

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

General Trial Information

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

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Bryan Reeb

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max
Variety: AG 29 X 6
Description: Asgrow Xtend

BBCH Scale: BSOY

Planting Date: 5-25-2016
Planting Method: PLANTD planted
Planting Equipment: FE Field Equipment
Emergence Date: 6-1-2016

Planting Rate, Unit: 175000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Soil Temperature, Unit: 67 F
Soil Moisture: DRY dry
Seed Bed: MEDIUM medium

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 2 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

Pest 3 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed

Pest 5 Type: W **Code:** ABUTH Abutilon theophrasti
Common Name: velvetleaf

Pest 6 Type: W **Code:** ECHCG Echinochloa crus-galli
Common Name: Common barnyard grass

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT² **Treatments:** 8
Replications: 3

Site Type: RESPLO research plot
Experimental Unit: 1 PLOT plot
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

No. Previous Crop Year
 1. CORN 2015

Soil Description

Description Name: BIG E
% OM: 2.2 **Texture:** SICL silty clay loam
pH: 6.1 **Soil Name:** KOKOMO SILTY CLAY LOAM
CEC: 14 **Fert. Level:** G good
Soil Drainage: G good

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

Application Description

	A	B
Application Date:	5-25-2016	6-20-2016
Appl. Start Time:	3:00 AM	9:00 AM
Appl. Stop Time:	3:30 PM	9:15 AM
Interval to Prev. Appl., Unit:		26 DAYS
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	28 DAPL
Application Placement:	BROSOL	BROFOL
Applied By:	ACKLEY/LOUX	BOLTE
Air Temperature, Unit:	79 F	79 F
% Relative Humidity:	50	72
Wind Velocity, Unit:	10 MPH	10 MPH
Wind Direction:	S	WSW
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	66 F	73 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	5	75
Next Moisture Occurred On:	5-29-2016	6-23-2016
Time to Next Moisture, Unit:	4 DAYS	3 day

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		12 100
Stage Minimum, Percent:		V3
Height, Unit:		6 IN

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:		18 60
Stage Minimum, Percent:		16 40
Stage Maximum, Percent:		18 60
Height, Unit:		7 IN
Height Minimum, Maximum:		5 10
Density, Unit:		8 m2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W
Stage Majority, Percent:		13 100
Height, Unit:		5 IN
Height Minimum, Maximum:		3 6
Density, Unit:		35 m2
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W
Stage Majority, Percent:		16 100
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		4 m2
Pest 4 Code, Type, Scale:	AMARE W	AMARE W
Stage Majority, Percent:		13 60
Stage Minimum, Percent:		12 40
Stage Maximum, Percent:		13 60
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		10 m2
Pest 5 Code, Type, Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:		13 100
Height, Unit:		3 IN
Height Minimum, Maximum:		3 4
Density, Unit:		1 m2
Pest 6 Code, Type, Scale:	ECHCG W	ECHCG W
Density, Unit:		75 m2

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

Application Equipment

	A	B
Appl. Equipment:	10' BACKPACK	6' BACKPACK
Equipment Type:	BACCAI	BACCAI
Operation Pressure, Unit:	44 PSI	44 PSI
Nozzle Type:	AIXR	TTI
Nozzle Size:	11015	11015
Nozzle Spacing, Unit:	18 IN	18 IN
Nozzles/Row:	6	4
Boom Length, Unit:	10 FT	6.67 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 gal/ac	15 gal/ac
Mix Size, Unit:	2 liters	1 liters
Propellant:	COMCO2	COMCO2

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	AMARE	IPOHE
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>	Ipomoea hedera>
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed	Ivyleaf mornin>
Rating Date	6-17-2016	6-17-2016	6-17-2016	6-17-2016	6-17-2016
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	1	2	3	4	5
Days After First/Last Applic.	23 23	23 23	23 23	23 23	23 23
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1	23 DP-1	23 DP-1
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*
1	UTC				0.0 c	0.0 d	0.0 -	0.0 b	0.0 b	0.0 b
2	Roundup Power Max	32 oz/a		B	0.0 c	0.0 d	0.0 -	0.0 b	0.0 b	0.0 b
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
3	Fierce	3 oz/a		A	1.7 bc	80.0 b	23.3 -	99.3 a	99.0 a	100.0 a
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
4	Authority Elite	25 oz/a		A	2.3 abc	86.7 ab	6.7 -	99.3 a	100.0 a	90.0 a
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
5	Boundary	1.8 pt/a		A	2.7 abc	97.7 a	13.3 -	100.0 a	100.0 a	83.3 a
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
6	Fierce XLT	4 oz/a		A	4.7 a	76.7 b	30.0 -	99.0 a	100.0 a	83.3 a
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
7	Rowel	2 oz/a		A	2.0 abc	6.7 d	0.0 -	100.0 a	100.0 a	90.0 a
	Warrant	2 qt/a		B						
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	CHEAL	AMARE	IPOHE				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>	Ipomoea hedera>				
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed	Ivyleaf mornin>				
Rating Date	6-17-2016	6-17-2016	6-17-2016	6-17-2016	6-17-2016				
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
SE Group No.	1	2	3	4	5				
Days After First/Last Applic.	23 23	23 23	23 23	23 23	23 23				
Plant-Eval Interval	23 DP-1	23 DP-1	23 DP-1	23 DP-1	23 DP-1				
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1				
Trt Treatment No. Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*
8 Sonic	6 oz/a		A	4.0 ab	36.7 c	36.7 -	100.0 a	100.0 a	100.0 a
Roundup Power Max	32 oz/a		B						
Clarity	1 pt/a		B						
NIS	0.3 pt/a		B						
LSD P=.05				2.73	12.39	28.63	1.57	1.07	18.28
Standard Deviation				1.56	7.07	16.35	0.90	0.61	10.44
CV				72.01	14.72	118.9	1.2	0.82	15.27
Bartlett's X2				0.908	5.028	4.523	0.443	0.0	0.058
P(Bartlett's X2)				0.97	0.412	0.34	0.801	.	0.996
Skewness				0.7229	-0.1034	1.2771*	-1.232*	-1.2325*	-0.9884*
Kurtosis				-0.3548	-1.8329	0.7783	-0.5321	-0.5317	-0.8107
Replicate F				7.513	5.789	0.608	0.052	1.000	2.792
Replicate Prob(F)				0.0061	0.0147	0.5582	0.9497	0.3927	0.0954
Treatment F				3.443	104.984	2.403	7938.423	17086.716	50.098
Treatment Prob(F)				0.0234	0.0001	0.0771	0.0001	0.0001	0.0001

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code		SETFA	AMBTR	CHEAL	AMARE	IPOHE					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>	Ipomoea heder>					
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed	Ivyleaf mornin>					
Rating Date		7-6-2016	7-6-2016	7-6-2016	7-6-2016	7-6-2016					
Rating Type		PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit		%	%	%	%	%					
Number of Subsamples		1	1	1	1	1					
SE Group No.		7	8	9	10	11					
Days After First/Last Applic.		42 16	42 16	42 16	42 16	42 16					
Plant-Eval Interval		42 DP-1	42 DP-1	42 DP-1	42 DP-1	42 DP-1					
Days After Emergence		35 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	7*	8*	9*	10*	11*	12*
1	UTC					0.0 b	0.0 c	0.0 b	0.0 b	0.0 b	0.0 b
2	Roundup Power Max	32 oz/a		B		5.0 a	98.3 ab	100.0 a	100.0 a	100.0 a	100.0 a
	Clarity	1 pt/a		B							
	NIS	0.3 pt/a		B							
3	Fierce	3 oz/a		A		0.0 b	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	Roundup Power Max	32 oz/a		B							
	Clarity	1 pt/a		B							
	NIS	0.3 pt/a		B							
4	Authority Elite	25 oz/a		A		1.7 b	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	Roundup Power Max	32 oz/a		B							
	Clarity	1 pt/a		B							
	NIS	0.3 pt/a		B							
5	Boundary	1.8 pt/a		A		0.7 b	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	Roundup Power Max	32 oz/a		B							
	Clarity	1 pt/a		B							
	NIS	0.3 pt/a		B							
6	Fierce XLT	4 oz/a		A		0.0 b	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
	Roundup Power Max	32 oz/a		B							
	Clarity	1 pt/a		B							
	NIS	0.3 pt/a		B							
7	Rowel	2 oz/a		A		2.3 b	95.3 b	100.0 a	100.0 a	100.0 a	98.3 a
	Warrant	2 qt/a		B							
	Roundup Power Max	32 oz/a		B							
	Clarity	1 pt/a		B							
	NIS	0.3 pt/a		B							

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	CHEAL	AMARE	IPHOE			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>	Ipomoea heder>			
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed	Ivyleaf mornin>			
Rating Date	7-6-2016	7-6-2016	7-6-2016	7-6-2016	7-6-2016	7-6-2016			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
SE Group No.	7	8	9	10	11	12			
Days After First/Last Applic.	42 16	42 16	42 16	42 16	42 16	42 16			
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	42 DP-1	42 DP-1			
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1			
Trt Treatment	Other	Other	Appl						
No. Name	Rate	Rate	Unit Code	7*	8*	9*	10*	11*	12*
8 Sonic	6 oz/a		A	1.3 b	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a
Roundup Power Max	32 oz/a		B						
Clarity	1 pt/a		B						
NIS	0.3 pt/a		B						
LSD P=.05				2.46	3.48	.	.	.	1.79
Standard Deviation				1.41	1.99	0.00	0.00	0.00	1.02
CV				102.24	2.29	0.0	0.0	0.0	1.17
Bartlett's X2				2.456	0.414	0.0	0.0	0.0	0.0
P(Bartlett's X2)				0.483	0.52	.	.	.	.
Skewness				1.1199*	-2.4012*	-2.4219*	-2.4219*	-2.4219*	-2.4176*
Kurtosis				-0.4376	4.1453*	4.2103*	4.2103*	4.2103*	4.1971*
Replicate F				1.771	0.517	0.000	0.000	0.000	1.000
Replicate Prob(F)				0.2062	0.6071	1.0000	1.0000	1.0000	0.3927
Treatment F				4.407	935.154	0.000	0.000	0.000	3583.858
Treatment Prob(F)				0.0088	0.0001	1.0000	1.0000	1.0000	0.0001

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	CHEAL	AMARE	IPOHE					
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium al-	Amaranthus ret-	Ipomoea heder-					
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu-	Redroot pigweed	Ivyleaf mornin-					
Rating Date	7-20-2016	7-20-2016	7-20-2016	7-20-2016	7-20-2016					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1 1					
SE Group No.	13	14	15	16	17 18					
Days After First/Last Applic.	56 30	56 30	56 30	56 30	56 30					
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1					
Days After Emergence	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1					
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*	18
1	UTC				0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	
2	Roundup Power Max	32 oz/a		B	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
3	Fierce	3 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
4	Authority Elite	25 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
5	Boundary	1.8 pt/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
6	Fierce XLT	4 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
7	Rowel	2 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
	Warrant	2 qt/a		B						
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
 Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
 Project ID: Fierce 64.01 Study Director: Bryan Reeb
 Sponsor Contact: Eric Ott, Valent

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	CHEAL	AMARE	IPOHE					
Pest Scientific Name	Setaria faberi	Ambrosia trifid	Chenopodium albidum	Amaranthus retrofractus	Ipomoea hederacea					
Pest Name	Giant foxtail	Giant ragweed	Common lambsquarters	Redroot pigweed	Ivyleaf morningglory					
Rating Date	7-20-2016	7-20-2016	7-20-2016	7-20-2016	7-20-2016					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1 1					
SE Group No.	13	14	15	16	17 18					
Days After First/Last Applic.	56 30	56 30	56 30	56 30	56 30					
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1					
Days After Emergence	49 DE-1	49 DE-1	49 DE-1	49 DE-1	49 DE-1					
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*	18
8	Sonic	6 oz/a		A	100.0 a	100.0 a	100.0 a	100.0 a	100.0 a	
	Roundup Power Max	32 oz/a		B						
	Clarity	1 pt/a		B						
	NIS	0.3 pt/a		B						
LSD P=.05					.	.	.	.	.	.
Standard Deviation					0.00	0.00	0.00	0.00	0.00	.
CV					0.0	0.0	0.0	0.0	0.0	.
Bartlett's X2					0.0	0.0	0.0	0.0	0.0	.
P(Bartlett's X2)					.	.	.	.	.	.
Skewness					-2.4219*	-2.4219*	-2.4219*	-2.4219*	-2.4219*	.
Kurtosis					4.2103*	4.2103*	4.2103*	4.2103*	4.2103*	.
Replicate F					0.000	0.000	0.000	0.000	0.000	
Replicate Prob(F)					1.0000	1.0000	1.0000	1.0000	1.0000	
Treatment F					0.000	0.000	0.000	0.000	0.000	
Treatment Prob(F)					1.0000	1.0000	1.0000	1.0000	1.0000	

The Ohio State University

Valent Xtend soybean programs

Trial ID: 16 VALENT X Location: Western Branch Trial Year: 2016
Protocol ID: 16 VALENT X Investigator: Dr. Mark M. Loux
Project ID: Fierce 64.01 Study Director: Bryan Reeb
Sponsor Contact: Eric Ott, Valent

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

IPOHE, Ipomoea hederacea, = US

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

23 DP-1 = 1 GLXMA 5-25-2016

42 DP-1 = 1 GLXMA 5-25-2016

56 DP-1 = 1 GLXMA 5-25-2016