

Ohio State University Horticulture and Crop Science

FULL SEASON CONTROL OF MARESTAIL WITH FALL AND SPRING APPLICATIONS

Title No. 2:
Trial ID: 11FALLHOWE 2 Protocol ID: 11FALLHOWE 2
Location: Western Branch G-7 Study Director: Bryan Reeb
Project ID: 11FALLHOWE 2 Investigator: Dr. Mark M. Loux
Sponsor Contact: Dain Bruns, Caren Judge

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 °:** 39.85809 N
State/Prov.: Ohio **Longitude of LL Corner °:** -83.67583 W
Postal Code: 45368
Country: USA

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Pioneer 93Y51 **Description:** Round Up Ready
BBCH Scale: BSOY **Planting Date:** 5/22/11
Planting Method: SEEDED seeded **Rate, Unit:** 197000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Seed Bed: MEDIUM medium
Soil Moisture: DAMP damp

Pest Description

- Pest 1 Type:** W **Code:** LAMPU *Lamium purpureum*
Common Name: Purple deadnettel
- Pest 2 Type:** W **Code:** TAROF *Taraxacum officinale*
Common Name: Common dandelion
- Pest 3 Type:** W **Code:** STEME *Stellaria media*
Common Name: Common chickweed
- Pest 4 Type:** W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed
- Pest 5 Type:** W **Code:** CAPBP *Capsella bursa-pastoris*
Common Name: Shepherd's purse
- Pest 6 Type:** W **Code:** ERYRE *Erysimum repandum*
Common Name: Bushy wallflower
- Pest 7 Type:** W **Code:** ERICA *Conyza canadensis*
Common Name: Canada horseweed
- Pest 8 Type:** W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail
- Pest 9 Type:** W **Code:** VERPG *Veronica peregrina*
Common Name: Purslane speedwell

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT **Experimental Unit:** 1 PLOT plot
Plot Area, Unit: 300 FT2 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

Soil Description

Description Name: G-7 West
% OM: 1.7 **Texture:** SIL silt loam
pH: 6.1 **Soil Name:** Crosby Silt Loam
CEC: 12.8 **Fert. Level:** G good
Soil Drainage: G good

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Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifid	Conyza canadensis
Pest Name	Giant foxtail	Giant ragweed	Canada horseweed
Rating Date	7/11/11	7/11/11	7/11/11
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	244 28	244 28	244 28
Trt-Eval Interval	28 DA-D	28 DA-D	28 DA-D
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit	Code	12	13	14
1	2,4-D	4	2 pt/a		A		95	100	100
1	Sharpen	2.85	1 oz/a		C				
1	Prefix	5.29	2 pt/a		C				
1	Touchdown Total	4.17	24 oz/a		C				
1	N-pak ams	100	1.5 qt/a		C				
1	MSO	100	0.6 qt/a		C				
1	Touchdown Total	4.17	24 oz/a		D				
1	N-pak ams	100	1.5 qt/a		D				
2	2,4-D	4	2 pt/a		A		90	93	100
2	Boundary	6.5	1.75 pt/a		C				
2	Gramoxone Inteon	2	3 pt/a		C				
2	MSO	100	0.6 qt/a		C				
2	Touchdown Total	4.17	24 oz/a		D				
2	N-pak ams	100	1.5 qt/a		D				
3	2,4-D	4	2 pt/a		A		95	89	100
3	Gramoxone Inteon	2	2 pt/a		A				
3	MSO	100	0.6 qt/a		A				
3	Boundary	6.5	1.75 pt/a		C				
3	Gramoxone Inteon	2	2.5 pt/a		C				
3	MSO	100	0.6 qt/a		C				
3	Touchdown Total	4.17	24 oz/a		D				
3	N-pak ams	100	1.5 qt/a		D				
4	Sharpen	2.85	1 oz/a		C		92	100	100
4	Prefix	5.29	2 pt/a		C				
4	Gramoxone Inteon	2	2 pt/a		C				
4	MSO	100	0.6 qt/a		C				
4	Touchdown Total	4.17	24 oz/a		D				
4	N-pak ams	100	1.5 qt/a		D				
5	Sharpen	2.85	1 oz/a		C		97	89	100
5	Boundary	6.5	1.75 pt/a		C				
5	Gramoxone Inteon	2	2 pt/a		C				
5	MSO	100	0.6 qt/a		C				
5	Touchdown Total	4.17	24 oz/a		D				
5	N-pak ams	100	1.5 qt/a		D				
6	Sharpen	2.85	1 oz/a		C		97	93	100
6	Scepter	70	2.8 oz/a		C				
6	Roundup Power Max	4.5	21.3 oz/a		C				
6	MSO	100	0.6 qt/a		C				
6	N-pak ams	100	1.5 qt/a		C				
6	Roundup Power Max	4.5	21.3 oz/a		D				
6	N-pak ams	100	1.5 qt/a		D				
7	Sharpen	2.85	1 oz/a		C		100	91	100
7	Scepter	70	2.8 oz/a		C				
7	Metribuzin	75	6 oz/a		C				
7	Roundup Power Max	4.5	21.3 oz/a		C				

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Pest Type	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	ERICA
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Conyza canadens>
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>
Rating Date	7/11/11	7/11/11	7/11/11
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Days After First/Last Applic.	244 28	244 28	244 28
Trt-Eval Interval	28 DA-D	28 DA-D	28 DA-D
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1
Number of Decimals	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Unit	Appl Code	12	13	14
7	MSO	100	0.6	qt/a	C			
7	N-pak ams	100	1.5	qt/a	C			
7	Roundup Power Max	4.5	21.3	oz/a	D			
7	N-pak ams	100	1.5	qt/a	D			
8	Sharpen	2.85	1	oz/a	A	90	67	84
8	Scepter	70	2.8	oz/a	A			
8	Roundup Power Max	4.5	21.3	oz/a	A			
8	MSO	100	0.6	qt/a	A			
8	N-pak ams	100	1.5	qt/a	A			
8	Roundup Power Max	4.5	21.3	oz/a	D			
8	N-pak ams	100	1.5	qt/a	D			
9	Sharpen	2.85	1	oz/a	A	82	85	100
9	Scepter	70	2.8	oz/a	A			
9	Roundup Power Max	4.5	21.3	oz/a	A			
9	MSO	100	0.6	qt/a	A			
9	N-pak ams	100	1.5	qt/a	A			
9	Sharpen	2.85	1	oz/a	C			
9	Metribuzin	75	8	oz/a	C			
9	Roundup Power Max	4.5	21.3	oz/a	C			
9	MSO	100	0.6	qt/a	C			
9	N-pak ams	100	1.5	qt/a	C			
9	Roundup Power Max	4.5	21.3	oz/a	D			
9	N-pak ams	100	1.5	qt/a	D			
10	OpTill	68	2	oz/a	A	97	60	11
10	Roundup Power Max	4.5	21.3	oz/a	A			
10	MSO	100	0.6	qt/a	A			
10	N-pak ams	100	1.5	qt/a	A			
10	Roundup Power Max	4.5	21.3	oz/a	D			
10	N-pak ams	100	1.5	qt/a	D			
11	OpTill	68	2	oz/a	A	73	78	100
11	Roundup Power Max	4.5	21.3	oz/a	A			
11	MSO	100	0.6	qt/a	A			
11	N-pak ams	100	1.5	qt/a	A			
11	Sharpen	2.85	1	oz/a	C			
11	Metribuzin	75	8	oz/a	C			
11	Roundup Power Max	4.5	21.3	oz/a	C			
11	MSO	100	0.6	qt/a	C			
11	N-pak ams	100	1.5	qt/a	C			
11	Roundup Power Max	4.5	21.3	oz/a	D			
11	N-pak ams	100	1.5	qt/a	D			
12	Canopy	75	2	oz/a	A	82	85	97
12	Roundup Power Max	4.5	10.8	oz/a	A			
12	2,4-D	4	1	pt/a	A			
12	N-pak ams	100	1.5	qt/a	A			
12	Valor XLT @ 2oz							
12	Valor SX	51	1.17	oz/a	C			
12	Classic	25	0.83	oz/a	C			
12	Roundup Power Max	4.5	21.3	oz/a	C			
12	N-pak ams	100	1.5	qt/a	C			
12	Roundup Power Max	4.5	21.3	oz/a	D			
12	N-pak ams	100	1.5	qt/a	D			
13	Roundup Power Max	4.5	21.3	oz/a	A	88	80	100
13	2,4-D	4	1	pt/a	A			
13	N-pak ams	100	1.5	qt/a	A			
13	Valor XLT @ 3.5oz							

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Pest Name		Giant foxtail	Giant ragweed	Canada horsewe>
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Rating Type		CONTRO	CONTRO	CONTRO
Rating Unit		%	%	%
Number of Subsamples		1	1	1
Days After First/Last Applic.		244 28	244 28	244 28
Trt-Eval Interval		28 DA-D	28 DA-D	28 DA-D
Plant-Eval Interval		50 DP-1	50 DP-1	50 DP-1
Number of Decimals		0	0	0
Trt Treatment	Form Other Other	Appl		
No. Name	Conc Rate Rate Unit Code		12	13
13 Valor SX	51 2.05 oz/a	B		
13 Classic	25 1.45 oz/a	B		
13 Roundup Power Max	4.5 21.3 oz/a	B		
13 2,4-D	4 1 pt/a	B		
13 N-pak ams	100 1.5 qt/a	B		
13 Roundup Power Max	4.5 21.3 oz/a	D		
13 N-pak ams	100 1.5 qt/a	D		
14 UTC			82	67
LSD (P=.05)			13.2	15.2
Standard Deviation			7.9	9.1
CV			8.75	10.79
Bartlett's X2			9.033	5.083
P(Bartlett's X2)			0.70	0.886
Replicate F			15.269	0.967
Replicate Prob(F)			0.0001	0.3935
Treatment F			2.888	5.652
Treatment Prob(F)			0.0103	0.0001

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Location: Western Branch G-7 Study Director: Bryan Reeb
Project ID: 11FALLHOWE 2 Investigator: Dr. Mark M. Loux
Sponsor Contact: Dain Bruns, Caren Judge

Pest Type

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

Pest Code

LAMPU, *Lamium purpureum*, = US
TAROF, *Taraxacum officinale*, = US
AMBTR, *Ambrosia trifida*, = US
VERPG, *Veronica peregrina*, = US
SETFA, *Setaria faberi*, = US
ERICA, *Conyza canadensis*, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

-31 DP-1 = 1 5/22/11
-6 DP-1 = 1 5/22/11
10 DP-1 = 1 5/22/11
50 DP-1 = 1 5/22/11

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General Trial Information

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Investigator: Dr. Mark M. Loux **Title:** Professor

Trial Location

City: South Charleston **Latitude of LL Corner °:** 39.85809 N
State/Prov.: Ohio **Longitude of LL Corner °:** -83.67583 W
Postal Code: 45368
Country: USA

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Pioneer 93Y51 **Description:** Round Up Ready
BBCH Scale: BSOY **Planting Date:** 5/22/11
Planting Method: SEEDED seeded **Rate, Unit:** 197000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Seed Bed: MEDIUM medium
Soil Moisture: DAMP damp

Pest Description

- Pest 1 Type:** W **Code:** LAMPU *Lamium purpureum*
Common Name: Purple deadnettel
- Pest 2 Type:** W **Code:** TAROF *Taraxacum officinale*
Common Name: Common dandelion
- Pest 3 Type:** W **Code:** STEME *Stellaria media*
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Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT **Experimental Unit:** 1 PLOT plot
Plot Area, Unit: 300 FT2 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB L Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

Soil Description

Description Name: G-7 West
% OM: 1.7 **Texture:** SIL silt loam
pH: 6.1 **Soil Name:** Crosby Silt Loam
CEC: 12.8 **Fert. Level:** G good
Soil Drainage: G good