

# Ohio State University Horticulture and Crop Science

Title No. 2:  
Trial ID: Protocol ID:  
Location: Study Director:  
Project ID: Investigator: Dr. Mark M. Loux  
Sponsor Contact:

### General Trial Information

**Study Director:** Anthony F. Dobbels **Title:** Research Specialist  
**Investigator:** Dr. Mark M. Loux **Title:** Professor

### Trial Location

**City:** South Charleston  
**State/Prov.:** Ohio  
**Postal Code:** 45368  
**Country:** USA

### Crop Description

**Crop 1:** TRZAW Triticum aestivum (winter) Winter wheat  
**Variety:** Seed Consultants 1358  
**BBCH Scale:** BCER  
**Planting Method:** DIRDRI direct drilled  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 7.5 IN  
**Seed Bed:** MEDIUM medium  
**Planting Date:** 10/8/10  
**Rate, Unit:** 126 LB/A  
**Emergence Date:** 10/15/10

### 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:** 6.67 FT  
**Plot Length, Unit:** 30 FT  
**Plot Area, Unit:** 200.1 FT<sup>2</sup>  
**Replications:** 3  
**Site Type:** FIELD field  
**Experimental Unit:** 1 PLOT plot  
**Tillage Type:** NOTILL no-till  
**Study Design:** RACOB L Randomized Complete Block (RCB)  
**Untreated Arrangement:** INCLUDED single control randomized in each block

### Soil Description

**Description Name:** J  
**% OM:** 2.9  
**pH:** 6.4  
**CEC:** 18.1  
**Texture:** SIL silt loam  
**Soil Name:** Crosby  
**Fert. Level:** G good  
**Soil Drainage:** G good

### Additional Measured Elements

Element	Quantity	Unit
P	122	ppm
K	196	ppm

### Application Description

	A	B
<b>Application Date:</b>	10/29/10	11/9/10
<b>Time of Day:</b>	8:30 A.M.	12:30 P.M.
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	EPO	POST
<b>Application Placement:</b>	BROFO	BROFO
<b>Applied By:</b>	Dobbels	
<b>Air Temperature, Unit:</b>	38 F	71 F
<b>% Relative Humidity:</b>	72.5	35
<b>Wind Velocity, Unit:</b>	6.5 MPH	2.4 MPH
<b>Wind Direction:</b>	W	SSW
<b>Dew Presence (Y/N):</b>	N no	N no
<b>Soil Temperature, Unit:</b>	42 F	48 F
<b>Soil Moisture:</b>	GOOD	DRY
<b>% Cloud Cover:</b>	75	0
<b>Next Rain Occurred On:</b>	11/4/10	11/16/10

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## Crop Stage At Each Application

	A		B	
	TRZAW	BCER	TRZAW	BCER
<b>Crop 1 Code, BBCH Scale:</b>	TRZAW	BCER	TRZAW	BCER
<b>Stage Scale Used:</b>	BBCH		BBCH	
<b>Stage Majority, Percent:</b>	12	100	14	80
<b>Stage Minimum, Percent:</b>			13	20
<b>Stage Maximum, Percent:</b>			14	80
<b>Height, Unit:</b>	3	IN	4	IN
<b>Height Minimum, Maximum:</b>	3	4	4	5

## Pest Stage At Each Application

	A		B	
	LAMPU	W	LAMPU	W
<b>Pest 1 Code, Type, Scale:</b>	LAMPU	W	LAMPU	W
<b>Stage Majority, Percent:</b>	14	80	14	100
<b>Stage Minimum, Percent:</b>	12	20		
<b>Stage Maximum, Percent:</b>	14	80		
<b>Diameter, Unit:</b>	0.5	IN	0.5	IN
<b>Height, Unit:</b>	0.5	IN	0.5	IN
<b>Height Minimum, Maximum:</b>	0.25	0.5	0.5	0.5
<b>Pest 2 Code, Type, Scale:</b>	TAROF	W	TAROF	W
<b>Stage Majority, Percent:</b>	16	80	18	80
<b>Stage Minimum, Percent:</b>	16	80	16	20
<b>Stage Maximum, Percent:</b>	18	20	18	80
<b>Diameter, Unit:</b>	3	IN	4	IN
<b>Height, Unit:</b>	0.25	IN	0.5	IN
<b>Height Minimum, Maximum:</b>	0.25	0.5	0.5	0.5
<b>Pest 3 Code, Type, Scale:</b>	STEME	W	STEME	W
<b>Stage Majority, Percent:</b>			21	100
<b>Diameter, Unit:</b>			2	IN
<b>Height, Unit:</b>			1	IN
<b>Height Minimum, Maximum:</b>			1	1

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	LAMPU	TAROF	STEME
Pest Scientific Name	Stellaria media	Lamium purpure>	Taraxacum offi>	Stellaria media
Pest Name	Common chickwe>	Purple deadnet>	Common dandel>	Common chickwe>
Rating Date	4/13/11	4/13/11	4/13/11	3/29/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	166 155	166 155	166 155	151 140
Plant-Eval Interval	187 DP-1	187 DP-1	187 DP-1	172 DP-1
Days After Emergence	180 DE-1	180 DE-1	180 DE-1	165 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	1	2	3	4
1	UNTREATED					87 a	38 b	50 b	87 a
2	AXIOM DF	68	6 oz/a		A	100 a	93 a	100 a	93 a
3	AXIOM DF	68	8 oz/a		A	90 a	90 a	100 a	83 a
4	OSPREY 4.5 WDG	13.5	4.76 oz/a		B	100 a	97 a	100 a	90 a
4	NIS	100	0.5 % v/v		B				
4	U.A.N.	32	4 pt/a		B				
5	AXIOM DF	68	6 oz/a		A	100 a	100 a	100 a	97 a
5	OSPREY 4.5 WDG	13.5	4.76 oz/a		B				
5	NIS	100	0.5 % v/v		B				
5	U.A.N.	32	4 pt/a		B				
6	AXIOM DF	68	8 oz/a		A	100 a	100 a	100 a	100 a
6	HUSKIE	2.140625	15 oz/a		B				
6	NIS	100	0.5 % v/v		B				
6	N-PAK AMS	100	2 qt/a		B				
7	HUSKIE	2.140625	15 oz/a		B	100 a	100 a	100 a	98 a
7	NIS	100	0.5 % v/v		B				
7	N-PAK AMS	100	2 qt/a		B				
8	POWERFLEX	7.5	3.5 oz/a		B	100 a	98 a	100 a	98 a
8	NIS	100	0.5 % v/v		B				
8	N-PAK AMS	100	4 pt/a		B				
9	Express	50	0.507 oz/a		B	100 a	100 a	100 a	97 a
9	Clarity	4	2 oz/a		B				
9	NIS	100	6.4 oz/a		B				
10	HARMONY XTRA 0.5 OZ					100 a	100 a	100 a	92 a
10	Harmony SG	50	0.5 oz/a		B				
10	Express	50	0.25 oz/a		B				
10	Clarity	4	2 oz/a		B				
10	NIS	100	6.4 oz/a		B				
LSD (P=.05)						16.1	25.0	28.0	14.7
Standard Deviation						9.4	14.6	16.3	8.6
CV						9.59	15.89	17.13	9.19
Bartlett's X2						0.159	12.921	0.0	9.741
P(Bartlett's X2)						0.69	0.012*	.	0.284
Replicate F						0.494	1.995	0.944	3.760
Replicate Prob(F)						0.6184	0.1650	0.4084	0.0432
Treatment F						0.848	5.131	2.833	1.241
Treatment Prob(F)						0.5841	0.0016	0.0308	0.3316

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Pest Type	W Weed	W Weed
Pest Code	LAMPU	TAROF
Pest Scientific Name	Lamium purpure>	Taraxacum offi>
Pest Name	Purple deadnet>	Common dandeli>
Rating Date	3/29/11	3/29/11
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
Days After First/Last Applic.	151 140	151 140
Plant-Eval Interval	172 DP-1	172 DP-1
Days After Emergence	165 DE-1	165 DE-1
Number of Decimals	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	5	6
1	UNTREATED					40 c	.
2	AXIOM DF	68	6 oz/a		A	70 b	.
3	AXIOM DF	68	8 oz/a		A	85 ab	.
4	OSPREY 4.5 WDG	13.5	4.76 oz/a		B	88 ab	.
4	NIS	100	0.5 % v/v		B		
4	U.A.N.	32	4 pt/a		B		
5	AXIOM DF	68	6 oz/a		A	100 a	.
5	OSPREY 4.5 WDG	13.5	4.76 oz/a		B		
5	NIS	100	0.5 % v/v		B		
5	U.A.N.	32	4 pt/a		B		
6	AXIOM DF	68	8 oz/a		A	100 a	75
6	HUSKIE	2.140625	15 oz/a		B		
6	NIS	100	0.5 % v/v		B		
6	N-PAK AMS	100	2 qt/a		B		
7	HUSKIE	2.140625	15 oz/a		B	100 a	.
7	NIS	100	0.5 % v/v		B		
7	N-PAK AMS	100	2 qt/a		B		
8	POWERFLEX	7.5	3.5 oz/a		B	90 ab	.
8	NIS	100	0.5 % v/v		B		
8	N-PAK AMS	100	4 pt/a		B		
9	Express	50	0.507 oz/a		B	87 ab	.
9	Clarity	4	2 oz/a		B		
9	NIS	100	6.4 oz/a		B		
10	HARMONY XTRA 0.5 OZ					82 ab	.
10	Harmony SG	50	0.5 oz/a		B		
10	Express	50	0.25 oz/a		B		
10	Clarity	4	2 oz/a		B		
10	NIS	100	6.4 oz/a		B		
LSD (P=.05)						28.2	.
Standard Deviation						16.5	.
CV						19.56	.
Bartlett's X2						6.038	.
P(Bartlett's X2)						0.419	.
Replicate F						2.438	.
Replicate Prob(F)						0.1156	.
Treatment F						3.650	.
Treatment Prob(F)						0.0093	.

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Pest Type

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

Pest Code

STEME, Stellaria media, = US

LAMPU, Lamium purpureum, = US

TAROF, Taraxacum officinale, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

187 DP-1 = 1 10/8/10

172 DP-1 = 1 10/8/10