The Ohio State University

V-10364 Pre versus competitor in conventional till soybeans

Trial ID: 14 PRES1 Location: Western Branch Trial Year: 2014
Protocol ID: 14 PRES1 Investigator: Dr. Mark M. Loux
Project ID: Fierce MD 64.02 Study Director: Bryan Reeb
Sponsor Contact: Eric Ott, Valent

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: PIONEER 35T58 **BBCH Scale:** BSOY
Description: Roundup Ready

Planting Date: May-8-2014
Planting Rate, Unit: 170000 S/A **Planting Method:** PLANTD planted
Depth, Unit: 1 IN **Planting Equipment:** FE Field Equipment
Row Spacing, Unit: 15 IN **Emergence Date:** May-19-2014
Seed Bed: SMOTRA smooth/trashy

Site and Design

Treated Plot Width: 6.67 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 200.1 FT2 **Treatments:** 12 **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RACOBL Randomized Complete Block (RCB)

No. Previous Crop Year
1. CORN 2013

Soil Description

Description Name: F-8 East
% OM: 2.4 **Texture:** SICL silty clay loam
pH: 6.2 **Soil Name:** Kokomo
CEC: 16 **Fert. Level:** G good
Soil Drainage: G good

Application Description

	A
Application Date:	May-8-2014
Appl. Start Time:	7:10 PM
Application Method:	SPRAY
Application Timing:	PRE
Application Placement:	BROSOI
Air Temperature, Unit:	84 F
% Relative Humidity:	49.2
Wind Velocity, Unit:	10 MPH
Wind Direction:	SSW
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	67 F
Soil Moisture:	DRY
% Cloud Cover:	10
Next Moisture Occurred On:	May-10-2014
Time to Next Moisture, Unit:	2 DAY

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY

Application Equipment

	A
Appl. Equipment:	6' BACKPACK
Equipment Type:	BACCAI
Operation Pressure, Unit:	50 PSI
Nozzle Type:	AIXR
Nozzle Size:	11015
Nozzle Spacing, Unit:	18 IN
Nozzles/Row:	4
Boom Length, Unit:	6.67 FT
Boom Height, Unit:	20 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume, Unit:	15 gal/ac
Mix Size, Unit:	1 liters
Propellant:	COMCO2

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Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	1	2	3	4	5
	Pest Type							W Weed	W Weed		W Weed
	Pest Code							SETFA	AMBTR		SETFA
	Pest Scientific Name							Setaria faberi	Ambrosia trifi>		Setaria faberi
	Pest Name							Giant foxtail	Giant ragweed		Giant foxtail
	Crop Code						GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	BBCH Scale						BSOY	BSOY	BSOY	BSOY	BSOY
	Crop Scientific Name						Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
	Crop Name						Soybean	Soybean	Soybean	Soybean	Soybean
	Rating Date						May-28-2014	May-28-2014	May-28-2014	Jun-5-2014	Jun-5-2014
	Rating Type						PHYTO	CONTRO	CONTRO	PHYGEN	CONTRO
	Rating Unit						%	%	%	%	%
	Number of Subsamples						1	1	1	1	1
	SE Group No.						1	2	3	4	5
	Days After First/Last Applic.						20 20	20 20	20 20	28 28	28 28
	Trt-Eval Interval						20 DA-A	20 DA-A	20 DA-A	28 DA-A	28 DA-A
	Plant-Eval Interval						20 DP-1	20 DP-1	20 DP-1	28 DP-1	28 DP-1
	Days After Emergence						9 DE-1	9 DE-1	9 DE-1	17 DE-1	17 DE-1
	Number of Decimals						0	0	0	0	0
1	UTC						0	0	0	0	0
2	Authority XL	0.175	lb ai/a	4	oz/a	A	4	73	47	0	60
3	Authority XL	0.328	lb ai/a	7.5	oz/a	A	1	94	53	0	67
4	V-102364 (Fierce XLT)	0.156	lb ai/a	4	oz/a	A	9	98	70	3	82
5	V-102364 (Fierce XLT)	0.234	lb ai/a	6	oz/a	A	9	98	67	6	90
6	Authority First	0.14	lb ai/a	3.2	oz/a	A	0	65	57	1	50
7	Authority First	0.282	lb ai/a	6.45	oz/a	A	3	76	43	0	57
8	Fierce	0.143	lb ai/a	3	oz/a	A	7	96	67	2	75
8	Firstrate	0.0158	lb ai/a	0.3	oz/a	A					
9	Fierce	0.214	lb ai/a	4.5	oz/a	A	8	99	68	5	82
9	Firstrate	0.0236	lb ai/a	0.45	oz/a	A					
10	Envive @ 3.0 oz						3	73	60	0	57
10	Classic	0.0172	lb ai/a	1.1	oz/a	A					
10	Thifensulfuron	0.0054	lb ai/a	0.172	oz/a	A					
10	Valor SX	0.0536	lb ai/a	1.68	oz/a	A					
11	Authority MAXX	0.248	lb ai/a	6	oz/a	A	3	72	43	0	57
12	Fierce XLT @ 4.0 oz						7	94	80	2	77
12	Valor SX	0.063	lb ai/a	1.98	oz/a	A					
12	Classic	0.021	lb ai/a	1.34	oz/a	A					
12	V-10206	0.054	lb ai/a	1.02	oz/a	A					
12	Sencor DF	0.188	lb ai/a	4	oz/a	A					
	LSD (P=.05)						3.5	21.5	37.9	2.4	12.8
	Standard Deviation						2.1	12.7	22.4	1.4	7.5
	CV						46.76	16.2	41.02	92.66	12.03
	Bartlett's X2						3.806	22.787	7.756	2.998	5.7
	P(Bartlett's X2)						0.924	0.012*	0.653	0.558	0.84
	Skewness						0.2199	-1.6348*	-0.6601	1.7399*	-1.3328*
	Kurtosis						-1.3363	2.0511*	-0.6093	3.2687*	1.6995*
	Replicate F						0.020	4.629	0.154	2.459	12.933
	Replicate Prob(F)						0.9807	0.0210	0.8584	0.1087	0.0002
	Treatment F						8.627	14.360	2.554	6.824	29.004
	Treatment Prob(F)						0.0001	0.0001	0.0294	0.0001	0.0001

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Pest Type					W Weed	W Weed	W Weed	W Weed
Pest Code					AMBTR	CHEAL	ABUTH	AMARE
Pest Scientific Name					Ambrosia trifi>	Chenopodium al>	Abutilon theop>	Amaranthus ret>
Pest Name					Giant ragweed	Common lambsqu>	velvetleaf	Redroot pigweed
Crop Code					GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale					BSOY	BSOY	BSOY	BSOY
Crop Scientific Name					Glycine max	Glycine max	Glycine max	Glycine max
Crop Name					Soybean	Soybean	Soybean	Soybean
Rating Date					Jun-5-2014	Jun-5-2014	Jun-5-2014	Jun-5-2014
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%	%
Number of Subsamples					1	1	1	1
SE Group No.					6	7	8	9
Days After First/Last Applic.					28 28	28 28	28 28	28 28
Trt-Eval Interval					28 DA-A	28 DA-A	28 DA-A	28 DA-A
Plant-Eval Interval					28 DP-1	28 DP-1	28 DP-1	28 DP-1
Days After Emergence					17 DE-1	17 DE-1	17 DE-1	17 DE-1
Number of Decimals					0	0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	6	7	8	9
1	UTC						0	0	0	0
2	Authority XL	0.175	lb ai/a	4	oz/a	A	30	100	100	100
3	Authority XL	0.328	lb ai/a	7.5	oz/a	A	37	100	100	100
4	V-102364 (Fierce XLT)	0.156	lb ai/a	4	oz/a	A	47	100	100	100
5	V-102364 (Fierce XLT)	0.234	lb ai/a	6	oz/a	A	57	100	100	100
6	Authority First	0.14	lb ai/a	3.2	oz/a	A	37	100	100	100
7	Authority First	0.282	lb ai/a	6.45	oz/a	A	40	100	100	100
8	Fierce	0.143	lb ai/a	3	oz/a	A	52	100	100	100
8	Firstrate	0.0158	lb ai/a	0.3	oz/a	A				
9	Fierce	0.214	lb ai/a	4.5	oz/a	A	43	100	100	100
9	Firstrate	0.0236	lb ai/a	0.45	oz/a	A				
10	Envive @ 3.0 oz						48	100	100	100
10	Classic	0.0172	lb ai/a	1.1	oz/a	A				
10	Thifensulfuron	0.0054	lb ai/a	0.172	oz/a	A				
10	Valor SX	0.0536	lb ai/a	1.68	oz/a	A				
11	Authority MAXX	0.248	lb ai/a	6	oz/a	A	33	100	100	100
12	Fierce XLT @ 4.0 oz						62	100	100	100
12	Valor SX	0.063	lb ai/a	1.98	oz/a	A				
12	Classic	0.021	lb ai/a	1.34	oz/a	A				
12	V-10206	0.054	lb ai/a	1.02	oz/a	A				
12	Sencor DF	0.188	lb ai/a	4	oz/a	A				
LSD (P=.05)							34.9	0.0	0.0	0.0
Standard Deviation							20.6	0.0	0.0	0.0
CV							50.96	0.0	0.0	0.0
Bartlett's X2							6.184	0.0	0.0	0.0
P(Bartlett's X2)							0.80	.	.	.
Skewness							-0.1604	-3.1478*	-3.1478*	-3.1478*
Kurtosis							-0.9562	8.3714*	8.3714*	8.3714*
Replicate F							1.316	0.000	0.000	0.000
Replicate Prob(F)							0.2885	1.0000	1.0000	1.0000
Treatment F							1.783	0.000	0.000	0.000
Treatment Prob(F)							0.1197	1.0000	1.0000	1.0000

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Pest Type						W Weed	W Weed		W Weed	W Weed
Pest Code						POLPY	SIDSP		SETFA	AMBTR
Pest Scientific Name						Persicaria pen>	Sida spinosa		Setaria faberi	Ambrosia trifi>
Pest Name						Pennsylvania s>	Prickly sida		Giant foxtail	Giant ragweed
Crop Code						GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale						BSOY	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name						Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name						Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date						Jun-5-2014	Jun-5-2014	Jun-17-2014	Jun-17-2014	Jun-17-2014
Rating Type						CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit						%	%	%	%	%
Number of Subsamples						1	1	1	1	1
SE Group No.						10	11	14	15	16
Days After First/Last Applic.						28 28	28 28	40 40	40 40	40 40
Trt-Eval Interval						28 DA-A	28 DA-A	40 DA-A	40 DA-A	40 DA-A
Plant-Eval Interval						28 DP-1	28 DP-1	40 DP-1	40 DP-1	40 DP-1
Days After Emergence						17 DE-1	17 DE-1	29 DE-1	29 DE-1	29 DE-1
Number of Decimals						0	0	0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	10	11	12	13	14
1	UTC						0	0	0	0	0
2	Authority XL	0.175	lb ai/a	4 oz/a		A	100	100	0	38	7
3	Authority XL	0.328	lb ai/a	7.5 oz/a		A	100	100	2	60	23
4	V-102364 (Fierce XLT)	0.156	lb ai/a	4 oz/a		A	100	100	3	63	23
5	V-102364 (Fierce XLT)	0.234	lb ai/a	6 oz/a		A	100	100	3	77	43
6	Authority First	0.14	lb ai/a	3.2 oz/a		A	100	100	0	23	17
7	Authority First	0.282	lb ai/a	6.45 oz/a		A	100	100	0	30	23
8	Fierce	0.143	lb ai/a	3 oz/a		A	100	100	1	53	33
8	Firstrate	0.0158	lb ai/a	0.3 oz/a		A					
9	Fierce	0.214	lb ai/a	4.5 oz/a		A	100	100	4	68	20
9	Firstrate	0.0236	lb ai/a	0.45 oz/a		A					
10	Envive @ 3.0 oz						100	100	1	30	23
10	Classic	0.0172	lb ai/a	1.1 oz/a		A					
10	Thifensulfuron	0.0054	lb ai/a	0.172 oz/a		A					
10	Valor SX	0.0536	lb ai/a	1.68 oz/a		A					
11	Authority MAXX	0.248	lb ai/a	6 oz/a		A	100	100	0	30	17
12	Fierce XLT @ 4.0 oz						100	100	0	57	50
12	Valor SX	0.063	lb ai/a	1.98 oz/a		A					
12	Classic	0.021	lb ai/a	1.34 oz/a		A					
12	V-10206	0.054	lb ai/a	1.02 oz/a		A					
12	Sencor DF	0.188	lb ai/a	4 oz/a		A					
LSD (P=.05)							0.0	0.0	2.1	19.6	38.5
Standard Deviation							0.0	0.0	1.2	11.6	22.8
CV							0.0	0.0	106.56	26.22	97.56
Bartlett's X2							0.0	0.0	1.251	10.707	4.75
P(Bartlett's X2)							.	.	0.94	0.381	0.856
Skewness							-3.1478*	-3.1478*	1.1751*	-0.1738	0.4099
Kurtosis							8.3714*	8.3714*	-0.0965	-1.2571	-1.3491
Replicate F							0.000	0.000	0.863	10.876	2.509
Replicate Prob(F)							1.0000	1.0000	0.4358	0.0005	0.1044
Treatment F							0.000	0.000	4.490	11.226	1.123
Treatment Prob(F)							1.0000	1.0000	0.0013	0.0001	0.3904

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Pest Type						W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code						CHEAL	ABUTH	AMARE	POLPY	SIDSP
Pest Scientific Name						Chenopodium al>	Abutilon theop>	Amaranthus ret>	Persicaria pen>	Sida spinosa
Pest Name						Common lambsqu>	velvetleaf	Redroot pigweed	Pennsylvania s>	Prickly sida
Crop Code						GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale						BSOY	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name						Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name						Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date						Jun-17-2014	Jun-17-2014	Jun-17-2014	Jun-17-2014	Jun-17-2014
Rating Type						CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit						%	%	%	%	%
Number of Subsamples						1	1	1	1	1
SE Group No.						17	18	19	20	21
Days After First/Last Applic.						40 40	40 40	40 40	40 40	40 40
Trt-Eval Interval						40 DA-A	40 DA-A	40 DA-A	40 DA-A	40 DA-A
Plant-Eval Interval						40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1
Days After Emergence						29 DE-1	29 DE-1	29 DE-1	29 DE-1	29 DE-1
Number of Decimals						0	0	0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	15	16	17	18	19
1	UTC						0	0	0	0	0
2	Authority XL	0.175	lb ai/a	4 oz/a		A	100	97	100	100	100
3	Authority XL	0.328	lb ai/a	7.5 oz/a		A	100	100	100	100	100
4	V-102364 (Fierce XLT)	0.156	lb ai/a	4 oz/a		A	100	100	98	100	100
5	V-102364 (Fierce XLT)	0.234	lb ai/a	6 oz/a		A	100	100	100	100	100
6	Authority First	0.14	lb ai/a	3.2 oz/a		A	100	98	100	100	100
7	Authority First	0.282	lb ai/a	6.45 oz/a		A	100	100	100	100	100
8	Fierce	0.143	lb ai/a	3 oz/a		A	99	100	100	100	100
8	Firstrate	0.0158	lb ai/a	0.3 oz/a		A					
9	Fierce	0.214	lb ai/a	4.5 oz/a		A	100	100	100	100	100
9	Firstrate	0.0236	lb ai/a	0.45 oz/a		A					
10	Envive @ 3.0 oz						100	100	100	100	100
10	Classic	0.0172	lb ai/a	1.1 oz/a		A					
10	Thifensulfuron	0.0054	lb ai/a	0.172 oz/a		A					
10	Valor SX	0.0536	lb ai/a	1.68 oz/a		A					
11	Authority MAXX	0.248	lb ai/a	6 oz/a		A	100	98	100	100	100
12	Fierce XLT @ 4.0 oz						100	100	100	100	100
12	Valor SX	0.063	lb ai/a	1.98 oz/a		A					
12	Classic	0.021	lb ai/a	1.34 oz/a		A					
12	V-10206	0.054	lb ai/a	1.02 oz/a		A					
12	Sencor DF	0.188	lb ai/a	4 oz/a		A					
LSD (P=.05)							0.6	3.4	1.4	0.0	0.0
Standard Deviation							0.3	2.0	0.8	0.0	0.0
CV							0.36	2.22	0.91	0.0	0.0
Bartlett's X2							0.0	1.337	0.0	0.0	0.0
P(Bartlett's X2)							.	0.513	.	.	.
Skewness							-3.147*	-3.1206*	-3.143*	-3.1478*	-3.1478*
Kurtosis							8.3682*	8.2559*	8.3512*	8.3714*	8.3714*
Replicate F							1.000	1.185	1.000	0.000	0.000
Replicate Prob(F)							0.3840	0.3246	0.3840	1.0000	1.0000
Treatment F							22473.730	602.708	3590.091	0.000	0.000
Treatment Prob(F)							0.0001	0.0001	0.0001	1.0000	1.0000

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Pest Type	W Weed	W Weed
Pest Code	SETFA	AMBTR
Pest Scientific Name	Setaria faberi	Ambrosia trifi>
Pest Name	Giant foxtail	Giant ragweed
Crop Code	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max
Crop Name	Soybean	Soybean
Rating Date	Jul-7-2014	Jul-7-2014
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
SE Group No.	22	23
Days After First/Last Applic.	60 60	60 60
Trt-Eval Interval	60 DA-A	60 DA-A
Plant-Eval Interval	60 DP-1	60 DP-1
Days After Emergence	49 DE-1	49 DE-1
Number of Decimals		

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Appl Code	20	21
1	UTC						0.0	0.0
2	Authority XL	0.175	lb ai/a	4 oz/a		A	6.7	0.0
3	Authority XL	0.328	lb ai/a	7.5 oz/a		A	26.7	10.0
4	V-102364 (Fierce XLT)	0.156	lb ai/a	4 oz/a		A	23.3	16.7
5	V-102364 (Fierce XLT)	0.234	lb ai/a	6 oz/a		A	43.3	20.0
6	Authority First	0.14	lb ai/a	3.2 oz/a		A	6.7	6.7
7	Authority First	0.282	lb ai/a	6.45 oz/a		A	20.0	10.0
8	Fierce	0.143	lb ai/a	3 oz/a		A	6.7	6.7
8	Firstrate	0.0158	lb ai/a	0.3 oz/a		A		
9	Fierce	0.214	lb ai/a	4.5 oz/a		A	23.3	0.0
9	Firstrate	0.0236	lb ai/a	0.45 oz/a		A		
10	Envive @ 3.0 oz						6.7	10.0
10	Classic	0.0172	lb ai/a	1.1 oz/a		A		
10	Thifensulfuron	0.0054	lb ai/a	0.172 oz/a		A		
10	Valor SX	0.0536	lb ai/a	1.68 oz/a		A		
11	Authority MAXX	0.248	lb ai/a	6 oz/a		A	10.0	0.0
12	Fierce XLT @ 4.0 oz						30.0	13.3
12	Valor SX	0.063	lb ai/a	1.98 oz/a		A		
12	Classic	0.021	lb ai/a	1.34 oz/a		A		
12	V-10206	0.054	lb ai/a	1.02 oz/a		A		
12	Sencor DF	0.188	lb ai/a	4 oz/a		A		
	LSD (P=.05)						26.19	22.19
	Standard Deviation						15.46	13.10
	CV						91.26	168.48
	Bartlett's X2						9.387	2.273
	P(Bartlett's X2)						0.496	0.943
	Skewness						0.8506*	1.5621*
	Kurtosis						-0.0797	1.7159*
	Replicate F						2.660	2.006
	Replicate Prob(F)						0.0923	0.1584
	Treatment F						2.064	0.824
	Treatment Prob(F)						0.0712	0.6191

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Trial ID: 14 PRES1 Location: Western Branch Trial Year: 2014
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Project ID: Fierce MD 64.02 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
ABUTH, Abutilon theophrasti, = US
AMARE, Amaranthus retroflexus, = US
POLPY, Persicaria pensylvanica, = US
SIDSP, Sida spinosa, = US
Crop Code
GLXMA, BSOY, Glycine max, = US
Rating Type
CONTRO = control / burndown or knockdown
PHYGEN = phytotoxicity - general / injury
Rating Unit
% = percent
Plant-Eval Interval
20 DP-1 = 1 GLXMA May-8-2014
28 DP-1 = 1 GLXMA May-8-2014
40 DP-1 = 1 GLXMA May-8-2014
60 DP-1 = 1 GLXMA May-8-2014