

# The Ohio State University

## Marestail Control with Fierce in 2,4-D Tolerant Soybean

Trial ID: 14FIERCEBGRD24D  
 Protocol ID: 14FIERCEBGRD24D  
 Project ID: FIERCE MD 64.09

Location: Western Branch G-8 Trial Year: 2014  
 Investigator: Dr. Mark M. Loux  
 Study Director: Anthony Dobbels  
 Sponsor Contact: Eric Ott, Valent

### Pest Description

- Pest 1 Type:** W **Code:** STEME *Stellaria media*  
**Common Name:** Common chickweed
- Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel
- Pest 3 Type:** W **Code:** RANAB *Ranunculus abortivus*  
**Common Name:** Smallflower buttercup
- Pest 4 Type:** W **Code:** ERPSS *Erophila sp.*  
**Common Name:** Whitlowgrass
- Pest 5 Type:** W **Code:** ERYRE *Erysimum repandum*  
**Common Name:** Bushy wallflower
- Pest 6 Type:** W **Code:** VERAG *Veronica agrestis*  
**Common Name:** Field speedwell
- Pest 7 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 8 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

### Site and Design

**Treated Plot Width:** 6.67 FT  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 200.1 FT<sup>2</sup> **Treatments:** 6  
**Replications:** 3

**Site Type:** FIELD field  
**Experimental Unit:** 1 PLOT plot  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOBL Randomized Complete Block (RCB)

**No. Previous Crop Year**  
 1. Soybean 2013

### Soil Description

**Description Name:** G-7 WEST  
**% OM:** 1.75 **Texture:** SIC silty clay  
**pH:** 6.2 **Soil Name:** Crosby  
**CEC:** 8.6 **Fert. Level:** G good  
**Soil Drainage:** F fair

### Application Description

	A	B
<b>Application Date:</b>	Apr-17-2014	May-30-2014
<b>Appl. Start Time:</b>	10:30 AM	9:00 am
<b>Appl. Stop Time:</b>	10:45 AM	9:15 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	14 EPP	POST
<b>Application Placement:</b>	BROFOL	BROFOL
<b>Applied By:</b>	Dobbels	
<b>Air Temperature, Unit:</b>	50 F	66 F
<b>% Relative Humidity:</b>	54	64
<b>Wind Velocity, Unit:</b>	8 MPH	2 MPH
<b>Wind Direction:</b>	S	SSW
<b>Dew Presence (Y/N):</b>	N no	N no
<b>Soil Temperature, Unit:</b>	40 F	64 F
<b>Soil Moisture:</b>	MOIST	DRY
<b>% Cloud Cover:</b>	15	2
<b>Next Moisture Occurred On:</b>	Apr-25-2014	Jun-2-2014
<b>Time to Next Moisture, Unit:</b>	8 DAY	3 DAY

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## Pest Stage At Each Application

	A		B	
<b>Pest 1 Code, Type, Scale:</b>	STEME	W	STEME	W
<b>Stage Majority, Percent:</b>	19	100	59	100
<b>Diameter, Unit:</b>	4	IN	6	IN
<b>Height, Unit:</b>	3	IN	2	IN
<b>Height Minimum, Maximum:</b>	2	3	1	2
<b>Density, Unit:</b>	3	M2	3	M2
<b>Pest 2 Code, Type, Scale:</b>	LAMPU	W	LAMPU	W
<b>Stage Majority, Percent:</b>	19	100		
<b>Diameter, Unit:</b>	4	IN		
<b>Height, Unit:</b>	2	IN		
<b>Height Minimum, Maximum:</b>	2	3		
<b>Density, Unit:</b>	4	M2		
<b>Pest 3 Code, Type, Scale:</b>	RANAB	W	RANAB	W
<b>Stage Majority, Percent:</b>	19	100	69	100
<b>Diameter, Unit:</b>	2	IN		
<b>Height, Unit:</b>	2	IN	8	IN
<b>Height Minimum, Maximum:</b>	1	2	8	10
<b>Density, Unit:</b>	2.5	M2		
<b>Pest 4 Code, Type, Scale:</b>	ERPSS	W	ERPSS	W
<b>Stage Majority, Percent:</b>	19	100		
<b>Diameter, Unit:</b>	4	IN		
<b>Height, Unit:</b>	1	IN		
<b>Height Minimum, Maximum:</b>	1	1.5		
<b>Density, Unit:</b>	6	M2		
<b>Pest 5 Code, Type, Scale:</b>	ERYRE	W	ERYRE	W
<b>Stage Majority, Percent:</b>	19	100		
<b>Height, Unit:</b>	5	IN		
<b>Height Minimum, Maximum:</b>	4	6		
<b>Density, Unit:</b>	3	M2		
<b>Pest 6 Code, Type, Scale:</b>	VERAG	W	VERAG	W
<b>Stage Majority, Percent:</b>	19	100		
<b>Diameter, Unit:</b>	3	IN		
<b>Height, Unit:</b>	0.5	IN		
<b>Height Minimum, Maximum:</b>	0.5	1		
<b>Density, Unit:</b>	3.33	M2		
<b>Pest 7 Code, Type, Scale:</b>	SETFA	W	SETFA	W
<b>Stage Majority, Percent:</b>			13	100
<b>Height, Unit:</b>			5	IN
<b>Height Minimum, Maximum:</b>			4	6
<b>Density, Unit:</b>			176	M2
<b>Pest 8 Code, Type, Scale:</b>	AMBTR	W	AMBTR	W
<b>Stage Majority, Percent:</b>			14	100
<b>Height, Unit:</b>			6	IN
<b>Height Minimum, Maximum:</b>			4	6
<b>Density, Unit:</b>			18	M2

## Application Equipment

	A		B	
<b>Appl. Equipment:</b>	6 FOOT	BOOM	6 FOOT	BOOM
<b>Equipment Type:</b>	SPRBAC		SPRBAC	
<b>Operation Pressure, Unit:</b>	46	PSI	46	PSI
<b>Nozzle Type:</b>	AI XR		AI XR	
<b>Nozzle Size:</b>	110015		110015	
<b>Nozzle Spacing, Unit:</b>	18	IN	18	IN
<b>Boom Length, Unit:</b>	6.67	FT	6.67	FT
<b>Boom Height, Unit:</b>	20	IN	20	IN
<b>Ground Speed, Unit:</b>	3	MPH	3	MPH
<b>Carrier:</b>	WATER		WATER	
<b>Spray Volume, Unit:</b>	15	GPA	15	GPA
<b>Mix Size, Unit:</b>	1	Liters	1	Liters
<b>Propellant:</b>	CO2		CO2	

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## Marestail Control with Fierce in 2,4-D Tolerant Soybean

Trial ID: 14FIERCEBGRD24D  
Protocol ID: 14FIERCEBGRD24D  
Project ID: FIERCE MD 64.09

Location: Western Branch G-8 Trial Year: 2014  
Investigator: Dr. Mark M. Loux  
Study Director: Anthony Dobbels  
Sponsor Contact: Eric Ott, Valent

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	ERYRE	VERAG
Pest Scientific Name	Stellaria media	Lamium purpure>	Erysimum repa>	Veronica agres>
Pest Name	Common chickwe>	Purple deadnet>	Bushy wallflow>	Field speedwell
Rating Date	May-15-2014	May-15-2014	May-15-2014	May-15-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	1	2	3	4
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
ARM Action Codes	ET5	ET1		
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Appl Unit Code	1	2	3	4
1 UTC						0	0	0	0
2 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	98	70	100	100
2 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A				
2 NIS	0.25 %	v/v	4.8 oz/a		A				
2 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B				
2 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B				
2 NIS	0.25 %	v/v	4.8 oz/a		B				
3 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	98	88	100	99
3 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A				
3 Fierce	0.143 lb	ai/a	3 oz/a		A				
3 NIS	0.25 %	v/v	4.8 oz/a		A				
3 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B				
3 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B				
3 NIS	0.25 %	v/v	4.8 oz/a		B				
4 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	100	73	100	100
4 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A				
4 NIS	0.25 %	v/v	4.8 oz/a		A				
4 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B				
4 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B				
4 Cobra	0.195 lb	ai/a	12.5 oz/a		B				
4 NIS	0.25 %	v/v	4.8 oz/a		B				
5 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	70	75	100	100
5 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A				
5 Fierce	0.143 lb	ai/a	3 oz/a		A				
5 NIS	0.25 %	v/v	4.8 oz/a		A				
5 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B				
5 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B				
5 Cobra	0.195 lb	ai/a	12.5 oz/a		B				
5 NIS	0.25 %	v/v	4.8 oz/a		B				

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

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	ERYRE	VERAG
Pest Scientific Name	Stellaria media	Lamium purpure>	Erysimum repa>	Veronica agres>
Pest Name	Common chickwe>	Purple deadnet>	Bushy wallflow>	Field speedwell
Rating Date	May-15-2014	May-15-2014	May-15-2014	May-15-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	1	2	3	4
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
ARM Action Codes	ET5	ET1		
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Unit	Appl Code	1	2	3	4
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a			A	100	72	100	99
6 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a			A				
6 Fierce	0.143 lb	ai/a	3 oz/a			A				
6 NIS	0.25 %	v/v	4.8 oz/a			A				
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a			B				
6 Cobra	0.195 lb	ai/a	12.5 oz/a			B				
6 NIS	0.25 %	v/v	4.8 oz/a			B				
LSD (P=.05)							38.6	19.6	0.0	1.3
Standard Deviation							21.2	10.7	0.0	0.7
CV							27.27	17.05	0.0	0.84
Bartlett's X2							27.244	7.399	0.0	0.0
P(Bartlett's X2)							0.001*	0.116	.	.
Skewness							-1.4652*	-1.4056*	-1.9558*	-1.9545*
Kurtosis							0.1787	0.9411	2.04	2.0373
Replicate F							1.048	1.490	0.000	0.455
Replicate Prob(F)							0.3861	0.2713	1.0000	0.6472
Treatment F							10.589	25.887	0.000	10173.456
Treatment Prob(F)							0.0010	0.0001	1.0000	0.0001

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Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Appl Unit Code	5	6	7	8	9
1 UTC						0	0	0	0	0
2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		A	38	82	57	0	70
2 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		A					
2 NIS	0.25 % v/v		4.8 oz/a		A					
2 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
2 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		B					
2 NIS	0.25 % v/v		4.8 oz/a		B					
3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		A	95	98	97	93	90
3 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		A					
3 Fierce	0.143 lb ai/a		3 oz/a		A					
3 NIS	0.25 % v/v		4.8 oz/a		A					
3 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
3 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		B					
3 NIS	0.25 % v/v		4.8 oz/a		B					
4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		A	48	90	47	0	87
4 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		A					
4 NIS	0.25 % v/v		4.8 oz/a		A					
4 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
4 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		B					
4 Cobra	0.195 lb ai/a		12.5 oz/a		B					
4 NIS	0.25 % v/v		4.8 oz/a		B					
5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		A	87	92	87	84	77
5 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		A					
5 Fierce	0.143 lb ai/a		3 oz/a		A					
5 NIS	0.25 % v/v		4.8 oz/a		A					
5 Roundup PowerMax	1.13 lb ae/a		32 oz/a		B					
5 2,4-D Amine	0.75 lb ai/a		1.5 pt/a		B					
5 Cobra	0.195 lb ai/a		12.5 oz/a		B					
5 NIS	0.25 % v/v		4.8 oz/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	AMBTR	SETFA	SETFA	AMBTR
Pest Scientific Name	Conyza canadensis	Ambrosia trifida	Setaria faberii	Setaria faberii	Ambrosia trifida
Pest Name	Canada horseweed	Giant ragweed	Giant foxtail	Giant foxtail	Giant ragweed
Rating Date	May-15-2014	May-15-2014	May-15-2014	May-29-2014	May-29-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	5	6	7	9	10
Days After First/Last Applic.	28 28	28 28	28 28	42 42	42 42
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	42 DA-A	42 DA-A
ARM Action Codes		AA		AA	ET1
Number of Decimals	0	0	0	0	0

Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Unit	Appl Code	5	6	7	8	9
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a			A	90	96	95	71	70
6 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a			A					
6 Fierce	0.143 lb	ai/a	3 oz/a			A					
6 NIS	0.25 %	v/v	4.8 oz/a			A					
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a			B					
6 Cobra	0.195 lb	ai/a	12.5 oz/a			B					
6 NIS	0.25 %	v/v	4.8 oz/a			B					
LSD (P=.05)							26.6	18.3t	14.8	17.1t	16.2
Standard Deviation							14.6	10.1t	8.1	9.4t	8.9
CV							24.44	16.32	12.81	28.43	13.55
Bartlett's X2							3.599	8.843	4.931	4.824	0.822
P(Bartlett's X2)							0.463	0.065	0.294	0.09	0.935
Skewness							-0.5696	-1.4931*	-0.7879	0.172	-1.4653*
Kurtosis							-1.2368	1.1027	-0.6181	-2.0829*	1.0752
Replicate F							0.046	0.567	0.774	0.636	0.915
Replicate Prob(F)							0.9556	0.5846	0.4869	0.5493	0.4314
Treatment F							19.829	28.027	63.184	45.604	41.859
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	SETFA	AMBTR	ERICA	SETFA
Pest Scientific Name	Conyza canadensis	Setaria faberi	Ambrosia trifida	Conyza canadensis	Setaria faberi
Pest Name	Canada horseweed	Giant foxtail	Giant ragweed	Canada horseweed	Giant foxtail
Rating Date	May-29-2014	Jun-12-2014	Jun-12-2014	Jun-12-2014	Jun-26-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	11	16	17	18	19
Days After First/Last Applic.	42 42	56 13	56 13	56 13	70 27
Trt-Eval Interval	42 DA-A	13 DA-B	13 DA-B	13 DA-B	27 DA-B
ARM Action Codes				ET6	ET1
Number of Decimals	0	0	0	0	0

Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Appl Unit Code	10	11	12	13	14
1 UTC						0	0	0	0	0
2 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	0	100	90	43	63
2 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A					
2 NIS	0.25 %	v/v	4.8 oz/a		A					
2 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B					
2 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B					
2 NIS	0.25 %	v/v	4.8 oz/a		B					
3 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	73	100	95	87	73
3 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A					
3 Fierce	0.143 lb	ai/a	3 oz/a		A					
3 NIS	0.25 %	v/v	4.8 oz/a		A					
3 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B					
3 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B					
3 NIS	0.25 %	v/v	4.8 oz/a		B					
4 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	0	100	94	50	53
4 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A					
4 NIS	0.25 %	v/v	4.8 oz/a		A					
4 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B					
4 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B					
4 Cobra	0.195 lb	ai/a	12.5 oz/a		B					
4 NIS	0.25 %	v/v	4.8 oz/a		B					
5 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	53	100	88	83	73
5 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A					
5 Fierce	0.143 lb	ai/a	3 oz/a		A					
5 NIS	0.25 %	v/v	4.8 oz/a		A					
5 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B					
5 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B					
5 Cobra	0.195 lb	ai/a	12.5 oz/a		B					
5 NIS	0.25 %	v/v	4.8 oz/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	SETFA	AMBTR	ERICA	SETFA
Pest Scientific Name	Conyza canadensis	Setaria faberi	Ambrosia trifida	Conyza canadensis	Setaria faberi
Pest Name	Canada horseweed	Giant foxtail	Giant ragweed	Canada horseweed	Giant foxtail
Rating Date	May-29-2014	Jun-12-2014	Jun-12-2014	Jun-12-2014	Jun-26-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
SE Group No.	11	16	17	18	19
Days After First/Last Applic.	42 42	56 13	56 13	56 13	70 27
Trt-Eval Interval	42 DA-A	13 DA-B	13 DA-B	13 DA-B	27 DA-B
ARM Action Codes				ET6	ET1
Number of Decimals	0	0	0	0	0

Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Unit	Appl Code	10	11	12	13	14
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a			A	67	100	89	68	57
6 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a			A					
6 Fierce	0.143 lb	ai/a	3 oz/a			A					
6 NIS	0.25 %	v/v	4.8 oz/a			A					
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a			B					
6 Cobra	0.195 lb	ai/a	12.5 oz/a			B					
6 NIS	0.25 %	v/v	4.8 oz/a			B					
LSD (P=.05)							22.4	0.0	11.5	20.5	15.2
Standard Deviation							12.3	0.0	6.3	11.3	8.4
CV							38.29	0.0	8.33	20.49	15.69
Bartlett's X2							0.219	0.0	0.675	11.112	2.471
P(Bartlett's X2)							0.896	.	0.879	0.025*	0.65
Skewness							0.3858	-1.9558*	-1.8325*	-0.6458	-1.1847*
Kurtosis							-1.6257	2.04	1.7704	-0.692	0.6939
Replicate F							2.226	0.000	0.952	0.991	3.095
Replicate Prob(F)							0.1586	1.0000	0.4184	0.4049	0.0899
Treatment F							25.372	0.000	104.352	24.105	32.190
Treatment Prob(F)							0.0001	1.0000	0.0001	0.0001	0.0001



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Pest Type	W Weed	W Weed
Pest Code	AMBTR	ERICA
Pest Scientific Name	Ambrosia trifida	Conyza canadensis
Pest Name	Giant ragweed	Canada horseweed
Rating Date	Jun-26-2014	Jun-26-2014
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
SE Group No.	20	21
Days After First/Last Applic.	70 27	70 27
Trt-Eval Interval	27 DA-B	27 DA-B
ARM Action Codes	ET1	
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	15	16
1	UTC						0	0
2	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	80	60
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A		
	NIS	0.25 %	v/v	4.8 oz/a		A		
2	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B		
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B		
	NIS	0.25 %	v/v	4.8 oz/a		B		
3	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	87	90
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A		
	Fierce	0.143 lb	ai/a	3 oz/a		A		
	NIS	0.25 %	v/v	4.8 oz/a		A		
3	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B		
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B		
	NIS	0.25 %	v/v	4.8 oz/a		B		
4	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	80	67
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A		
	NIS	0.25 %	v/v	4.8 oz/a		A		
4	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B		
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B		
	Cobra	0.195 lb	ai/a	12.5 oz/a		B		
	NIS	0.25 %	v/v	4.8 oz/a		B		
5	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	97	92
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A		
	Fierce	0.143 lb	ai/a	3 oz/a		A		
	NIS	0.25 %	v/v	4.8 oz/a		A		
5	Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B		
	2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		B		
	Cobra	0.195 lb	ai/a	12.5 oz/a		B		
	NIS	0.25 %	v/v	4.8 oz/a		B		

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Pest Type	W Weed	W Weed
Pest Code	AMBTR	ERICA
Pest Scientific Name	Ambrosia trifi>	Conyza canadens>
Pest Name	Giant ragweed	Canada horsewe>
Rating Date	Jun-26-2014	Jun-26-2014
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
SE Group No.	20	21
Days After First/Last Applic.	70 27	70 27
Trt-Eval Interval	27 DA-B	27 DA-B
ARM Action Codes	ET1	
Number of Decimals	0	0

Trt Treatment	Rate	Other	Other	Appl		
No. Name	Rate	Unit	Rate	Rate	Unit	Code
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		A	15 73 16 50
6 2,4-D Amine	0.75 lb	ai/a	1.5 pt/a		A	
6 Fierce	0.143 lb	ai/a	3 oz/a		A	
6 NIS	0.25 %	v/v	4.8 oz/a		A	
6 Roundup PowerMax	1.13 lb	ae/a	32 oz/a		B	
6 Cobra	0.195 lb	ai/a	12.5 oz/a		B	
6 NIS	0.25 %	v/v	4.8 oz/a		B	

LSD (P=.05)	22.4	16.9
Standard Deviation	12.3	9.3
CV	17.77	15.56
Bartlett's X2	4.083	1.412
P(Bartlett's X2)	0.395	0.703
Skewness	-1.4445*	-0.7533
Kurtosis	0.8759	-0.3454

Replicate F	0.255	5.900
Replicate Prob(F)	0.7795	0.0203
Treatment F	24.036	39.219
Treatment Prob(F)	0.0001	0.0001

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## Marestail Control with Fierce in 2,4-D Tolerant Soybean

Trial ID: 14FIERCEBGRD24D  
Protocol ID: 14FIERCEBGRD24D  
Project ID: FIERCE MD 64.09

Location: Western Branch G-8 Trial Year: 2014  
Investigator: Dr. Mark M. Loux  
Study Director: Anthony Dobbels  
Sponsor Contact: Eric Ott, Valent

### Pest Type

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

### Pest Code

STEME, Stellaria media, = US  
LAMPU, Lamium purpureum, = US  
ERYRE, Erysimum repandum, = US  
VERAG, Veronica agrestis, = US  
ERICA, Conyza canadensis, = US  
AMBTR, Ambrosia trifida, = US  
SETFA, Setaria faberi, = US

### Rating Type

CONTRO = control / burndown or knockdown

### Rating Unit

% = percent

### ARM Action Codes

AA = Automatic arcsine square root % transformation