

Ohio State University Horticulture and Crop Science

FALL HORSEWEED BURNDOWN AND RESIDUAL

Title No. 2:
Trial ID: 11FALLHOWE(WARS) Protocol ID: 11FALLHOWE(WARS)
Location: Western Branch G-7 Study Director: Bryan Reeb
Project ID: 11FALLHOWE(WARS) Investigator: Dr. Mark M. Loux
Sponsor Contact:

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 °:** 39.8581 N
State/Prov.: Ohio **Longitude of LL Corner °:** -83.67622 W
Postal Code: 45368
Country: USA

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: SC 3381 LL **Description:** Liberty Link
BBCH Scale: BSOY **Planting Date:** 6/3/11
Planting Method: PLANTD planted **Rate, Unit:** 197000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Seed Bed: MEDIUM medium
Soil Moisture: GOOD good **Emergence Date:** 6/10/11

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

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

Application Description

Application Date: 11/9/10
Time of Day: 12:30 PM
Application Method: SPRAY
Application Timing: FALL
Application Placement: BROFOL
Air Temperature, Unit: 71 F
% Relative Humidity: 35
Wind Velocity, Unit: 2.4 MPH
Wind Direction: SSW
Dew Presence (Y/N): N no
Soil Temperature, Unit: 48 F
Soil Moisture: DRY
% Cloud Cover: 0
Next Rain Occurred On: 11/14/10

Crop Stage At Each Application

Crop 1 Code, BBCH Scale: GLXMA BSOY

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Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	LAMPU W
Stage Majority, Percent:	15 100
Height, Unit:	0.5 IN
Height Minimum, Maximum:	0.25 0.50
Pest 2 Code, Type, Scale:	TAROF W
Stage Majority, Percent:	18 100
Diameter, Unit:	3.5 IN
Pest 3 Code, Type, Scale:	STEME W
Stage Majority, Percent:	19 100
Diameter, Unit:	1 IN
Height, Unit:	0.5 IN

Application Equipment

	A
Appl. Equipment:	Backpack
Equipment Type:	SPRBAC
Operating Pressure, Unit:	52 PSI
Nozzle Type:	DG
Nozzle Size:	8002
Nozzle Spacing, Unit:	18 IN
Boom Length, Unit:	6.67 FT
Boom Height, Unit:	18 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume, Unit:	20 gal/ac
Mix Size, Unit:	0.33 gallons
Propellant:	COMCO2

Date	By	Notes
6/3/11		SPRAYED POST APP OF 44OZ ROUNDUP

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 Sponsor Contact:

Pest Type	W Weed					
Pest Code	ERICA SEEDLING EMERGED					
Pest Scientific Name	Conyza canadensis					
Pest Name	Canada horseweed					
Rating Date	6/3/11		6/3/11		6/3/11	
Rating Type	CONTROL					
Rating Unit	%					
Number of Subsamples	1		1		1	
Days After First/Last Applic.	206	206	206	206	206	206
Trt-Eval Interval	206 DA-A		206 DA-A		206 DA-A	
Plant-Eval Interval	0 DP-1		0 DP-1		0 DP-1	
Days After Emergence	-7 DE-1		-7 DE-1		-7 DE-1	
Number of Decimals	0		0		0	

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	1	2	3
1	2,4-D Ester	4	1 pt/a		A	23	1	0
1	Roundup Power Max	4.5	10.7 oz/a		A			
1	N-pak ams	100	2 qt/a		A			
2	Clarity	4	8 oz/a		A	20	0	1
2	2,4-D Ester	4	1 pt/a		A			
2	Roundup Power Max	4.5	10.7 oz/a		A			
2	N-pak ams	100	2 qt/a		A			
3	Clarity	4	16 oz/a		A	13	0	1
3	2,4-D Ester	4	1 pt/a		A			
3	Roundup Power Max	4.5	10.7 oz/a		A			
3	N-pak ams	100	2 qt/a		A			
4	Sencor 75DF	75	4 oz/a		A	7	0	1
4	2,4-D Ester	4	1 pt/a		A			
4	Roundup Power Max	4.5	10.7 oz/a		A			
4	N-pak ams	100	2 qt/a		A			
5	Sencor 75DF	75	8 oz/a		A	13	0	1
5	2,4-D Ester	4	1 pt/a		A			
5	Roundup Power Max	4.5	10.7 oz/a		A			
5	N-pak ams	100	2 qt/a		A			
6	Sencor 75DF	75	12 oz/a		A	17	0	1
6	2,4-D Ester	4	1 pt/a		A			
6	Roundup Power Max	4.5	10.7 oz/a		A			
6	N-pak ams	100	2 qt/a		A			
7	Canopy EX @ 1.1oz					27	0	1
7	Classic	25	1 oz/a		A			
7	Express	50	0.15 oz/a		A			
7	2,4-D Ester	4	1 pt/a		A			
7	Roundup Power Max	4.5	10.7 oz/a		A			
7	N-pak ams	100	2 qt/a		A			
8	Canopy EX @ 2.2oz					33	0	1
8	Classic	25	1.97 oz/a		A			
8	Express	50	0.30 oz/a		A			
8	2,4-D Ester	4	1 pt/a		A			
8	Roundup Power Max	4.5	10.7 oz/a		A			
8	N-pak ams	100	2 qt/a		A			
9	Canopy	75	2.25 oz/a		A	43	0	1
9	2,4-D Ester	4	1 pt/a		A			
9	Roundup Power Max	4.5	10.7 oz/a		A			
9	N-pak ams	100	2 qt/a		A			
10	Canopy	75	4.5 oz/a		A	52	1	0
10	2,4-D Ester	4	1 pt/a		A			

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Rating Type	CONTROL
Rating Unit	%
Number of Subsamples	1 1 1
Days After First/Last Applic.	206 206 206 206 206 206
Trt-Eval Interval	206 DA-A 206 DA-A 206 DA-A
Plant-Eval Interval	0 DP-1 0 DP-1
Days After Emergence	-7 DE-1 -7 DE-1
Number of Decimals	0 0 0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	1	2	3
10	Roundup Power Max	4.5	10.7 oz/a		A			
10	N-pak ams	100	2 qt/a		A			
11	Canopy	75	2.25 oz/a		A	53	1	0
11	Sencor 75DF	75	6 oz/a		A			
11	2,4-D Ester	4	1 pt/a		A			
11	Roundup Power Max	4.5	10.7 oz/a		A			
11	N-pak ams	100	2 qt/a		A			
12	VALOR XLT @ 2 oz					43	1	0
12	Valor SX	51	1.17 oz/a		A			
12	Classic	25	0.83 oz/a		A			
12	2,4-D Ester	4	1 pt/a		A			
12	Roundup Power Max	4.5	10.7 oz/a		A			
12	N-pak ams	100	2 qt/a		A			
13	VALOR XLT @ 4 oz					95	1	0
13	Valor SX	51	2.35 oz/a		A			
13	Classic	25	1.65 oz/a		A			
13	2,4-D Ester	4	1 pt/a		A			
13	Roundup Power Max	4.5	10.7 oz/a		A			
13	N-pak ams	100	2 qt/a		A			
14	Valor SX	51	1 oz/a		A	20	1	0
14	2,4-D Ester	4	1 pt/a		A			
14	Roundup Power Max	4.5	10.7 oz/a		A			
14	N-pak ams	100	2 qt/a		A			
15	Valor SX	51	2 oz/a		A	33	1	0
15	2,4-D Ester	4	1 pt/a		A			
15	Roundup Power Max	4.5	10.7 oz/a		A			
15	N-pak ams	100	2 qt/a		A			
16	Sharpen	2.85	1 oz/a		A	7	0	1
16	2,4-D Ester	4	1 pt/a		A			
16	Roundup Power Max	4.5	10.7 oz/a		A			
16	N-pak ams	100	2 qt/a		A			
17	Authority MTZ	45	12 oz/a		A	17	0	1
17	2,4-D Ester	4	1 pt/a		A			
17	Roundup Power Max	4.5	10.7 oz/a		A			
17	N-pak ams	100	2 qt/a		A			
18	Authority XL	70	2 oz/a		A	33	1	0
18	2,4-D Ester	4	1 pt/a		A			
18	Roundup Power Max	4.5	10.7 oz/a		A			
18	N-pak ams	100	2 qt/a		A			
19	Authority XL	70	4 oz/a		A	27	0	1
19	2,4-D Ester	4	1 pt/a		A			
19	Roundup Power Max	4.5	10.7 oz/a		A			
19	N-pak ams	100	2 qt/a		A			
20	Scepter	70	2.8 oz/a		A	3	0	1
20	2,4-D Ester	4	1 pt/a		A			
20	Roundup Power Max	4.5	10.7 oz/a		A			
20	N-pak ams	100	2 qt/a		A			
21	KIH 485	85	2.5 oz/a		A	13	0	1

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 Rating Type CONTROL
 Rating Unit %
 Number of Subsamples 1 1 1
 Days After First/Last Applic. 206 206 206 206 206 206
 Trt-Eval Interval 206 DA-A 206 DA-A 206 DA-A
 Plant-Eval Interval 0 DP-1 0 DP-1
 Days After Emergence -7 DE-1 -7 DE-1
 Number of Decimals 0 0 0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	1	2	3
21	2,4-D Ester	4	1 pt/a		A			
21	Roundup Power Max	4.5	10.7 oz/a		A			
21	N-pak ams	100	2 qt/a		A			
22	KIH 485	85	5 oz/a		A	30	0	1
22	2,4-D Ester	4	1 pt/a		A			
22	Roundup Power Max	4.5	10.7 oz/a		A			
22	N-pak ams	100	2 qt/a		A			
LSD (P=.05)						26.5	0.7	0.7
Standard Deviation						16.0	0.4	0.4
CV						56.64	129.18	62.18
Bartlett's X2						22.89	0.0	0.0
P(Bartlett's X2)						0.35	.	.
Replicate F						6.761	0.572	0.290
Replicate Prob(F)						0.0028	0.5687	0.7495
Treatment F						4.893	1.712	2.618
Treatment Prob(F)						0.0001	0.0684	0.0039

Pest Type
 W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
Pest Code
 ERICA, Conyza canadensis, = US
Rating Unit
 % = percent
Plant-Eval Interval
 0 DP-1 = 1 6/3/11