

Ohio State University Horticulture and Crop Science

Evaluate tank-mix options for marestail control with kixor applied preplant burndown

Title No. 2:
Trial ID: 11NTS1 Protocol ID: 11NTS1
Location: Study Director: Bryan Reeb
Project ID: 11NTS1 Investigator: Dr. Mark M. Loux
Sponsor Contact: Caren Judge, BASF

General Trial Information

Study Director: Bryan Reeb **Title:** Research Technician
Investigator: Dr. Mark M. Loux **Title:** Professor

Trial Location

City: South Charleston **Latitude of LL Corner °:** 39.8601 N
State/Prov.: Ohio **Longitude of LL Corner °:** -83.66985 W
Postal Code: 45368
Country: USA

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG 3631 **Description:** Round up Ready
BBCH Scale: BSOY **Planting Date:** 6/15/11
Planting Method: SEEDED seeded **Rate, Unit:** 197000 S/A
Depth, Unit: 0.75 IN
Row Spacing, Unit: 15 IN
Seed Bed: CLODDY cloddy
Soil Moisture: NORMAL normal

Pest Description

Pest 1 Type: W **Code:** VERAG Veronica agrestis
Common Name: Field speedwell
Pest 2 Type: W **Code:** ERICA Conyza canadensis
Common Name: Canada horseweed
Pest 3 Type: W **Code:** TAROF Taraxacum officinale
Common Name: Common dandelion
Pest 4 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Site and Design

Plot Width, Unit: 6.67 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT **Experimental Unit:** 1 PLOT plot
Plot Area, Unit: 200.1 FT2 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOBL Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

Maintenance

No.	Date	Maintenance Treatment Name	Rate	Unit
1.	7/15/11	Round Up	22	oz

Comment: soybeans 8-10" tall V-4
setfa 10-12"
erica 3-5" and 8-10"
ambtr 20-25"

Soil Description

Description Name: ENT W-6
% OM: 2.6 **Texture:** SICL silty clay loam
pH: 7.1 **Soil Name:** Kokomo
CEC: 17.8 **Fert. Level:** G good
Soil Drainage: G good

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Application Description

Application Date: 6/2/11
Time of Day: 10:38 A.M
Application Method: SPRAY
Application Placement: BROFOL
Air Temperature, Unit: 82 F
% Relative Humidity: 46
Wind Velocity, Unit: 1.6 MPH
Dew Presence (Y/N): N no
Soil Temperature, Unit: 68 F
Soil Moisture: GOOD
Next Rain Occurred On: 6/4/11

Crop Stage At Each Application

Crop 1 Code, BBCH Scale: GLXMA BSOY

Pest Stage At Each Application

Pest 1 Code, Type, Scale: VERAG W
Height, Unit: 4 IN
Height Minimum, Maximum: 4 4
Pest 2 Code, Type, Scale: ERICA W
Height, Unit: 3 IN
Height Minimum, Maximum: 1 5
Density, Unit: 109.33 M2
Pest 3 Code, Type, Scale: TAROF W
Diameter, Unit: 6 IN
Pest 4 Code, Type, Scale: AMBTR W
Height, Unit: 6 IN
Height Minimum, Maximum: 6 6
Density, Unit: 9.33 M2

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Evaluate tank-mix options for marestalk control with kixor applied preplant burndown

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 Sponsor Contact: Caren Judge, BASF

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	VERAG	ERICA	STEME	VERAG
Pest Scientific Name	Stellaria media	Veronica agres>	Conyza canadens>	Stellaria media	Veronica agres>
Pest Name	Common chickwe>	Field speedwell	Canada horsewe>	Common chickwe>	Field speedwell
Rating Date	6/10/11	6/10/11	6/10/11	6/15/11	6/15/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	8 8	8 8	8 8	13 13	13 13
Trt-Eval Interval	8 DA-A	8 DA-A	8 DA-A	13 DA-A	13 DA-A
Plant-Eval Interval	-5 DP-1	-5 DP-1	-5 DP-1	0 DP-1	0 DP-1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
1	Roundup Power Max	4.5	22 oz/a		A	100	40	3	100	100
	1 N-pak ams	100	3 qt/a		A					
2	Roundup Power Max	4.5	22 oz/a		A	100	57	37	100	100
	2 2,4-D Ester	4	1 pt/a		A					
	2 N-pak ams	100	3 qt/a		A					
3	Sharpen	2.85	1 oz/a		A	100	50	100	100	100
	3 Roundup Power Max	4.5	22 oz/a		A					
	3 MSO	100	0.6 qt/a		A					
	3 N-pak ams	100	3 qt/a		A					
4	Sharpen	2.85	1.5 oz/a		A	100	60	100	100	100
	4 Roundup Power Max	4.5	22 oz/a		A					
	4 MSO	100	0.6 qt/a		A					
	4 N-pak ams	100	3 qt/a		A					
5	Verdict	5.57	5 oz/a		A	100	75	100	100	100
	5 Roundup Power Max	4.5	22 oz/a		A					
	5 MSO	100	0.6 qt/a		A					
	5 N-pak ams	100	3 qt/a		A					
6	Verdict	5.57	7.5 oz/a		A	100	78	100	100	100
	6 Roundup Power Max	4.5	22 oz/a		A					
	6 MSO	100	0.6 qt/a		A					
	6 N-pak ams	100	3 qt/a		A					
7	Sharpen	2.85	1 oz/a		A	100	83	100	100	100
	7 Roundup Power Max	4.5	22 oz/a		A					
	7 2,4-D Ester	4	1 pt/a		A					
	7 MSO	100	0.6 qt/a		A					
	7 N-pak ams	100	3 qt/a		A					
8	Sharpen	2.85	1 oz/a		A	100	100	99	100	100
	8 Ignite	2.34	22 oz/a		A					
	8 MSO	100	0.6 qt/a		A					
	8 N-pak ams	100	3 qt/a		A					
9	Authority First	70	3 oz/a		A	75	55	43	92	98
	9 Roundup Power Max	4.5	22 oz/a		A					
	9 MSO	100	0.6 qt/a		A					
	9 N-pak ams	100	3 qt/a		A					
10	Valor XLT @ 3.0 oz					98	85	53	100	100
	10 Valor SX	51	1.76 oz/a		A					
	10 Classic	25	1.24 oz/a		A					
	10 Roundup Power Max	4.5	22 oz/a		A					
	10 2,4-D Ester	4	1 pt/a		A					
	10 MSO	100	0.6 qt/a		A					
	10 N-pak ams	100	3 qt/a		A					

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Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code		STEME	VERAG	ERICA	STEME	VERAG
Pest Scientific Name		Stellaria media	Veronica agres>	Conyza canadens>	Stellaria media	Veronica agres>
Pest Name		Common chickwe>	Field speedwell	Canada horsewe>	Common chickwe>	Field speedwell
Rating Date		6/10/11	6/10/11	6/10/11	6/15/11	6/15/11
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%	%	%
Number of Subsamples		1	1	1	1	1
Days After First/Last Applic.		8 8	8 8	8 8	13 13	13 13
Trt-Eval Interval		8 DA-A	8 DA-A	8 DA-A	13 DA-A	13 DA-A
Plant-Eval Interval		-5 DP-1	-5 DP-1	-5 DP-1	0 DP-1	0 DP-1
Number of Decimals		0	0	0	0	0
Trt Treatment No. Name	Form Other Other Conc Rate Rate Unit Code	1	2	3	4	5
LSD (P=.05)		14.6	33.8	9.0	5.6	1.6
Standard Deviation		8.4	19.4	5.2	3.3	0.9
CV		8.67	28.33	7.13	3.32	0.91
Bartlett's X2		5.771	4.604	8.812	0.0	0.0
P(Bartlett's X2)		0.016*	0.595	0.066	.	.
Replicate F		0.896	3.512	3.152	1.000	1.000
Replicate Prob(F)		0.4279	0.0561	0.0671	0.3874	0.3874
Treatment F		2.595	2.789	142.520	1.923	1.000
Treatment Prob(F)		0.0462	0.0383	0.0001	0.1136	0.4742

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	ERICA	AMBTR	ERICA	AMBTR
Pest Scientific Name	<i>Conyza canadensis</i>	<i>Conyza canadensis</i>	<i>Ambrosia trifida</i>	<i>Conyza canadensis</i>	<i>Ambrosia trifida</i>
Pest Name	Canada horseweed	Canada horseweed	Giant ragweed	Canada horseweed	Giant ragweed
Rating Date	6/15/11	7/14/11	7/14/11	8/10/11	8/10/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	13 13	42 42	42 42	69 69	69 69
Trt-Eval Interval	13 DA-A	42 DA-A	42 DA-A	69 DA-A	69 DA-A
Plant-Eval Interval	0 DP-1	29 DP-1	29 DP-1	56 DP-1	56 DP-1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit	Code	6	7	8	9	10	11
1	Roundup Power Max	4.5	22 oz/a		A		33	13	40	30	87	
	1 N-pak ams	100	3 qt/a		A							
2	Roundup Power Max	4.5	22 oz/a		A		37	67	77	73	98	
	2 2,4-D Ester	4	1 pt/a		A							
	2 N-pak ams	100	3 qt/a		A							
3	Sharpen	2.85	1 oz/a		A		100	87	78	83	93	
	3 Roundup Power Max	4.5	22 oz/a		A							
	3 MSO	100	0.6 qt/a		A							
	3 N-pak ams	100	3 qt/a		A							
4	Sharpen	2.85	1.5 oz/a		A		98	92	90	90	98	
	4 Roundup Power Max	4.5	22 oz/a		A							
	4 MSO	100	0.6 qt/a		A							
	4 N-pak ams	100	3 qt/a		A							
5	Verdict	5.57	5 oz/a		A		97	90	73	88	100	
	5 Roundup Power Max	4.5	22 oz/a		A							
	5 MSO	100	0.6 qt/a		A							
	5 N-pak ams	100	3 qt/a		A							
6	Verdict	5.57	7.5 oz/a		A		97	100	50	100	85	
	6 Roundup Power Max	4.5	22 oz/a		A							
	6 MSO	100	0.6 qt/a		A							
	6 N-pak ams	100	3 qt/a		A							
7	Sharpen	2.85	1 oz/a		A		99	87	72	83	85	
	7 Roundup Power Max	4.5	22 oz/a		A							
	7 2,4-D Ester	4	1 pt/a		A							
	7 MSO	100	0.6 qt/a		A							
	7 N-pak ams	100	3 qt/a		A							
8	Sharpen	2.85	1 oz/a		A		96	90	88	82	93	
	8 Ignite	2.34	22 oz/a		A							
	8 MSO	100	0.6 qt/a		A							
	8 N-pak ams	100	3 qt/a		A							
9	Authority First	70	3 oz/a		A		60	70	53	68	93	
	9 Roundup Power Max	4.5	22 oz/a		A							
	9 MSO	100	0.6 qt/a		A							
	9 N-pak ams	100	3 qt/a		A							
10	Valor XLT @ 3.0 oz						57	50	93	58	100	
	10 Valor SX	51	1.76 oz/a		A							
	10 Classic	25	1.24 oz/a		A							
	10 Roundup Power Max	4.5	22 oz/a		A							
	10 2,4-D Ester	4	1 pt/a		A							
	10 MSO	100	0.6 qt/a		A							
	10 N-pak ams	100	3 qt/a		A							

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Pest Code		ERICA	ERICA	AMBTR	ERICA	AMBTR
Pest Scientific Name		<i>Conyza canadensis</i>	<i>Conyza canadensis</i>	<i>Ambrosia trifida</i>	<i>Conyza canadensis</i>	<i>Ambrosia trifida</i>
Pest Name		Canada horseweed	Canada horseweed	Giant ragweed	Canada horseweed	Giant ragweed
Rating Date		6/15/11	7/14/11	7/14/11	8/10/11	8/10/11
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%		
Number of Subsamples		1	1	1	1	1
Days After First/Last Applic.		13 13	42 42	42 42	69 69	69 69
Trt-Eval Interval		13 DA-A	42 DA-A	42 DA-A	69 DA-A	69 DA-A
Plant-Eval Interval		0 DP-1	29 DP-1	29 DP-1	56 DP-1	56 DP-1
Number of Decimals		0	0	0	0	0
Trt Treatment No. Name	Form Other Other Appl	6	7	8	9	10 11
	Conc Rate Rate Unit Code					
LSD (P=.05)		17.2	20.1	31.5	21.4	17.8 .
Standard Deviation		10.0	11.7	18.2	12.5	10.4 .
CV		12.94	15.75	25.47	16.47	11.15 .
Bartlett's X2		25.107	8.719	4.891	5.355	11.498 .
P(Bartlett's X2)		0.001*	0.273	0.769	0.719	0.118 .
Replicate F		0.783	1.108	1.369	0.392	1.393
Replicate Prob(F)		0.4719	0.3518	0.2827	0.6815	0.2737
Treatment F		22.720	14.876	2.973	7.635	0.992
Treatment Prob(F)		0.0001	0.0001	0.0276	0.0001	0.4794

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Title No. 2:

Trial ID: 11NTS1

Location:

Project ID: 11NTS1

Protocol ID: 11NTS1

Study Director: Bryan Reeb

Investigator: Dr. Mark M. Loux

Sponsor Contact: Caren Judge, BASF

Pest Type

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

Pest Code

STEME, Stellaria media, = US

VERAG, Veronica agrestis, = US

ERICA, Conyza canadensis, = US

AMBTR, Ambrosia trifida, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

-5 DP-1 = 1 6/15/11

0 DP-1 = 1 6/15/11

29 DP-1 = 1 6/15/11

56 DP-1 = 1 6/15/11