin	.000019 oz ai/unit		A						
	Durango DMA	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
14	Envive @ 3.5oz			A	91.5 ab	100.0 -	100.0 -	77.5 -	0.0 -	99.9 a
	Classic	1.28 oz/a		A						
	Thifensulfuron	0.208 oz/a		A						
	Valor SX	1.96 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
15	Trivence @ 8oz			A	99.4 a	100.0 -	100.0 -	100.0 -	0.0 -	99.7 a
	Classic	1.25 oz/a		A						
	Metribuzin	4.76 oz/a		A						
	Valor SX	2 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
16	Sonic	4 oz/a		A	52.2 cd	99.7 -	100.0 -	100.0 -	0.0 -	99.9 a
	Everprex	1 qt/a		B						
	Abundit Edge	1 qt/a		B						
	N-pak ams	1.5 qt/a		B						
	LSD P=.05				8.99 - 29.95	0.85 - 1.28	0.80 - 1.27	21.94	.	1.92 - 11.57
	Standard Deviation				12.25t	3.72t	3.59t	15.40	0.00	5.59t
	CV				18.39t	4.17t	4.02t	15.86	0.0	6.94t
	Levene's F				1.076	0.948	0.948	0.926	0.00	1.226
	Levene's Prob(F)				0.402	0.521	0.521	0.543	.	0.286
	Skewness				-0.4263	-6.4066*	-6.4066*	-5.505*	.	-1.1574*
	Kurtosis				-0.9929	42.7155*	42.7155*	29.2677*	.	-0.1833
	Replicate F				0.807	0.725	1.886	2.096	0.000	2.182
	Replicate Prob(F)				0.4967	0.5423	0.1456	0.1141	1.0000	0.1033
	Treatment F				9.394	0.931	1.000	0.989	0.000	22.259
	Treatment Prob(F)				0.0001	0.5381	0.4718	0.4817	1.0000	0.0001

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The Ohio State University

University Showcase treatments

Trial ID: 18 SHOWCASE

Protocol ID: 18 SHOWCASE

Project ID: H050SMAD/SULFSOY

Location:

Trial Year: 2018

Investigator: Dr. Mark M. Loux

Study Director: Bryan Reeb

Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ECHCG	AMBTR	CHEAL	AMARE	ABUTH
Pest Scientific Name	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>	Abutilon theop>
Pest Name	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed	velvetleaf
Rating Date	Jul-30-2018	Jul-30-2018	Jul-30-2018	Jul-30-2018	Jul-30-2018
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	80 32	80 32	80 32	80 32	80 32
Plant-Eval Interval	80 DP-1	80 DP-1	80 DP-1	80 DP-1	80 DP-1
Days After Emergence	74 DE-1	74 DE-1	74 DE-1	74 DE-1	74 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	24*	25*	26*	27*	28*	29
1	Boundary	1.8 pt/a		A	99.9 a	84.7 ab	100.0 -	98.8	100.0 -	
	Flexstar GT 3.5	3.5 pt/a		C						
	MSO	0.6 qt/a		C						
	N-pak ams	1.5 qt/a		C						
2	Boundary	1.8 pt/a		A	99.4 a	75.6 abc	100.0 -	100.0 -	97.5	
	Prefix	2 pt/a		C						
	Roundup Power Max	26 oz/a		C						
	N-pak ams	1.5 qt/a		C						
3	Boundary	1.8 pt/a		A	99.9 a	92.3 a	100.0 -	100.0 -	100.0 -	
	Tavium	56.5 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
4	Boundary	1.8 pt/a		A	99.9 a	100.0 a	100.0 -	100.0 -	100.0 -	
	Prefix	2 pt/a		C						
	Xtendimax	22 oz/a		C						
	Roundup Power Max	26 oz/a		C						
	Class Act Ridion	19.2 oz/a		C						
5	Authority MTZ	14 oz/a		A	89.3 b	53.0 d	100.0 -	100.0 -	100.0 -	
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
6	Authority First	6.4 oz/a		A	90.0 b	52.0 d	98.8	100.0 -	100.0 -	
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
7	Authority XL	4 oz/a		A	95.4 ab	59.8 cd	100.0 -	100.0 -	100.0 -	
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
8	Authority First	6.4 oz/a		A	100.0 a	100.0 a	100.0 -	100.0 -	100.0 -	
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
9	Authority XL	4 oz/a		A	100.0 a	100.0 a	100.0 -	100.0 -	100.0 -	
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
10	Authority MTZ	14 oz/a		A	100.0 a	100.0 a	100.0 -	100.0 -	100.0 -	
	Anthem Maxx	3 oz/a		B						
	Xtendimax	22 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						
	Roundup Power Max	32 oz/a		D						
	N-pak ams	1.5 qt/a		D						
11	Zidua Pro	6 oz/a		A	100.0 a	66.7 bcd	100.0 -	100.0 -	100.0 -	
	Engenia	12.8 oz/a		B						
	Roundup Power Max	32 oz/a		B						
	Zidua WG	1.25 oz/a		B						
	Class Act Ridion	19.2 oz/a		B						

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls)

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

* Adjusted means

Could not calculate LSD (% mean diff) for columns 22,26,27,28,29 because error mean square = 0.

The Ohio State University

University Showcase treatments
 Trial ID: 18 SHOWCASE
 Protocol ID: 18 SHOWCASE
 Project ID: H050SMAD/SULFSOY

Location: Trial Year: 2018
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	ECHCG	AMBTR	CHEAL	AMARE	ABUTH					
Pest Scientific Name	Echinochloa cr>	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>	Abutilon theop>					
Pest Name	Common barnyar>	Giant ragweed	common lambsqu>	Redroot pigweed	velvetleaf					
Rating Date	Jul-30-2018	Jul-30-2018	Jul-30-2018	Jul-30-2018	Jul-30-2018					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Days After First/Last Applic.	80 32	80 32	80 32	80 32	80 32					
Plant-Eval Interval	80 DP-1	80 DP-1	80 DP-1	80 DP-1	80 DP-1					
Days After Emergence	74 DE-1	74 DE-1	74 DE-1	74 DE-1	74 DE-1					
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	24*	25*	26*	27*	28*	29
12	Valor XLT @ 4 oz			A	92.3 b	49.7 d	100.0 -	100.0 -	100.0 -	
	Valor SX	2.35 oz/a		A						
	Classic	1.65 oz/a		A						
	Roundup Power Max	32 oz/a		B						
	N-pak ams	1.5 qt/a		B						
13	Sonic			A	100.0 a	89.3 a	100.0 -	100.0 -	100.0 -	
	Metribuzin	.000019 oz ai/unit		A						
	Durango DMA	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
14	Envive @ 3.5oz			A	99.9 a	77.4 abc	100.0 -	100.0 -	100.0 -	
	Classic	1.28 oz/a		A						
	Thifensulfuron	0.208 oz/a		A						
	Valor SX	1.96 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
15	Trivence @ 8oz			A	99.7 a	82.4 ab	100.0 -	100.0 -	100.0 -	
	Classic	1.25 oz/a		A						
	Metribuzin	4.76 oz/a		A						
	Valor SX	2 oz/a		A						
	Abundit Edge	1 qt/a		C						
	N-pak ams	1.5 qt/a		C						
16	Sonic			A	99.9 a	54.5 d	100.0 -	100.0 -	100.0 -	
	Everprex	1 qt/a		B						
	Abundit Edge	1 qt/a		B						
	N-pak ams	1.5 qt/a		B						
	LSD P=.05				1.92 - 6.97	12.67 - 16.20	.	.	.	.
	Standard Deviation				5.59t	0.59t	0.00	0.00	0.00	.
	CV				6.6t	6.76t	0.0	0.0	0.0	.
	Levene's F				1.382	2.112	0.00	0.00	0.00	.
	Levene's Prob(F)				0.195	0.026*	.	.	.	.
	Skewness				-1.3883*	-0.5406	.	.	.	.
	Kurtosis				0.9541	-1.0138	.	.	.	.
	Replicate F				1.164	2.084	0.000	0.000	0.000	
	Replicate Prob(F)				0.3339	0.1157	1.0000	1.0000	1.0000	
	Treatment F				6.221	13.921	0.000	0.000	0.000	
	Treatment Prob(F)				0.0001	0.0001	1.0000	1.0000	1.0000	

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The Ohio State University

University Showcase treatments

Trial ID: 18 SHOWCASE
Protocol ID: 18 SHOWCASE
Project ID: H050SMAD/SULFSOY

Location: Trial Year: 2018
Investigator: Dr. Mark M. Loux
Study Director: Bryan Reeb
Sponsor Contact: Dain Bruns, Joe Reed, Alice Harris

Pest Type

O, Other, G-BYRO7, G-OthStg = Other animal or nematode
W, Weed, G-BYRW7, G-WedStg = 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

Rating Type

PHYGEN = phytotoxicity - general / injury
CONTRO = control / burndown or knockdown
PHYNEC = phytotoxicity - necrosis /burn

Rating Unit

% = percent

Plant-Eval Interval

20 DP-1 = 1 GLXMA May-11-2018
41 DP-1 = 1 GLXMA May-11-2018
52 DP-1 = 1 GLXMA May-11-2018
80 DP-1 = 1 GLXMA May-11-2018