

# Ohio State University Horticulture and Crop Science

Evaluate residual herbicides with the first app of Ignite and demonstrate how that compares to either a pre followed by post or post app alone

Title No. 2:

Trial ID: 11LLSOY      Protocol ID: 11LLSOY  
Location: Western Branch F-7      Study Director: Bryan Reeb  
Project ID: 11LLSOY      Investigator: Dr. Mark M. Loux  
Sponsor Contact: Dave Lamore, Bayer

### 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 °:** 39.86018 N  
**State/Prov.:** Ohio      **Longitude of LL Corner °:** -83.67059 W  
**Postal Code:** 45368  
**Country:** USA

### Crop Description

**Crop 1:** GLXMA Glycine max      Soybean  
**Variety:** Seed Consultant SC 3381 LL  
**BBCH Scale:** BSOY      **Description:** Liberty Link  
**Planting Method:** SEEDED      seeded      **Planting Date:** 6/6/11  
**Depth, Unit:** 1 IN      **Rate, Unit:** 197000 S/A  
**Row Spacing, Unit:** 15 IN  
**Seed Bed:** MEDIUM      medium      **Soil Temperature, Unit:** 76 F  
**Soil Moisture:** NORMAL      normal

### Pest Description

- Pest 1 Type:** W      **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 2 Type:** W      **Code:** IPOHE *Ipomoea hederacea*  
**Common Name:** Ivyleaf morningglory
- Pest 3 Type:** W      **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters
- Pest 4 Type:** W      **Code:** ABUTH *Abutilon theophrasti*  
**Common Name:** Velvetleaf
- Pest 5 Type:** W      **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 6 Type:** W      **Code:** HIBTR *Hibiscus trionum*  
**Common Name:** Venice mallow
- Pest 7 Type:** W      **Code:** SIDSP *Sida spinosa*  
**Common Name:** Prickly sida

### 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 FT<sup>2</sup>      **Tillage Type:** CONTIL      conventional-till  
**Replications:** 3      **Study Design:** RACOB      Randomized Complete Block (RCB)  
**Untreated Arrangement:** INCLUDED      single control randomized in each block

### Soil Description

**Description Name:** F-7 East  
**% OM:** 1.8      **Texture:** SIL      silt loam  
**pH:** 5.7      **Soil Name:** Crosby Silt Loam  
**CEC:** 16.2      **Fert. Level:** G      good  
**Soil Drainage:** G      good

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## Application Description

	A	B	C
Application Date:	6/6/11	6/27/11	7/7/11
Time of Day:	1:45 P.M.	8:45 A.M.	10:00 A.M
Application Method:	SPRAY	SPRAY	SPRAY
Application Placement:	BROFOL	BROFOL	BROFOL
Air Temperature, Unit:	88.6 F	67.5 F	87 F
% Relative Humidity:	37.5	72.5	87
Wind Velocity, Unit:	4.4 MPH	1.9 MPH	1.1 MPH
Wind Direction:	WSW	SSW	W
Dew Presence (Y/N):	N no	Y yes	N no
Soil Temperature, Unit:	76 F	62 F	77 F
Soil Moisture:	GOOD	GOOD	MOIST
% Cloud Cover:	15	75	20
Next Rain Occurred On:	6/10/11	7/2/11	7/8/11

## Crop Stage At Each Application

	A		B		C	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:			BBCH		BBCH	
Stage Majority, Percent:			V4	100	14	100
Stage Minimum, Percent:					16	100
Height, Unit:			3	IN	9	IN
Height Minimum, Maximum:			2	4	6	9

## Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:			13	100	13	50
Stage Minimum, Percent:					12	25
Stage Maximum, Percent:					16	25
Height, Unit:			2	IN	4	IN
Height Minimum, Maximum:			2	3	1	6
Density, Unit:	49.33	M2	49.33	M2	49.33	M2
Pest 2 Code, Type, Scale:	IPOHE	W	IPOHE	W	IPOHE	W
Stage Majority, Percent:			12	100	12	80
Stage Minimum, Percent:					12	80
Stage Maximum, Percent:					16	20
Height, Unit:			2	IN	3	IN
Height Minimum, Maximum:			1	2	2	4
Density, Unit:	5.33	M2	5.33	M2	5.33	M2
Pest 3 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			14	100	16	80
Stage Minimum, Percent:					12	10
Stage Maximum, Percent:					18	10
Height, Unit:			1	IN	3	IN
Height Minimum, Maximum:			1	1	1	4
Density, Unit:	13.33	M2	13.33	M2	13.33	M2
Pest 4 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			13	100	13	60
Stage Minimum, Percent:					12	20
Stage Maximum, Percent:					14	20
Height, Unit:			1	IN	3	IN
Height Minimum, Maximum:			1	1	1	4
Pest 5 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:			14	100	16	80
Stage Minimum, Percent:					14	10
Stage Maximum, Percent:					18	10
Height, Unit:			2	IN	6	IN
Height Minimum, Maximum:			1	2	4	8
Density, Unit:	4	M2	4	M2	4	M2
Pest 6 Code, Type, Scale:	HIBTR	W	HIBTR	W	HIBTR	W
Stage Majority, Percent:					12	80
Stage Minimum, Percent:					12	80
Stage Maximum, Percent:					14	20
Height, Unit:					2	IN
Height Minimum, Maximum:					1	4
Density, Unit:	5.33	M2	5.33	M2	5.33	M2
Pest 7 Code, Type, Scale:	SIDSP	W	SIDSP	W	SIDSP	W
Stage Majority, Percent:					12	80
Stage Minimum, Percent:					12	80
Stage Maximum, Percent:					18	10
Height, Unit:					2	IN
Height Minimum, Maximum:					1	4
Density, Unit:	6.66	M2	6.66	M2	6.66	M2

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## Application Equipment

	A	B	C
<b>Appl. Equipment:</b>	Backpack	Backpack	Backpack
<b>Equipment Type:</b>	SPRBAC	SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	46 PSI	46 PSI	46 PSI
<b>Nozzle Type:</b>	DG	DG	DG
<b>Nozzle Size:</b>	8015	8015	8015
<b>Nozzle Spacing, Unit:</b>	18 IN	18 IN	18 IN
<b>Boom Length, Unit:</b>	6.67 FT	6.67 FT	6.67 FT
<b>Boom Height, Unit:</b>	18 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	15 gal/ac	15 gal/ac	15 gal/ac
<b>Mix Size, Unit:</b>	0.33 gallons	0.33 gallons	0.33 gallons
<b>Propellant:</b>	COMCO2	COMCO2	COMCO2

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	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date	6/23/11	6/23/11	6/23/11	6/23/11	7/5/11	7/11/11
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	17 17	17 17	17 17	17 17	29 8	35 4
Trt-Eval Interval	17 DA-A	17 DA-A	17 DA-A	17 DA-A	8 DA-B	14 DA-B
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	17 DP-1	29 DP-1	35 DP-1
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5	6
1	UTC					0	0	0	0	0	0
2	Prefix	5.29	2.5 pt/a		A	1	92	77	63	0	2
	2 Ignite	2.34	29 oz/a		C						
	2 N-pak ams	100	1.5 qt/a		C						
3	Authority First	70	6 oz/a		A	1	85	82	82	0	1
	3 Ignite	2.34	29 oz/a		C						
	3 N-pak ams	100	1.5 qt/a		C						
4	Prefix	5.29	2.5 pt/a		B	0	0	0	0	0	0
	4 Ignite	2.34	29 oz/a		B						
	4 N-pak ams	100	1.5 qt/a		B						
5	Dual II Magnum	7.62	1.33 pt/a		B	0	0	0	0	0	0
	5 Ignite	2.34	29 oz/a		B						
	5 N-pak ams	100	1.5 qt/a		B						
6	Ignite	2.34	29 oz/a		B	0	0	0	0	0	2
	6 N-pak ams	100	1.5 qt/a		B						
	6 Ignite	2.34	29 oz/a		C						
	6 N-pak ams	100	1.5 qt/a		C						
7	Fierce	76	3 oz/a		A	9	92	72	75	0	1
	7 Ignite	2.34	29 oz/a		C						
	7 N-pak ams	100	1.5 qt/a		C						
8	Valor XLT @ 3.0 oz					6	72	80	63	0	2
	8 Valor SX	51	1.76 oz/a		A						
	8 Classic	25	1.24 oz/a		A						
	8 Ignite	2.34	29 oz/a		C						
	8 N-pak ams	100	1.5 qt/a		C						
9	Authority MTZ	45	16 oz/a		A	0	67	53	60	0	2
	9 Ignite	2.34	29 oz/a		C						
	9 N-pak ams	100	1.5 qt/a		C						
10	KIH 485	85	3 oz/a		A	0	0	0	0	10	6
	10 Ignite	2.34	29 oz/a		B						
	10 N-pak ams	100	1.5 qt/a		B						
11	Ignite	2.34	36 oz/a		B	0	0	0	0	0	0
	11 N-pak ams	100	1.5 qt/a		B						
12	F9310-6	2	6 oz/a		A	0	77	40	53	0	2
	12 Ignite	2.34	29 oz/a		C						

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Pest Type		W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	IPOHE			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea heder>			
Pest Name		Giant foxtail	Giant ragweed	Ivyleaf mornin>			
Crop Code	GLXMA				GLXMA	GLXMA	
BBCH Scale	BSOY				BSOY	BSOY	
Crop Scientific Name	Glycine max				Glycine max	Glycine max	
Crop Name	Soybean				Soybean	Soybean	
Rating Date	6/23/11	6/23/11	6/23/11	6/23/11	7/5/11	7/11/11	
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN	
Rating Unit	%	%	%	%	%	%	
Number of Subsamples	1	1	1	1	1	1	
Days After First/Last Applic.	17 17	17 17	17 17	17 17	29 8	35 4	
Trt-Eval Interval	17 DA-A	17 DA-A	17 DA-A	17 DA-A	8 DA-B	14 DA-B	
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	17 DP-1	29 DP-1	35 DP-1	
Number of Decimals	0	0	0	0	0	0	
Trt Treatment	Form	Other	Other	Appl			
No. Name	Conc	Rate	Rate	Unit Code	1	2	3
12 N-pak ams	100	1.5 qt/a		C			
LSD (P=.05)	2.4	17.7	13.3	15.0	0.0	0.7	
Standard Deviation	1.4	10.4	7.9	8.8	0.0	0.4	
CV	100.59	25.9	23.4	26.62	0.0	30.49	
Bartlett's X2	4.471	7.645	2.339	4.209	0.0	1.62	
P(Bartlett's X2)	0.215	0.177	0.801	0.52	.	0.655	
Replicate F	0.270	5.691	4.086	2.188	0.000	2.014	
Replicate Prob(F)	0.7656	0.0102	0.0310	0.1371	1.0000	0.1573	
Treatment F	12.880	50.169	65.996	48.056	0.000	41.521	
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	AMARE	CHEAL	IPOHE	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>	Ipomoea heder>	
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Common lambsqu>	Ivyleaf mornin>	
Crop Code						GLXMA
BBCH Scale						BSOY
Crop Scientific Name						Glycine max
Crop Name						Soybean
Rating Date	7/11/11	7/11/11	7/11/11	7/11/11	7/11/11	7/18/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	35 4	35 4	35 4	35 4	35 4	42 11
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B	14 DA-B	21 DA-B
Plant-Eval Interval	35 DP-1	35 DP-1	35 DP-1	35 DP-1	35 DP-1	42 DP-1
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	7	8	9	10	11	12
1	UTC					0	0	0	0	0	0
2	Prefix	5.29	2.5 pt/a		A	93	93	100	100	87	0
	2 Ignite	2.34	29 oz/a		C						
	2 N-pak ams	100	1.5 qt/a		C						
3	Authority First	70	6 oz/a		A	92	95	100	100	92	2
	3 Ignite	2.34	29 oz/a		C						
	3 N-pak ams	100	1.5 qt/a		C						
4	Prefix	5.29	2.5 pt/a		B	95	97	98	99	98	0
	4 Ignite	2.34	29 oz/a		B						
	4 N-pak ams	100	1.5 qt/a		B						
5	Dual II Magnum	7.62	1.33 pt/a		B	97	100	100	100	92	0
	5 Ignite	2.34	29 oz/a		B						
	5 N-pak ams	100	1.5 qt/a		B						
6	Ignite	2.34	29 oz/a		B	99	100	100	100	98	1
	6 N-pak ams	100	1.5 qt/a		B						
	6 Ignite	2.34	29 oz/a		C						
	6 N-pak ams	100	1.5 qt/a		C						
7	Fierce	76	3 oz/a		A	91	88	100	100	87	0
	7 Ignite	2.34	29 oz/a		C						
	7 N-pak ams	100	1.5 qt/a		C						
8	Valor XLT @ 3.0 oz					92	93	100	100	90	1
	8 Valor SX	51	1.76 oz/a		A						
	8 Classic	25	1.24 oz/a		A						
	8 Ignite	2.34	29 oz/a		C						
	8 N-pak ams	100	1.5 qt/a		C						
9	Authority MTZ	45	16 oz/a		A	88	88	100	100	90	1
	9 Ignite	2.34	29 oz/a		C						
	9 N-pak ams	100	1.5 qt/a		C						
10	KIH 485	85	3 oz/a		A	93	100	100	98	97	2
	10 Ignite	2.34	29 oz/a		B						
	10 N-pak ams	100	1.5 qt/a		B						
11	Ignite	2.34	36 oz/a		B	92	99	94	97	90	0
	11 N-pak ams	100	1.5 qt/a		B						
12	F9310-6	2	6 oz/a		A	92	88	100	100	88	2
	12 Ignite	2.34	29 oz/a		C						

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	SETFA	AMBTR	AMARE	CHEAL	IPOHE	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>	Ipomoea heder>	
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Common lambsqu>	Ivyleaf mornin>	
Crop Code						GLXMA
BCH Scale						BSOY
Crop Scientific Name						Glycine max
Crop Name						Soybean
Rating Date	7/11/11	7/11/11	7/11/11	7/11/11	7/11/11	7/18/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	35 4	35 4	35 4	35 4	35 4	42 11
Trt-Eval Interval	14 DA-B	14 DA-B	14 DA-B	14 DA-B	14 DA-B	21 DA-B
Plant-Eval Interval	35 DP-1	35 DP-1	35 DP-1	35 DP-1	35 DP-1	42 DP-1
Number of Decimals	0	0	0	0	0	0
Trt Treatment	Form	Other	Other	Appl		
No. Name	Conc	Rate	Rate	Unit	Code	
12 N-pak ams	100	1.5 qt/a		C		
	7	8	9	10	11	12
LSD (P=.05)	6.0	5.5	2.4	3.2	7.5	1.1
Standard Deviation	3.5	3.2	1.4	1.9	4.4	0.6
CV	4.15	3.71	1.58	2.09	5.27	80.44
Bartlett's X2	8.686	5.649	0.218	3.998	5.577	4.36
P(Bartlett's X2)	0.562	0.581	0.641	0.135	0.781	0.628
Replicate F	17.781	3.585	0.854	0.833	1.309	0.071
Replicate Prob(F)	0.0001	0.0449	0.4392	0.4479	0.2904	0.9317
Treatment F	174.583	222.649	1189.422	681.764	109.540	4.542
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0012

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMARE	CHEAL	IPOHE	SETFA
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>	Ipomoea heder>	Setaria faberi
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Common lambsqu>	Ivyleaf mornin>	Giant foxtail
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	7/18/11	7/18/11	7/18/11	7/18/11	7/18/11	7/25/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	42 11	42 11	42 11	42 11	42 11	49 18
Trt-Eval Interval	21 DA-B	21 DA-B	21 DA-B	21 DA-B	21 DA-B	18 DA-C
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	42 DP-1	49 DP-1
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	13	14	15	16	17	18
1	UTC					0	0	0	0	0	0
2	Prefix	5.29	2.5 pt/a		A	100	100	100	100	100	100
	2 Ignite	2.34	29 oz/a		C						
	2 N-pak ams	100	1.5 qt/a		C						
3	Authority First	70	6 oz/a		A	100	100	100	100	100	100
	3 Ignite	2.34	29 oz/a		C						
	3 N-pak ams	100	1.5 qt/a		C						
4	Prefix	5.29	2.5 pt/a		B	93	100	98	100	100	95
	4 Ignite	2.34	29 oz/a		B						
	4 N-pak ams	100	1.5 qt/a		B						
5	Dual II Magnum	7.62	1.33 pt/a		B	94	97	95	100	100	95
	5 Ignite	2.34	29 oz/a		B						
	5 N-pak ams	100	1.5 qt/a		B						
6	Ignite	2.34	29 oz/a		B	100	100	100	100	100	100
	6 N-pak ams	100	1.5 qt/a		B						
	6 Ignite	2.34	29 oz/a		C						
	6 N-pak ams	100	1.5 qt/a		C						
7	Fierce	76	3 oz/a		A	100	98	100	100	97	100
	7 Ignite	2.34	29 oz/a		C						
	7 N-pak ams	100	1.5 qt/a		C						
8	Valor XLT @ 3.0 oz					100	100	100	100	100	100
	8 Valor SX	51	1.76 oz/a		A						
	8 Classic	25	1.24 oz/a		A						
	8 Ignite	2.34	29 oz/a		C						
	8 N-pak ams	100	1.5 qt/a		C						
9	Authority MTZ	45	16 oz/a		A	100	100	100	100	100	100
	9 Ignite	2.34	29 oz/a		C						
	9 N-pak ams	100	1.5 qt/a		C						
10	KIH 485	85	3 oz/a		A	88	97	100	99	95	93
	10 Ignite	2.34	29 oz/a		B						
	10 N-pak ams	100	1.5 qt/a		B						
11	Ignite	2.34	36 oz/a		B	88	95	92	100	100	90
	11 N-pak ams	100	1.5 qt/a		B						
12	F9310-6	2	6 oz/a		A	100	100	100	100	100	100
	12 Ignite	2.34	29 oz/a		C						



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Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>	Ipomoea heder>	Setaria faberi
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Common lambsqu>	Ivyleaf mornin>	Giant foxtail
Crop Code						
BCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	7/18/11	7/18/11	7/18/11	7/18/11	7/18/11	7/25/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	42 11	42 11	42 11	42 11	42 11	49 18
Trt-Eval Interval	21 DA-B	21 DA-B	21 DA-B	21 DA-B	21 DA-B	18 DA-C
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1	42 DP-1	49 DP-1
Number of Decimals	0	0	0	0	0	0
Trt Treatment	Form	Other	Other	Appl		
No. Name	Conc	Rate	Rate	Unit Code	13	14
12 N-pak ams	100	1.5 qt/a		C		
LSD (P=.05)	4.8	6.1	4.5	0.6	4.9	3.6
Standard Deviation	2.9	3.6	2.6	0.3	2.9	2.1
CV	3.23	3.95	2.93	0.36	3.16	2.37
Bartlett's X2	2.553	1.989	1.646	0.0	0.314	0.665
P(Bartlett's X2)	0.466	0.575	0.439	.	0.575	0.717
Replicate F	2.000	0.704	2.081	1.000	2.099	2.014
Replicate Prob(F)	0.1592	0.5052	0.1487	0.3840	0.1464	0.1573
Treatment F	293.687	191.094	350.081	22473.729	298.710	538.930
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOHE	AMARE	CHEAL	SETFA
Pest Scientific Name	Ambrosia trifida	Ipomoea hederacea	Amaranthus retrofractus	Chenopodium album	Setaria faberii
Pest Name	Giant ragweed	Ivyleaf morningglow	Redroot pigweed	Common lambsquarters	Giant foxtail
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	7/25/11	7/25/11	7/25/11	7/25/11	8/8/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	49 18	49 18	49 18	49 18	63 32
Trt-Eval Interval	18 DA-C	18 DA-C	18 DA-C	18 DA-C	32 DA-C
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1	63 DP-1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	19	20	21	22	23
1	UTC					0	0	0	0	0
2	Prefix	5.29	2.5 pt/a		A	100	97	100	100	100
	2 Ignite	2.34	29 oz/a		C					
	2 N-pak ams	100	1.5 qt/a		C					
3	Authority First	70	6 oz/a		A	100	97	100	100	100
	3 Ignite	2.34	29 oz/a		C					
	3 N-pak ams	100	1.5 qt/a		C					
4	Prefix	5.29	2.5 pt/a		B	100	95	100	100	98
	4 Ignite	2.34	29 oz/a		B					
	4 N-pak ams	100	1.5 qt/a		B					
5	Dual II Magnum	7.62	1.33 pt/a		B	98	92	83	100	97
	5 Ignite	2.34	29 oz/a		B					
	5 N-pak ams	100	1.5 qt/a		B					
6	Ignite	2.34	29 oz/a		B	100	98	100	100	100
	6 N-pak ams	100	1.5 qt/a		B					
	6 Ignite	2.34	29 oz/a		C					
	6 N-pak ams	100	1.5 qt/a		C					
7	Fierce	76	3 oz/a		A	98	97	100	100	100
	7 Ignite	2.34	29 oz/a		C					
	7 N-pak ams	100	1.5 qt/a		C					
8	Valor XLT @ 3.0 oz					100	98	100	100	100
	8 Valor SX	51	1.76 oz/a		A					
	8 Classic	25	1.24 oz/a		A					
	8 Ignite	2.34	29 oz/a		C					
	8 N-pak ams	100	1.5 qt/a		C					
9	Authority MTZ	45	16 oz/a		A	100	100	100	100	100
	9 Ignite	2.34	29 oz/a		C					
	9 N-pak ams	100	1.5 qt/a		C					
10	KIH 485	85	3 oz/a		A	95	98	100	100	90
	10 Ignite	2.34	29 oz/a		B					
	10 N-pak ams	100	1.5 qt/a		B					
11	Ignite	2.34	36 oz/a		B	97	97	85	100	92
	11 N-pak ams	100	1.5 qt/a		B					
12	F9310-6	2	6 oz/a		A	100	98	100	100	100
	12 Ignite	2.34	29 oz/a		C					

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOHE	AMARE	CHEAL	SETFA
Pest Scientific Name	Ambrosia trifida	Ipomoea hederacea	Amaranthus retrofractus	Chenopodium album	Setaria faberii
Pest Name	Giant ragweed	Ivyleaf morning glory	Redroot pigweed	Common lambsquarters	Giant foxtail
Crop Code					
BCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	7/25/11	7/25/11	7/25/11	7/25/11	8/8/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	49 18	49 18	49 18	49 18	63 32
Trt-Eval Interval	18 DA-C	18 DA-C	18 DA-C	18 DA-C	32 DA-C
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1	63 DP-1
Number of Decimals	0	0	0	0	0
Trt Treatment No. Name	Form Conc	Other Rate	Other Rate	Appl Unit	Code
12 N-pak ams	100	1.5 qt/a		C	
	19	20	21	22	23
LSD (P=.05)	5.4	7.1	10.1	0.0	6.0
Standard Deviation	3.2	4.2	6.0	0.0	3.5
CV	3.55	4.69	6.73	0.0	3.93
Bartlett's X2	3.238	4.798	0.04	0.0	4.078
P(Bartlett's X2)	0.356	0.852	0.841	.	0.253
Replicate F	1.073	1.960	0.367	0.000	1.061
Replicate Prob(F)	0.3592	0.1647	0.6968	1.0000	0.3632
Treatment F	237.140	136.175	68.772	0.000	195.513
Treatment Prob(F)	0.0001	0.0001	0.0001	1.0000	0.0001

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOHE	AMARE	CHEAL
Pest Scientific Name	Ambrosia trifida	Ipomoea hederacea	Amaranthus retrofractus	Chenopodium album
Pest Name	Giant ragweed	Ipomoea hederacea	Redroot pigweed	Common lambsquarters
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	8/8/11	8/8/11	8/8/11	8/8/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	63 32	63 32	63 32	63 32
Trt-Eval Interval	32 DA-C	32 DA-C	32 DA-C	32 DA-C
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	63 DP-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Form Conc	Other Rate	Other Rate	Appl Unit Code	24	25	26	27	28
1	UTC					0	0	0	0	0.0
2	Prefix	5.29	2.5 pt/a		A	97	100	100	100	.
	2 Ignite	2.34	29 oz/a		C					
	2 N-pak ams	100	1.5 qt/a		C					
3	Authority First	70	6 oz/a		A	100	98	100	100	.
	3 Ignite	2.34	29 oz/a		C					
	3 N-pak ams	100	1.5 qt/a		C					
4	Prefix	5.29	2.5 pt/a		B	100	95	97	100	.
	4 Ignite	2.34	29 oz/a		B					
	4 N-pak ams	100	1.5 qt/a		B					
5	Dual II Magnum	7.62	1.33 pt/a		B	93	93	83	100	.
	5 Ignite	2.34	29 oz/a		B					
	5 N-pak ams	100	1.5 qt/a		B					
6	Ignite	2.34	29 oz/a		B	100	100	100	100	.
	6 N-pak ams	100	1.5 qt/a		B					
	6 Ignite	2.34	29 oz/a		C					
	6 N-pak ams	100	1.5 qt/a		C					
7	Fierce	76	3 oz/a		A	97	100	100	100	.
	7 Ignite	2.34	29 oz/a		C					
	7 N-pak ams	100	1.5 qt/a		C					
8	Valor XLT @ 3.0 oz					100	98	100	100	.
	8 Valor SX	51	1.76 oz/a		A					
	8 Classic	25	1.24 oz/a		A					
	8 Ignite	2.34	29 oz/a		C					
	8 N-pak ams	100	1.5 qt/a		C					
9	Authority MTZ	45	16 oz/a		A	98	100	100	100	.
	9 Ignite	2.34	29 oz/a		C					
	9 N-pak ams	100	1.5 qt/a		C					
10	KIH 485	85	3 oz/a		A	92	95	100	100	.
	10 Ignite	2.34	29 oz/a		B					
	10 N-pak ams	100	1.5 qt/a		B					
11	Ignite	2.34	36 oz/a		B	87	97	82	100	.
	11 N-pak ams	100	1.5 qt/a		B					
12	F9310-6	2	6 oz/a		A	100	100	100	100	.
	12 Ignite	2.34	29 oz/a		C					

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	IPOHE	AMARE	CHEAL
Pest Scientific Name	Ambrosia trifida	Ipomoea hederacea	Amaranthus retrofractus	Chenopodium album
Pest Name	Giant ragweed	Ivy leaf morning glory	Redroot pigweed	Common lambsquarters
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	8/8/11	8/8/11	8/8/11	8/8/11
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	63 32	63 32	63 32	63 32
Trt-Eval Interval	32 DA-C	32 DA-C	32 DA-C	32 DA-C
Plant-Eval Interval	63 DP-1	63 DP-1	63 DP-1	63 DP-1
Number of Decimals	0	0	0	0
Trt Treatment No. Name	Form Conc	Other Rate	Other Rate	Appl Unit Code
12 N-pak ams	100	1.5 qt/a		C
LSD (P=.05)	9.4	7.5	9.8	0.0
Standard Deviation	5.6	4.4	5.8	0.0
CV	6.26	4.94	6.52	0.0
Bartlett's X2	3.38	3.84	1.798	0.0
P(Bartlett's X2)	0.642	0.573	0.407	.
Replicate F	0.361	0.884	1.023	0.000
Replicate Prob(F)	0.7013	0.4272	0.3761	1.0000
Treatment F	77.549	122.842	74.025	0.000
Treatment Prob(F)	0.0001	0.0001	0.0001	1.0000

# Ohio State University Horticulture and Crop Science

**Evaluate residual herbicides with the first app of Ignite and demonstrate how that compares to either a pre followed by post or post app alone**

Title No. 2:

Trial ID: 11LLSOY                      Protocol ID: 11LLSOY  
Location: Western Branch F-7      Study Director: Bryan Reeb  
Project ID: 11LLSOY                  Investigator: Dr. Mark M. Loux  
Sponsor Contact: Dave Lamore, Bayer

Pest Type

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

Pest Code

SETFA, *Setaria faberi*, = US  
AMBTR, *Ambrosia trifida*, = US  
IPOHE, *Ipomoea hederacea*, = US  
AMARE, *Amaranthus retroflexus*, = US  
CHEAL, *Chenopodium album*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Type

PHYGEN = phytotoxicity - general / injury  
CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

17 DP-1 = 1 6/6/11  
29 DP-1 = 1 6/6/11  
35 DP-1 = 1 6/6/11  
42 DP-1 = 1 6/6/11  
49 DP-1 = 1 6/6/11  
63 DP-1 = 1 6/6/11