

# The Ohio State University

Trial ID: Location: Trial Year:  
 Protocol ID: Investigator: Dr. Mark M. Loux  
 Project ID: Study Director:  
 Sponsor Contact:

**Crop 1:** GLXMA Glycine max  
**Variety:** Pioneer P35T58R  
**Description:** Roundup Ready  
**Planting Rate, Unit:** 160000 S/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 15 IN  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** MEDIUM medium

**Crop Description**  
 Soybean  
**BBCH Scale:** BSOY  
**Planting Date:** May-5-2014  
**Planting Method:** SEEDED seeded  
**Planting Equipment:** FE Field Equipment

**Crop 2:** GLXMA Glycine max  
**Variety:** Pioneer P34T35L  
**Description:** Liberty Link  
**Planting Rate, Unit:** 1600000 S/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 15 IN  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** MEDIUM medium

**Crop Description**  
 Soybean  
**BBCH Scale:** BSOY  
**Planting Date:** May-5-2014  
**Planting Method:** SEEDED seeded  
**Planting Equipment:** FE Field Equipment

**Crop 3:** SECCW Secale cereale (winter)  
**Variety:** VNS  
**Description:** Walnut Creek Seed, Lot KD2013B  
**Planting Rate, Unit:** 90 LB/A  
**Depth, Unit:** 0.75 in  
**Row Spacing, Unit:** 7.5 IN

**Crop Description**  
 Winter rye  
**BBCH Scale:** BCER  
**Planting Date:** Oct-11-2013  
**Planting Method:** DRILLE drilled  
**Planting Equipment:** DD Disc Drill

**Crop 4:** AVESS Avena sp.  
**Variety:** VNS  
**Planting Rate, Unit:** 60 LB/A  
**Depth, Unit:** 0.75 IN  
**Row Spacing, Unit:** 7.5 IN

**Crop Description**  
 Oats  
**BBCH Scale:** BCER  
**Planting Date:** Oct-11-2013  
**Planting Method:** DRILLE drilled  
**Planting Equipment:** DD Disc Drill

**Pest 1 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W **Code:** AMARE *Amaranthus retroflexus*  
**Common Name:** Redroot pigweed

**Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Treated Plot Width:** 10 FT  
**Treated Plot Length:** 40 FT  
**Treated Plot Area:** 400 FT<sup>2</sup> **Treatments:** 18  
**Replications:** 4

**Site and Design**  
**Study Design:** SPLPLO Split-Plot

**Description Name:** E-1  
**% OM:** 3.5 **Texture:** SICL silty clay loam  
**pH:** 6.6 **Soil Name:** Kokomo  
**CEC:** 22 **Fert. Level:** G good  
**Soil Drainage:** G good

**Analyzed By:**  
 Spectrum Analytic, Inc.  
 Washington Court House, Oh

**Additional Measured Elements**

Date	Element	Quantity	Unit
Mar-14-2014 P		82	LB/A
Mar-14-2014 K		317	LB/A

# The Ohio State University

## Application Description

	A	B	C
<b>Application Date:</b>	Apr-17-2014	Jun-4-2014	Jun-26-2014
<b>Appl. Start Time:</b>	11:30 AM	8:30 AM	8:30 AM
<b>Appl. Stop Time:</b>	12:00 PM	9:10 AM	9:00 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	14 EPP	21DAPL	21 DAPO
<b>Application Placement:</b>	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	Rebb	Bethel	Ackley
<b>Air Temperature, Unit:</b>	48.7 F	68.6 F	76 F
<b>% Relative Humidity:</b>	54	65	77
<b>Wind Velocity, Unit:</b>	8.3 MPH	1.0 MPH	2 MPH
<b>Wind Direction:</b>	S	E	NNW
<b>Dew Presence (Y/N):</b>	N no	N no	Y yes
<b>Soil Temperature, Unit:</b>	40 F	66 F	69 F
<b>Soil Moisture:</b>	MOIST	SLIDRY	WET
<b>% Cloud Cover:</b>	15	90	10
<b>Next Moisture Occurred On:</b>	Apr-28-2014	Jun-4-2014	
<b>Time to Next Moisture, Unit:</b>	11 DAY	7 HR	

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		BBCH	BBCH
<b>Stage Majority, Percent:</b>		13 100	22 100
<b>Height, Unit:</b>		6 IN	15 IN
<b>Height Minimum, Maximum:</b>		4 6	14 16
<b>Crop 2 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>		BBCH	BBCH
<b>Stage Majority, Percent:</b>		13 100	22 100
<b>Height, Unit:</b>		6 IN	15 IN
<b>Height Minimum, Maximum:</b>		4 6	14 16
<b>Crop 3 Code, BBCH Scale:</b>	SECCW BCER	SECCW BCER	SECCW BCER
<b>Stage Scale Used:</b>		BBCH	
<b>Stage Majority, Percent:</b>		27 100	
<b>Height, Unit:</b>		12 IN	
<b>Height Minimum, Maximum:</b>		10 12	
<b>Crop 4 Code, BBCH Scale:</b>	AVESS BCER	AVESS BCER	AVESS BCER

## Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Stage Majority, Percent:</b>		12 100	
<b>Height, Unit:</b>		3 IN	
<b>Height Minimum, Maximum:</b>		3 4	
<b>Density, Unit:</b>		246 M2	
<b>Pest 2 Code, Type, Scale:</b>	AMARE W	AMARE W	AMARE W
<b>Stage Majority, Percent:</b>		14 90	
<b>Stage Minimum, Percent:</b>		12 10	
<b>Stage Maximum, Percent:</b>		14 90	
<b>Height, Unit:</b>		2 IN	
<b>Height Minimum, Maximum:</b>		1 2	
<b>Pest 3 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Stage Majority, Percent:</b>		14 100	14 100
<b>Height, Unit:</b>		4 IN	3 IN
<b>Height Minimum, Maximum:</b>		4 6	2 3
<b>Density, Unit:</b>		3 M2	0.3 M2

## Application Equipment

	A	B	C
<b>Appl. Equipment:</b>	10' AI XR	10' AI XR	10' AI XR
<b>Equipment Type:</b>	SPRBAC	SPRBAC	SPRBAC
<b>Operation Pressure, Unit:</b>	46 PSI	46 PSI	46 PSI
<b>Nozzle Type:</b>	AI XR	AI XR	AI XR
<b>Nozzle Size:</b>	110015	110015	110015
<b>Nozzle Spacing, Unit:</b>	18 IN	18 IN	18 IN
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	20 IN	20 IN	20 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA
<b>Mix Size, Unit:</b>	0.33 Gallons	0.33 Gallons	0.33 Gallons
<b>Propellant:</b>	CO2	CO2	CO2

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Trial ID: Location: Trial Year:  
 Protocol ID: Investigator: Dr. Mark M. Loux  
 Project ID: Study Director:  
 Sponsor Contact:

Pest Type		W Weed	W Weed	W Weed	W Weed
Pest Code		AMARE	AMBTR	SETFA	AMARE
Pest Scientific Name		Amaranthus ret>	Ambrosia trifi>	Setaria faberi	Amaranthus ret>
Pest Name		Redroot pigweed	Giant ragweed	Giant foxtail	Redroot pigweed
Rating Date	Jun-3-2014	Jun-5-2014	Jun-5-2014	Jun-5-2014	Jun-25-2014
Rating Type	COPLPA	CONTRO	CONTRO	CONTRO	COPLPA
Rating Unit	1/2 M2	%	%	%	1/2 M2
Number of Subsamples	1	1	1	1	1
SE Group No.	1	3	4	5	2
Days After First/Last Applic.	47 47	49 1	49 1	49 1	69 21
Trt-Eval Interval	47 DA-A	1 DA-B	1 DA-B	1 DA-B	
Plant-Eval Interval	29 DP-1	31 DP-1	31 DP-1	31 DP-1	51 DP-1
Number of Decimals	0	0	0	0	

Trt Treatment No. Name	Rate	Unit	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
1 Cereal Rye						6	84	71	66	0.0
1 Roundup Ready										
1 Valor SX	0.08 lb ai/a		2.5 oz/a		A					
1 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A					
1 2,4-D Ester	0.5 lb ai/a		1 pt/a		A					
1 N PAK AMS	2.5 % v/v		1.5 qt/a		A					
1 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		B					
1 Flexstar	0.313 lb ai/a		1.33 pt/a		B					
1 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B					
1 MSO	1 % v/v		0.6 qt/a		B					
1 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
2 Cereal Rye						5	88	64	68	0.0
2 Roundup Ready										
2 Valor SX	0.08 lb ai/a		2.5 oz/a		A					
2 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A					
2 2,4-D Ester	0.5 lb ai/a		1 pt/a		A					
2 N PAK AMS	2.5 % v/v		1.5 qt/a		A					
2 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		B					
2 Flexstar	0.313 lb ai/a		1.33 pt/a		B					
2 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B					
2 MSO	1 % v/v		0.6 qt/a		B					
2 N PAK AMS	2.5 % v/v		1.5 qt/a		B					
2 Warrant	1.13 lb ai/a		1.5 qt/a		C					
3 Cereal Rye						48	33	25	25	25.8
3 Roundup Ready										
3 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A					
3 2,4-D Ester	0.5 lb ai/a		1 pt/a		A					
3 N PAK AMS	2.5 % v/v		1.5 qt/a		A					
3 UTC										
4 Cereal Rye						4	78	75	64	0.3
4 Liberty Link										
4 Valor SX	0.08 lb ai/a		2.5 oz/a		A					
4 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A					
4 2,4-D Ester	0.5 lb ai/a		1 pt/a		A					
4 N PAK AMS	2.5 % v/v		1.5 qt/a		A					
4 Liberty	0.585 lb ai/a		32 oz/a		B					
4 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B					
4 N PAK AMS	2.5 % v/v		1.5 qt/a		B					

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	AMBTR	SETFA	AMARE
Pest Scientific Name	Amaranthus ret>	Ambrosia trifi>	Setaria faberi	Amaranthus ret>
Pest Name	Redroot pigweed	Giant ragweed	Giant foxtail	Redroot pigweed
Rating Date	Jun-3-2014	Jun-5-2014	Jun-5-2014	Jun-25-2014
Rating Type	COPLPA	CONTRO	CONTRO	COPLPA
Rating Unit	1/2 M2	%	%	1/2 M2
Number of Subsamples	1	1	1	1
SE Group No.	1	3	4	5
Days After First/Last Applic.	47 47	49 1	49 1	69 21
Trt-Eval Interval	47 DA-A	1 DA-B	1 DA-B	1 DA-B
Plant-Eval Interval	29 DP-1	31 DP-1	31 DP-1	31 DP-1
Number of Decimals	0	0	0	0

Trt Treatment	Rate	Other	Other	Appl	1	2	3	4	5		
No. Name	Rate	Unit	Rate	Rate	Unit	Code					
5 Cereal Rye							4	80	73	69	0.3
5 Liberty Link											
5 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
5 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
5 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
5 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
5 Liberty	0.585 lb ai/a		32 oz/a			B					
5 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
5 N PAK AMS	2.5 % v/v		1.5 qt/a			B					
5 Warrant	1.13 lb ai/a		1.5 qt/a			C					
6 Cereal Rye							45	30	25	25	14.5
6 Liberty Link											
6 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
6 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
6 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
6 UTC											
7 Oats							4	66	53	51	0.0
7 Roundup Ready						A					
7 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
7 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
7 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
7 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
7 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			B					
7 Flexstar	0.313 lb ai/a		1.33 pt/a			B					
7 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
7 MSO	1 % v/v		0.6 qt/a			B					
7 N PAK AMS	2.5 % v/v		1.5 qt/a			B					
8 Oats							5	89	65	68	0.0
8 Roundup Ready						A					
8 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
8 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
8 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
8 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
8 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			B					
8 Flexstar	0.313 lb ai/a		1.33 pt/a			B					
8 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
8 MSO	1 % v/v		0.6 qt/a			B					
8 N PAK AMS	2.5 % v/v		1.5 qt/a			B					
8 Warrant	1.13 lb ai/a		1.5 qt/a			C					
9 Oats							41	36	41	33	17.8
9 Roundup Ready						A					
9 UTC											
10 Oats							8	66	48	58	0.0
10 Liberty Link						A					
10 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
10 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
10 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
10 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
10 Liberty	0.585 lb ai/a		32 oz/a			B					
10 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
10 N PAK AMS	2.5 % v/v		1.5 qt/a			B					

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	AMBTR	SETFA	AMARE
Pest Scientific Name	Amaranthus ret>	Ambrosia trifi>	Setaria faberi	Amaranthus ret>
Pest Name	Redroot pigweed	Giant ragweed	Giant foxtail	Redroot pigweed
Rating Date	Jun-3-2014	Jun-5-2014	Jun-5-2014	Jun-5-2014
Rating Type	COPLPA	CONTRO	CONTRO	CONTRO
Rating Unit	1/2 M2	%	%	%
Number of Subsamples	1	1	1	1
SE Group No.	1	3	4	5
Days After First/Last Applic.	47 47	49 1	49 1	49 1
Trt-Eval Interval	47 DA-A	1 DA-B	1 DA-B	1 DA-B
Plant-Eval Interval	29 DP-1	31 DP-1	31 DP-1	31 DP-1
Number of Decimals	0	0	0	0

Trt Treatment	Rate	Other	Other	Appl	1	2	3	4	5		
No. Name	Rate	Unit	Rate	Rate	Unit	Code					
11 Oats							8	76	55	58	0.3
11 Liberty Link											
11 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
11 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
11 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
11 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
11 Liberty	0.585 lb ai/a		32 oz/a			B					
11 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
11 N PAK AMS	2.5 % v/v		1.5 qt/a			B					
11 Warrant	1.13 lb ai/a		1.5 qt/a			C					
12 Oats							24	28	25	23	23.8
12 Liberty Link											
12 UTC											
13 No Cover							14	91	71	56	0.0
13 Roundup Ready											
13 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
13 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
13 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
13 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
13 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			B					
13 Flexstar	0.313 lb ai/a		1.33 pt/a			B					
13 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
13 MSO	1 % v/v		0.6 qt/a			B					
13 N PAK AMS	2.5 % v/v		1.5 qt/a			B					
14 No Cover							35	86	59	51	0.0
14 Roundup Ready											
14 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
14 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
14 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
14 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
14 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			B					
14 Flexstar	0.313 lb ai/a		1.33 pt/a			B					
14 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
14 MSO	1 % v/v		0.6 qt/a			B					
14 N PAK AMS	2.5 % v/v		1.5 qt/a			B					
14 Warrant	1.13 lb ai/a		1.5 qt/a			C					
15 No Cover							33	28	25	20	10.8
15 Roundup Ready											
15 UTC											
16 No Cover							29	55	48	49	1.3
16 Liberty Link						A					
16 Valor SX	0.08 lb ai/a		2.5 oz/a			A					
16 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a			A					
16 2,4-D Ester	0.5 lb ai/a		1 pt/a			A					
16 N PAK AMS	2.5 % v/v		1.5 qt/a			A					
16 Liberty	0.585 lb ai/a		32 oz/a			B					
16 Dual II Magnum	1.24 lb ai/a		1.3 pt/a			B					
16 N PAK AMS	2.5 % v/v		1.5 qt/a			B					

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Pest Type	W Weed	W Weed	W Weed	W Weed						
Pest Code	AMARE	AMBTR	SETFA	AMARE						
Pest Scientific Name	Amaranthus ret>	Ambrosia trifi>	Setaria faberi	Amaranthus ret>						
Pest Name	Redroot pigweed	Giant ragweed	Giant foxtail	Redroot pigweed						
Rating Date	Jun-3-2014	Jun-5-2014	Jun-5-2014	Jun-5-2014						
Rating Type	COPLPA	CONTRO	CONTRO	CONTRO						
Rating Unit	1/2 M2	%	%	%						
Number of Subsamples	1	1	1	1						
SE Group No.	1	3	4	5						
Days After First/Last Applic.	47 47	49 1	49 1	49 1						
Trt-Eval Interval	47 DA-A	1 DA-B	1 DA-B	1 DA-B						
Plant-Eval Interval	29 DP-1	31 DP-1	31 DP-1	31 DP-1						
Number of Decimals	0	0	0	0						
Trt Treatment	Rate	Other	Other	Appl	1	2	3	4	5	
No. Name	Rate	Unit	Rate	Rate Unit Code						
17 No Cover					28		60	58	45	0.0
17 Liberty Link										
17 Valor SX	0.08 lb ai/a		2.5 oz/a	A						
17 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a	A						
17 2,4-D Ester	0.5 lb ai/a		1 pt/a	A						
17 N PAK AMS	2.5 % v/v		1.5 qt/a	A						
17 Liberty	0.585 lb ai/a		32 oz/a	B						
17 Dual II Magnum	1.24 lb ai/a		1.3 pt/a	B						
17 N PAK AMS	2.5 % v/v		1.5 qt/a	B						
17 Warrant	1.13 lb ai/a		1.5 qt/a	C						
18 No Cover					41	28	33	18	16.0	
18 Liberty Link										
18 UTC										
LSD (P=.05)					34.0	23.1	18.6	20.1	11.79	
Standard Deviation					23.8	16.2	13.0	14.1	8.25	
CV					112.12	26.49	25.78	30.06	134.35	
Bartlett's X2					87.13	33.176	30.851	30.464	56.284	
P(Bartlett's X2)					0.001*	0.007*	0.021*	0.023*	0.001*	
Skewness					2.1595*	-0.3259	-0.2404	-0.1893	2.1405*	
Kurtosis					4.0238*	-1.4796*	-0.9553	-1.4294*	4.1725*	
Replicate F					3.904	2.352	0.707	0.403	3.569	
Replicate Prob(F)					0.0164	0.0884	0.5539	0.7518	0.0233	
Treatment F					1.879	9.202	7.629	6.747	5.007	
Treatment Prob(F)					0.0551	0.0001	0.0001	0.0001	0.0001	

# The Ohio State University

Pest Type W Weed  
 Pest Code AMARE  
 Pest Scientific Name Amaranthus ret>  
 Pest Name Redroot pigweed  
 Rating Date Jun-25-2014  
 Rating Type CONTRO  
 Rating Unit %  
 Number of Subsamples 1  
 SE Group No. 6  
 Days After First/Last Applic. 69 21  
 Trt-Eval Interval  
 Plant-Eval Interval 51 DP-1  
 Number of Decimals

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Appl Code	
							6
1	Cereal Rye						100.0
1	Roundup Ready						
1	Valor SX	0.08 lb ai/a		2.5 oz/a		A	
1	Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
1	2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
1	N PAK AMS	2.5 % v/v		1.5 qt/a		A	
1	Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		B	
1	Flexstar	0.313 lb ai/a		1.33 pt/a		B	
1	Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
1	MSO	1 % v/v		0.6 qt/a		B	
1	N PAK AMS	2.5 % v/v		1.5 qt/a		B	
2	Cereal Rye						100.0
2	Roundup Ready						
2	Valor SX	0.08 lb ai/a		2.5 oz/a		A	
2	Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
2	2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
2	N PAK AMS	2.5 % v/v		1.5 qt/a		A	
2	Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		B	
2	Flexstar	0.313 lb ai/a		1.33 pt/a		B	
2	Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
2	MSO	1 % v/v		0.6 qt/a		B	
2	N PAK AMS	2.5 % v/v		1.5 qt/a		B	
2	Warrant	1.13 lb ai/a		1.5 qt/a		C	
3	Cereal Rye						0.0
3	Roundup Ready						
3	Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
3	2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
3	N PAK AMS	2.5 % v/v		1.5 qt/a		A	
3	UTC						
4	Cereal Rye						99.8
4	Liberty Link						
4	Valor SX	0.08 lb ai/a		2.5 oz/a		A	
4	Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
4	2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
4	N PAK AMS	2.5 % v/v		1.5 qt/a		A	
4	Liberty	0.585 lb ai/a		32 oz/a		B	
4	Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
4	N PAK AMS	2.5 % v/v		1.5 qt/a		B	

# The Ohio State University

Pest Type	W Weed
Pest Code	AMARE
Pest Scientific Name	Amaranthus ret>
Pest Name	Redroot pigweed
Rating Date	Jun-25-2014
Rating Type	CONTRO
Rating Unit	%
Number of Subsamples	1
SE Group No.	6
Days After First/Last Applic.	69 21
Trt-Eval Interval	
Plant-Eval Interval	51 DP-1
Number of Decimals	

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	
	5 Cereal Rye						99.8
	5 Liberty Link						
	5 Valor SX	0.08 lb ai/a		2.5 oz/a		A	
	5 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
	5 2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		A	
	5 Liberty	0.585 lb ai/a		32 oz/a		B	
	5 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
	5 N PAK AMS	2.5 % v/v		1.5 qt/a		B	
	5 Warrant	1.13 lb ai/a		1.5 qt/a		C	
	6 Cereal Rye						0.0
	6 Liberty Link						
	6 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
	6 2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
	6 N PAK AMS	2.5 % v/v		1.5 qt/a		A	
	6 UTC						
	7 Oats						100.0
	7 Roundup Ready					A	
	7 Valor SX	0.08 lb ai/a		2.5 oz/a		A	
	7 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
	7 2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
	7 N PAK AMS	2.5 % v/v		1.5 qt/a		A	
	7 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		B	
	7 Flexstar	0.313 lb ai/a		1.33 pt/a		B	
	7 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
	7 MSO	1 % v/v		0.6 qt/a		B	
	7 N PAK AMS	2.5 % v/v		1.5 qt/a		B	
	8 Oats						100.0
	8 Roundup Ready						
	8 Valor SX	0.08 lb ai/a		2.5 oz/a		A	
	8 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
	8 2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
	8 N PAK AMS	2.5 % v/v		1.5 qt/a		A	
	8 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		B	
	8 Flexstar	0.313 lb ai/a		1.33 pt/a		B	
	8 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
	8 MSO	1 % v/v		0.6 qt/a		B	
	8 N PAK AMS	2.5 % v/v		1.5 qt/a		B	
	8 Warrant	1.13 lb ai/a		1.5 qt/a		C	
	9 Oats						0.0
	9 Roundup Ready						
	9 UTC						
	10 Oats						100.0
	10 Liberty Link					A	
	10 Valor SX	0.08 lb ai/a		2.5 oz/a		A	
	10 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
	10 2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
	10 N PAK AMS	2.5 % v/v		1.5 qt/a		A	
	10 Liberty	0.585 lb ai/a		32 oz/a		B	
	10 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
	10 N PAK AMS	2.5 % v/v		1.5 qt/a		B	

# The Ohio State University

Pest Type	W Weed
Pest Code	AMARE
Pest Scientific Name	Amaranthus ret>
Pest Name	Redroot pigweed
Rating Date	Jun-25-2014
Rating Type	CONTRO
Rating Unit	%
Number of Subsamples	1
SE Group No.	6
Days After First/Last Applic.	69 21
Trt-Eval Interval	
Plant-Eval Interval	51 DP-1
Number of Decimals	

Trt Treatment	Rate	Other	Other	Appl	
No. Name	Rate Unit	Rate	Rate Unit	Code	6
11 Oats					99.8
11 Liberty Link					
11 Valor SX	0.08 lb ai/a	2.5 oz/a		A	
11 Roundup PowerMax	0.75 lb ae/a	21.3 oz/a		A	
11 2,4-D Ester	0.5 lb ai/a	1 pt/a		A	
11 N PAK AMS	2.5 % v/v	1.5 qt/a		A	
11 Liberty	0.585 lb ai/a	32 oz/a		B	
11 Dual II Magnum	1.24 lb ai/a	1.3 pt/a		B	
11 N PAK AMS	2.5 % v/v	1.5 qt/a		B	
11 Warrant	1.13 lb ai/a	1.5 qt/a		C	
12 Oats					0.0
12 Liberty Link					
12 UTC					
13 No Cover					100.0
13 Roundup Ready					
13 Valor SX	0.08 lb ai/a	2.5 oz/a		A	
13 Roundup PowerMax	0.75 lb ae/a	21.3 oz/a		A	
13 2,4-D Ester	0.5 lb ai/a	1 pt/a		A	
13 N PAK AMS	2.5 % v/v	1.5 qt/a		A	
13 Roundup PowerMax	0.75 lb ae/a	21.3 oz/a		B	
13 Flexstar	0.313 lb ai/a	1.33 pt/a		B	
13 Dual II Magnum	1.24 lb ai/a	1.3 pt/a		B	
13 MSO	1 % v/v	0.6 qt/a		B	
13 N PAK AMS	2.5 % v/v	1.5 qt/a		B	
14 No Cover					100.0
14 Roundup Ready					
14 Valor SX	0.08 lb ai/a	2.5 oz/a		A	
14 Roundup PowerMax	0.75 lb ae/a	21.3 oz/a		A	
14 2,4-D Ester	0.5 lb ai/a	1 pt/a		A	
14 N PAK AMS	2.5 % v/v	1.5 qt/a		A	
14 Roundup PowerMax	0.75 lb ae/a	21.3 oz/a		B	
14 Flexstar	0.313 lb ai/a	1.33 pt/a		B	
14 Dual II Magnum	1.24 lb ai/a	1.3 pt/a		B	
14 MSO	1 % v/v	0.6 qt/a		B	
14 N PAK AMS	2.5 % v/v	1.5 qt/a		B	
14 Warrant	1.13 lb ai/a	1.5 qt/a		C	
15 No Cover					0.0
15 Roundup Ready					
15 UTC					
16 No Cover					96.3
16 Liberty Link				A	
16 Valor SX	0.08 lb ai/a	2.5 oz/a		A	
16 Roundup PowerMax	0.75 lb ae/a	21.3 oz/a		A	
16 2,4-D Ester	0.5 lb ai/a	1 pt/a		A	
16 N PAK AMS	2.5 % v/v	1.5 qt/a		A	
16 Liberty	0.585 lb ai/a	32 oz/a		B	
16 Dual II Magnum	1.24 lb ai/a	1.3 pt/a		B	
16 N PAK AMS	2.5 % v/v	1.5 qt/a		B	

# The Ohio State University

Pest Type	W Weed
Pest Code	AMARE
Pest Scientific Name	Amaranthus ret>
Pest Name	Redroot pigweed
Rating Date	Jun-25-2014
Rating Type	CONTRO
Rating Unit	%
Number of Subsamples	1
SE Group No.	6
Days After First/Last Applic.	69 21
Trt-Eval Interval	
Plant-Eval Interval	51 DP-1
Number of Decimals	

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate	Appl Unit Code	
	17 No Cover						100.0
	17 Liberty Link						
	17 Valor SX	0.08 lb ai/a		2.5 oz/a		A	
	17 Roundup PowerMax	0.75 lb ae/a		21.3 oz/a		A	
	17 2,4-D Ester	0.5 lb ai/a		1 pt/a		A	
	17 N PAK AMS	2.5 % v/v		1.5 qt/a		A	
	17 Liberty	0.585 lb ai/a		32 oz/a		B	
	17 Dual II Magnum	1.24 lb ai/a		1.3 pt/a		B	
	17 N PAK AMS	2.5 % v/v		1.5 qt/a		B	
	17 Warrant	1.13 lb ai/a		1.5 qt/a		C	
	18 No Cover						0.0
	18 Liberty Link						
	18 UTC						
	LSD (P=.05)						2.54
	Standard Deviation						1.78
	CV						2.68
	Bartlett's X2						31.538
	P(Bartlett's X2)						0.001*
	Skewness						-0.7181*
	Kurtosis						-1.5226*
	Replicate F						1.034
	Replicate Prob(F)						0.3893
	Treatment F						2946.513
	Treatment Prob(F)						0.0001

# The Ohio State University

Trial ID:                    Location:                    Trial Year:  
Protocol ID:                Investigator: Dr. Mark M. Loux  
Project ID:                 Study Director:  
                                 Sponsor Contact:

Pest Type

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

Pest Code

AMARE, Amaranthus retroflexus, = US

AMBTR, Ambrosia trifida, = US

SETFA, Setaria faberi, = US

Rating Type

COPLPA = count - plant part

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

29 DP-1 = 1 GLXMA May-5-2014

31 DP-1 = 1 GLXMA May-5-2014

51 DP-1 = 1 GLXMA May-5-2014