

Ohio State University Horticulture and Crop Science

IGNITE LL EFFICACY AND TIMING OF IGNITE FOLLOW UP APPLICATION

Title No. 2:
 Trial ID: 10LLSOY2 Protocol ID: 10LLSOY2
 Location: Western Branch F-8 Study Director: Bryan Reeb
 Project ID: 10LLSOY2 Investigator: Dr. Mark M. Loux
 Sponsor Contact: DAVE LAMORE, BAYER

General Trial Information

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Trial Location
City: South Charleston **Latitude of LL Corner °:** 39.86015 N
State/Prov.: Ohio **Longitude of LL Corner °:** 83.67121 W
Postal Code: 45368 **Altitude of LL Corner, Unit:** 1080.00 FT
Country: USA

Personnel

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: S.C. 3330 LL **Description:** LL
BCH Scale: BSOY **Planting Date:** May-6-2010
Planting Method: SEEDED seeded **Rate, Unit:** 196000 S/A
Depth, Unit: 0.75 IN
Row Spacing, Unit: 15 IN
Seed Bed: MEDIUM medium
Soil Moisture: GOOD good **Emergence Date:** May-18-2010

Pest Description

- Pest 1 Type:** W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail
- Pest 2 Type:** W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed
- Pest 3 Type:** W **Code:** POLPY Polygonum pensylvanicum
Common Name: Pennsylvania smartweed
- Pest 4 Type:** W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters
- Pest 5 Type:** W **Code:** ABUTH Abutilon theophrasti
Common Name: Velvetleaf
- Pest 6 Type:** W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed
- Pest 7 Type:** W **Code:** SOLPT Solanum ptycanthum
Common Name: Eastern black nightshade
- Pest 8 Type:** W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed

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 FT2 **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-8 West
% OM: 3.1 **Texture:** SICL silty clay loam
pH: 6.3 **Soil Name:** Kokomo
CEC: 20 **Fert. Level:** G good
Soil Drainage: G good

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Application Description

	A	B	C	D	E
Application Date:	Jun-4-2010	Jun-10-2010	Jun-10-2010	Jun-17-2010	Jun-25-2010
Time of Day:	8:30 AM	3:00 PM	3:00 PM	9:00 AM	9:00 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	EPO	MPO12"WDS	MPO 7 DAA	MPO14 DAA	LPO21 DAA
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Air Temperature, Unit:	72.4 F	80.5 F	80.5 F	75 F	71 F
% Relative Humidity:	85.5	58	58	72	75
Wind Velocity, Unit:	4 MPH	6 MPH	6 MPH	1 MPH	1 MPH
Wind Direction:	SW	NW	NW	NW	NE
Dew Presence (Y/N):	Y yes	N no	N no	Y yes	Y yes
Soil Temperature, Unit:	68 F	74 F	74 F	70 F	68 F
Soil Moisture:	WET	GOOD	GOOD	WET	GOOD
% Cloud Cover:	0	5	5	0	0
Next Rain Occurred On:	Jun-4-2010	Jun-11-2010	Jun-11-2010	Jun-27-2010	Jun-27-2010

Crop Stage At Each Application

	A		B		C		D		E	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:	BBCH		BBCH		BBCH		BBCH		BBCH	
Stage Majority, Percent:	12	100	12	100	12	100	14	100	16	100
Height, Unit:	6	IN	9	IN	9	IN	11	IN	14	IN
Height Minimum, Maximum:	5	6	8	9	8	9	10	11	12	14

Pest Stage At Each Application

	A		B		C		D		E	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:	13	100	14	100	11	100	13	100	14	100
Height, Unit:	6	IN	8	IN	0.5	IN	6	IN	14	IN
Height Minimum, Maximum:	4	6	7	8	0.25	0.5	5	6	14	16
Density, Unit:	26.4 M2									
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:	16	100	18	100	10	100	12	100	18	100
Height, Unit:	8	IN	12	IN	0.25	IN	4	IN	14	IN
Height Minimum, Maximum:	7	8	10	12	0.25	0.5	2	4	10	14
Density, Unit:	40 M2									
Pest 3 Code, Type, Scale:	POLPY	W	POLPY	W	POLPY	W	POLPY	W	POLPY	W
Stage Majority, Percent:	14	100								
Height, Unit:	3	IN								
Height Minimum, Maximum:	2	3								
Pest 4 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:	14	100	16	100	11	100	12	100		
Height, Unit:	2	IN	4	IN	0.5	IN	2	IN		
Height Minimum, Maximum:	1	2	3	4	0.25	0.5	1	2		
Density, Unit:	49.2 M2									
Pest 5 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:	13	100								
Height, Unit:	3	IN								
Height Minimum, Maximum:	2	3								
Pest 6 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W	AMARE	W	AMARE	W
Stage Majority, Percent:	14	100								
Height, Unit:	2	IN								
Height Minimum, Maximum:	1	2								
Density, Unit:	4 M2									
Pest 7 Code, Type, Scale:	SOLPT	W	SOLPT	W	SOLPT	W	SOLPT	W	SOLPT	W
Stage Majority, Percent:	12	100	12	100			12	100		
Height, Unit:	0.5	IN	1	IN			1	IN		
Height Minimum, Maximum:	0.5	1	1	2			1	2		
Pest 8 Code, Type, Scale:	AMBEL	W	AMBEL	W	AMBEL	W	AMBEL	W	AMBEL	W
Stage Majority, Percent:	14	100	15	100						
Height, Unit:	3	IN	4	IN						
Height Minimum, Maximum:	2	3	3	4						
Density, Unit:	2.4 M2									

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Application Equipment

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

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	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	W Weed SETFA Setaria faberi	W Weed ECHCG Echinochloa cr>	W Weed AMBTR Ambrosia trifi>
Pest Type				Giant foxtail	Common barnyar>	Giant ragweed
Pest Code						
Pest Scientific Name						
Pest Name						
Crop Code						
BBCH Scale						
Crop Scientific Name	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean			
Rating Date	Jun-10-2010	Jun-10-2010	Jun-22-2010	Jun-22-2010	Jun-22-2010	Jun-22-2010
Rating Type	PHYCHL	PHYLMA	PHYGEN	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Days After First/Last Applic.	6 6	6 6	18 5	18 5	18 5	18 5
Trt-Eval Interval	6 DA-A	6 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A
Plant-Eval Interval	35 DP-1	35 DP-1	47 DP-1	47 DP-1	47 DP-1	47 DP-1
Days After Emergence	23 DE-	23 DE-	35 DE-	35 DE-	35 DE-	35 DE-
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	1	2	3	4	5	6
1	UTC						0	0	0	0	0	0
2	Ignite	2.34 LBA/GAL		22 oz/a		A	0	0	0	70	57	33
2	N-pak ams	100 %		2 qt/a		A						
3	Ignite	2.34 LBA/GAL		29 oz/a		A	1	0	0	67	55	33
3	N-pak ams	100 %		2 qt/a		A						
4	Ignite	2.34 LBA/GAL		36 oz/a		A	1	0	0	60	55	30
4	N-pak ams	100 %		2 qt/a		A						
5	Ignite	2.34 LBA/GAL		29 oz/a		B	0	0	1	96	85	83
5	N-pak ams	100 %		2 qt/a		B						
6	Ignite	2.34 LBA/GAL		36 oz/a		B	0	0	1	97	88	88
6	N-pak ams	100 %		2 qt/a		B						
7	Ignite	2.34 LBA/GAL		22 oz/a		A	1	0	0	99	93	90
7	N-pak ams	100 %		2 qt/a		A						
7	Ignite	2.34 LBA/GAL		22 oz/a		C						
7	N-pak ams	100 %		2 qt/a		C						
8	Ignite	2.34 LBA/GAL		22 oz/a		A	1	0	0	100	88	100
8	N-pak ams	100 %		2 qt/a		A						
8	Ignite	2.34 LBA/GAL		22 oz/a		D						
8	N-pak ams	100 %		2 qt/a		D						
9	Ignite	2.34 LBA/GAL		22 oz/a		A	1	0	0	82	53	53
9	N-pak ams	100 %		2 qt/a		A						
9	Ignite	2.34 LBA/GAL		22 oz/a		E						
9	N-pak ams	100 %		2 qt/a		E						
10	Ignite	2.34 LBA/GAL		22 oz/a		A	2	5	1	90	58	82
10	Flexstar	1.88 LBA/GAL		1 pt/a		A						
10	N-pak ams	100 %		2 qt/a		A						
11	Ignite	2.34 LBA/GAL		22 oz/a		A	1	0	0	83	68	37
11	Select Max	1 LBA/GAL		8 oz/a		A						
11	N-pak ams	100 %		2 qt/a		A						
12	Ignite	2.34 LBA/GAL		22 oz/a		A	2	9	2	77	68	50
12	Cobra	2 LBA/GAL		8 oz/a		A						
12	N-pak ams	100 %		2 qt/a		A						
13	Ignite	2.34 LBA/GAL		22 oz/a		A	1	4	0	87	67	37
13	Harmony GT	75 %AW/W		0.083 oz/a		A						

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Pest Type	GLXMA			W Weed	W Weed	W Weed							
Pest Code	BSOY			SETFA	ECHCG	AMBTR							
Pest Scientific Name	Glycine max			Setaria faberi	Echinochloa cr>	Ambrosia trifi>							
Pest Name	Soybean			Giant foxtail	Common barnyar>	Giant ragweed							
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	Jun-10-2010	Jun-10-2010	Jun-22-2010	Jun-22-2010	Jun-22-2010	Jun-22-2010							
Rating Type	PHYCHL	PHYLMA	PHYGEN	CONTROL	CONTROL	CONTROL							
Rating Unit	%	%	%	%	%	%							
Number of Subsamples	1	1	1	1	1	1							
Days After First/Last Applic.	6 6	6 6	18 5	18 5	18 5	18 5							
Trt-Eval Interval	6 DA-A	6 DA-A	18 DA-A	18 DA-A	18 DA-A	18 DA-A							
Plant-Eval Interval	35 DP-1	35 DP-1	47 DP-1	47 DP-1	47 DP-1	47 DP-1							
Days After Emergence	23 DE-	23 DE-	35 DE-	35 DE-	35 DE-	35 DE-							
Number of Decimals	0	0	0	0	0	0							
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Rate	Appl Unit	Code	1	2	3	4	5	6
13	N-pak ams	100 %		2 qt/a		A							
14	Ignite	2.34 LBA/GAL		22 oz/a		A		2	2	0	77	67	37
14	Cadet	0.91 LBA/GAL		0.5 oz/a		A							
14	N-pak ams	100 %		2 qt/a		A							
LSD (P=.05)				0.5	1.6	0.7		14.6	22.7	19.4			
Standard Deviation				0.3	1.0	0.4		8.7	13.5	11.5			
CV				33.55	67.32	116.79		11.27	20.92	21.45			
Bartlett's X2				0.0	3.787	1.632		22.829	18.221	16.194			
P(Bartlett's X2)				.	0.285	0.652		0.019*	0.109	0.063			
Replicate F				0.736	2.857	0.411		0.316	1.591	0.637			
Replicate Prob(F)				0.4888	0.0756	0.6675		0.7319	0.2229	0.5367			
Treatment F				15.943	24.863	6.621		25.707	8.855	19.860			
Treatment Prob(F)				0.0001	0.0001	0.0001		0.0001	0.0001	0.0001			

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Pest Type	W Weed	W Weed	W Weed	W Weed							
Pest Code	AMARE	CHEAL	POLPY	HIBTR							
Pest Scientific Name	Amaranthus ret>	Chenopodium al>	Polygonum pens>	Hibiscus trion>							
Pest Name	Redroot pigweed	Common lambsqu>	Pennsylvania s>	Venice mallow							
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	Jun-22-2010	Jun-22-2010	Jun-22-2010	Jun-22-2010	Jul-1-2010						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	PHYGEN						
Rating Unit	%	%	%	%	%						
Number of Subsamples	1	1	1	1	1						
Days After First/Last Applic.	18 5	18 5	18 5	18 5	27 6						
Trt-Eval Interval	18 DA-A	18 DA-A	18 DA-A	18 DA-A	27 DA-A						
Plant-Eval Interval	47 DP-1	47 DP-1	47 DP-1	47 DP-1	56 DP-1						
Days After Emergence	35 DE-	35 DE-	35 DE-	35 DE-	44 DE-						
Number of Decimals	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	7	8	9	10	11
1	UTC						0	0	0	0	0
2	Ignite	2.34 LBA/GAL		22 oz/a		A	93	78	100	100	0
	2 N-pak ams	100 %		2 qt/a		A					
3	Ignite	2.34 LBA/GAL		29 oz/a		A	92	63	97	98	0
	3 N-pak ams	100 %		2 qt/a		A					
4	Ignite	2.34 LBA/GAL		36 oz/a		A	97	73	100	95	0
	4 N-pak ams	100 %		2 qt/a		A					
5	Ignite	2.34 LBA/GAL		29 oz/a		B	98	90	100	100	0
	5 N-pak ams	100 %		2 qt/a		B					
6	Ignite	2.34 LBA/GAL		36 oz/a		B	100	88	100	100	0
	6 N-pak ams	100 %		2 qt/a		B					
7	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100	0
	7 N-pak ams	100 %		2 qt/a		A					
	7 Ignite	2.34 LBA/GAL		22 oz/a		C					
	7 N-pak ams	100 %		2 qt/a		C					
8	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100	0
	8 N-pak ams	100 %		2 qt/a		A					
	8 Ignite	2.34 LBA/GAL		22 oz/a		D					
	8 N-pak ams	100 %		2 qt/a		D					
9	Ignite	2.34 LBA/GAL		22 oz/a		A	78	48	100	100	0
	9 N-pak ams	100 %		2 qt/a		A					
	9 Ignite	2.34 LBA/GAL		22 oz/a		E					
	9 N-pak ams	100 %		2 qt/a		E					
10	Ignite	2.34 LBA/GAL		22 oz/a		A	100	72	100	100	0
	10 Flexstar	1.88 LBA/GAL		1 pt/a		A					
	10 N-pak ams	100 %		2 qt/a		A					
11	Ignite	2.34 LBA/GAL		22 oz/a		A	87	63	100	97	0
	11 Select Max	1 LBA/GAL		8 oz/a		A					
	11 N-pak ams	100 %		2 qt/a		A					
12	Ignite	2.34 LBA/GAL		22 oz/a		A	100	73	98	100	1
	12 Cobra	2 LBA/GAL		8 oz/a		A					
	12 N-pak ams	100 %		2 qt/a		A					
13	Ignite	2.34 LBA/GAL		22 oz/a		A	98	78	100	100	0
	13 Harmony GT	75 %AW/W		0.083 oz/a		A					

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Pest Type	W Weed	W Weed	W Weed	W Weed							
Pest Code	AMARE	CHEAL	POLPY	HIBTR							
Pest Scientific Name	Amaranthus ret>	Chenopodium al>	Polygonum pens>	Hibiscus trion>							
Pest Name	Redroot pigweed	Common lambsqu>	Pennsylvania s>	Venice mallow							
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	Jun-22-2010	Jun-22-2010	Jun-22-2010	Jun-22-2010	Jul-1-2010						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	PHYGEN						
Rating Unit	%	%	%	%	%						
Number of Subsamples	1	1	1	1	1						
Days After First/Last Applic.	18 5	18 5	18 5	18 5	27 6						
Trt-Eval Interval	18 DA-A	18 DA-A	18 DA-A	18 DA-A	27 DA-A						
Plant-Eval Interval	47 DP-1	47 DP-1	47 DP-1	47 DP-1	56 DP-1						
Days After Emergence	35 DE-	35 DE-	35 DE-	35 DE-	44 DE-						
Number of Decimals	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Rate Unit	Appl Code	7	8	9	10	11
13	N-pak ams	100 %		2 qt/a		A					
14	Ignite	2.34 LBA/GAL		22 oz/a		A	95	68	100	98	0
14	Cadet	0.91 LBA/GAL		0.5 oz/a		A					
14	N-pak ams	100 %		2 qt/a		A					
LSD (P=.05)							16.7	25.9	2.8	2.9	0.4
Standard Deviation							9.9	15.4	1.7	1.7	0.2
CV							11.23	21.66	1.81	1.89	299.57
Bartlett's X2							22.36	11.206	0.877	1.215	0.0
P(Bartlett's X2)							0.002*	0.342	0.349	0.75	.
Replicate F							0.766	0.604	1.918	2.864	1.560
Replicate Prob(F)							0.4750	0.5544	0.1671	0.0751	0.2292
Treatment F							20.899	7.904	762.312	697.347	2.440
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0256

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	ECHCG	AMBTR	AMARE	CHEAL
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	Redroot pigweed	Common lambsqu>
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jul-1-2010	Jul-1-2010	Jul-1-2010	Jul-1-2010	Jul-1-2010
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	27 6	27 6	27 6	27 6	27 6
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1
Days After Emergence	44 DE-	44 DE-	44 DE-	44 DE-	44 DE-
Number of Decimals	0	0	0	0	0

Trt	Treatment	Form	Form	Other	Other	Appl	12	13	14	15	16
No.	Name	Conc	Unit	Rate	Rate	Unit Code					
1	UTC						0	0	0	0	0
2	Ignite	2.34	LBA/GAL	22 oz/a		A	92	73	63	99	78
2	N-pak ams	100 %		2 qt/a		A					
3	Ignite	2.34	LBA/GAL	29 oz/a		A	93	73	68	90	75
3	N-pak ams	100 %		2 qt/a		A					
4	Ignite	2.34	LBA/GAL	36 oz/a		A	95	75	68	95	79
4	N-pak ams	100 %		2 qt/a		A					
5	Ignite	2.34	LBA/GAL	29 oz/a		B	97	82	86	97	80
5	N-pak ams	100 %		2 qt/a		B					
6	Ignite	2.34	LBA/GAL	36 oz/a		B	97	88	89	100	92
6	N-pak ams	100 %		2 qt/a		B					
7	Ignite	2.34	LBA/GAL	22 oz/a		A	98	94	93	100	100
7	N-pak ams	100 %		2 qt/a		A					
7	Ignite	2.34	LBA/GAL	22 oz/a		C					
7	N-pak ams	100 %		2 qt/a		C					
8	Ignite	2.34	LBA/GAL	22 oz/a		A	98	94	97	99	99
8	N-pak ams	100 %		2 qt/a		A					
8	Ignite	2.34	LBA/GAL	22 oz/a		D					
8	N-pak ams	100 %		2 qt/a		D					
9	Ignite	2.34	LBA/GAL	22 oz/a		A	85	68	96	100	83
9	N-pak ams	100 %		2 qt/a		A					
9	Ignite	2.34	LBA/GAL	22 oz/a		E					
9	N-pak ams	100 %		2 qt/a		E					
10	Ignite	2.34	LBA/GAL	22 oz/a		A	96	78	85	92	87
10	Flexstar	1.88	LBA/GAL	1 pt/a		A					
10	N-pak ams	100 %		2 qt/a		A					
11	Ignite	2.34	LBA/GAL	22 oz/a		A	94	88	65	91	73
11	Select Max	1	LBA/GAL	8 oz/a		A					
11	N-pak ams	100 %		2 qt/a		A					
12	Ignite	2.34	LBA/GAL	22 oz/a		A	95	75	70	100	73
12	Cobra	2	LBA/GAL	8 oz/a		A					
12	N-pak ams	100 %		2 qt/a		A					
13	Ignite	2.34	LBA/GAL	22 oz/a		A	88	78	65	100	78
13	Harmony GT	75 %	AW/W	0.083 oz/a		A					

Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed						
Pest Code	SETFA	ECHCG	AMBTR	AMARE	CHEAL						
Pest Scientific Name	Setaria faberi	Echinochloa cr>	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>						
Pest Name	Giant foxtail	Common barnyar>	Giant ragweed	Redroot pigweed	Common lambsqu>						
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Rating Date	Jul-1-2010	Jul-1-2010	Jul-1-2010	Jul-1-2010	Jul-1-2010						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL						
Rating Unit	%	%	%	%	%						
Number of Subsamples	1	1	1	1	1						
Days After First/Last Applic.	27 6	27 6	27 6	27 6	27 6						
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A						
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1						
Days After Emergence	44 DE-	44 DE-	44 DE-	44 DE-	44 DE-						
Number of Decimals	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Rate	Appl Unit Code	12	13	14	15	16
13	N-pak ams	100 %		2 qt/a		A					
14	Ignite	2.34	LBA/GAL	22 oz/a		A	90	79	65	93	77
14	Cadet	0.91	LBA/GAL	0.5 oz/a		A					
14	N-pak ams	100 %		2 qt/a		A					
	LSD (P=.05)						4.6	14.8	10.0	9.6	12.4
	Standard Deviation						2.7	8.8	5.9	5.7	7.4
	CV						3.12	11.81	8.23	6.4	9.64
	Bartlett's X2						5.098	11.089	16.806	17.191	17.519
	P(Bartlett's X2)						0.826	0.521	0.157	0.016*	0.093
	Replicate F						1.690	0.800	0.585	2.020	0.097
	Replicate Prob(F)						0.2042	0.4601	0.5643	0.1529	0.9081
	Treatment F						260.729	20.279	50.426	61.941	30.907
	Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed						
Pest Code	POLPY	HIBTR	SETFA	ECHCG	AMBTR						
Pest Scientific Name	Polygonum pens>	Hibiscus trion>	Setaria faberi	Echinochloa cr>	Ambrosia trifi>						
Pest Name	Pennsylvania s>	Venice mallow	Giant foxtail	Common barnyar>	Giant ragweed						
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Rating Date	Jul-1-2010	Jul-1-2010	Jul-16-2010	Jul-16-2010	Jul-16-2010						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL						
Rating Unit	%	%	%	%	%						
Number of Subsamples	1	1	1	1	1						
Days After First/Last Applic.	27 6	27 6	42 21	42 21	42 21						
Trt-Eval Interval	27 DA-A	27 DA-A	42 DA-A	42 DA-A	42 DA-A						
Plant-Eval Interval	56 DP-1	56 DP-1	71 DP-1	71 DP-1	71 DP-1						
Days After Emergence	44 DE-	44 DE-	59 DE-	59 DE-	59 DE-						
Number of Decimals	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Unit Code	17	18	19	20	21
1	UTC						0	0	0	0	0
2	Ignite	2.34 LBA/GAL		22 oz/a		A	100	99	99	94	52
	2 N-pak ams	100 %		2 qt/a		A					
3	Ignite	2.34 LBA/GAL		29 oz/a		A	100	99	98	87	60
	3 N-pak ams	100 %		2 qt/a		A					
4	Ignite	2.34 LBA/GAL		36 oz/a		A	100	98	98	87	57
	4 N-pak ams	100 %		2 qt/a		A					
5	Ignite	2.34 LBA/GAL		29 oz/a		B	100	100	100	99	93
	5 N-pak ams	100 %		2 qt/a		B					
6	Ignite	2.34 LBA/GAL		36 oz/a		B	100	100	100	99	98
	6 N-pak ams	100 %		2 qt/a		B					
7	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100	100
	7 N-pak ams	100 %		2 qt/a		A					
	7 Ignite	2.34 LBA/GAL		22 oz/a		C					
	7 N-pak ams	100 %		2 qt/a		C					
8	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100	100
	8 N-pak ams	100 %		2 qt/a		A					
	8 Ignite	2.34 LBA/GAL		22 oz/a		D					
	8 N-pak ams	100 %		2 qt/a		D					
9	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100	100
	9 N-pak ams	100 %		2 qt/a		A					
	9 Ignite	2.34 LBA/GAL		22 oz/a		E					
	9 N-pak ams	100 %		2 qt/a		E					
10	Ignite	2.34 LBA/GAL		22 oz/a		A	99	100	99	86	95
	10 Flexstar	1.88 LBA/GAL		1 pt/a		A					
	10 N-pak ams	100 %		2 qt/a		A					
11	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100	55
	11 Select Max	1 LBA/GAL		8 oz/a		A					
	11 N-pak ams	100 %		2 qt/a		A					
12	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	89	80	55
	12 Cobra	2 LBA/GAL		8 oz/a		A					
	12 N-pak ams	100 %		2 qt/a		A					
13	Ignite	2.34 LBA/GAL		22 oz/a		A	100	99	88	90	43
	13 Harmony GT	75 %AW/W		0.083 oz/a		A					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	POLPY	HIBTR	SETFA	ECHCG	AMBTR
Pest Scientific Name	Polygonum pens>	Hibiscus trion>	Setaria faberi	Echinochloa cr>	Ambrosia trifi>
Pest Name	Pennsylvania s>	Venice mallow	Giant foxtail	Common barnyar>	Giant ragweed
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jul-1-2010	Jul-1-2010	Jul-16-2010	Jul-16-2010	Jul-16-2010
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	27 6	27 6	42 21	42 21	42 21
Trt-Eval Interval	27 DA-A	27 DA-A	42 DA-A	42 DA-A	42 DA-A
Plant-Eval Interval	56 DP-1	56 DP-1	71 DP-1	71 DP-1	71 DP-1
Days After Emergence	44 DE-	44 DE-	59 DE-	59 DE-	59 DE-
Number of Decimals	0	0	0	0	0
Trt No.	17	18	19	20	21
Treatment Name	13 N-pak ams	14 Ignite	14 Cadet	14 N-pak ams	
Form Conc	100 %	2.34 LBA/GAL	0.91 LBA/GAL	100 %	
Form Unit					
Other Rate	2 qt/a	22 oz/a	0.5 oz/a	2 qt/a	
Other Rate Unit					
Appl Code	A	A	A	A	A
Mean		100	100	94	94
Standard Deviation	0.5	1.6	5.8	8.8	12.3
CV	0.3	1.0	3.4	5.3	7.3
Bartlett's X2	0.33	1.03	3.81	6.05	10.71
P(Bartlett's X2)	0.0	2.911	12.228	13.678	8.472
Replicate F	.	0.405	0.032*	0.091	0.293
Replicate Prob(F)	1.000	0.659	0.099	0.909	0.078
Treatment F	0.3816	0.5257	0.9065	0.4153	0.9253
Treatment Prob(F)	22477.926	2360.643	175.287	72.666	50.778
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001

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				W Weed	W Weed	W Weed	W Weed			
				AMARE	CHEAL	POLPY	HIBTR			
				Amaranthus ret>	Chenopodium al>	Polygonum pens>	Hibiscus trion>			
				Redroot pigweed	Common lambsqu>	Pennsylvania s>	Venice mallow			
Pest Type										
Pest Code										
Pest Scientific Name										
Pest Name										
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jul-16-2010	Jul-16-2010	Jul-16-2010	Jul-16-2010						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL						
Rating Unit	%	%	%	%						
Number of Subsamples	1	1	1	1						
Days After First/Last Applic.	42 21	42 21	42 21	42 21						
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A						
Plant-Eval Interval	71 DP-1	71 DP-1	71 DP-1	71 DP-1						
Days After Emergence	59 DE-	59 DE-	59 DE-	59 DE-						
Number of Decimals	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Rate	Appl Unit Code	22	23	24	25
1	UTC						0	0	0	0
2	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100
2	N-pak ams	100 %		2 qt/a		A				
3	Ignite	2.34 LBA/GAL		29 oz/a		A	100	100	100	100
3	N-pak ams	100 %		2 qt/a		A				
4	Ignite	2.34 LBA/GAL		36 oz/a		A	100	100	100	100
4	N-pak ams	100 %		2 qt/a		A				
5	Ignite	2.34 LBA/GAL		29 oz/a		B	100	100	100	100
5	N-pak ams	100 %		2 qt/a		B				
6	Ignite	2.34 LBA/GAL		36 oz/a		B	100	100	100	100
6	N-pak ams	100 %		2 qt/a		B				
7	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100
7	N-pak ams	100 %		2 qt/a		A				
7	Ignite	2.34 LBA/GAL		22 oz/a		C				
7	N-pak ams	100 %		2 qt/a		C				
8	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100
8	N-pak ams	100 %		2 qt/a		A				
8	Ignite	2.34 LBA/GAL		22 oz/a		D				
8	N-pak ams	100 %		2 qt/a		D				
9	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100
9	N-pak ams	100 %		2 qt/a		A				
9	Ignite	2.34 LBA/GAL		22 oz/a		E				
9	N-pak ams	100 %		2 qt/a		E				
10	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100
10	Flexstar	1.88 LBA/GAL		1 pt/a		A				
10	N-pak ams	100 %		2 qt/a		A				
11	Ignite	2.34 LBA/GAL		22 oz/a		A	99	100	100	100
11	Select Max	1 LBA/GAL		8 oz/a		A				
11	N-pak ams	100 %		2 qt/a		A				
12	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100
12	Cobra	2 LBA/GAL		8 oz/a		A				
12	N-pak ams	100 %		2 qt/a		A				
13	Ignite	2.34 LBA/GAL		22 oz/a		A	100	100	100	100
13	Harmony GT	75 %AW/W		0.083 oz/a		A				

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMARE	CHEAL	POLPY	HIBTR
Pest Scientific Name	Amaranthus ret>	Chenopodium al>	Polygonum pens>	Hibiscus trion>
Pest Name	Redroot pigweed	Common lambsqu>	Pennsylvania s>	Venice mallow
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	Jul-16-2010	Jul-16-2010	Jul-16-2010	Jul-16-2010
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	42 21	42 21	42 21	42 21
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A
Plant-Eval Interval	71 DP-1	71 DP-1	71 DP-1	71 DP-1
Days After Emergence	59 DE-	59 DE-	59 DE-	59 DE-
Number of Decimals	0	0	0	0
Trt No.	22	23	24	25
Treatment Name	13 N-pak ams			
Form Conc	100 %			
Form Unit				
Other Rate	2 qt/a			
Other Rate				
Appl Unit Code	A			
	100	100	100	100
14 Ignite	2.34 LBA/GAL			
14 Cadet	0.91 LBA/GAL			
14 N-pak ams	100 %			
	22 oz/a			
	0.5 oz/a			
	2 qt/a			
	A			
LSD (P=.05)	0.5	0.0	0.0	0.0
Standard Deviation	0.3	0.0	0.0	0.0
CV	0.33	0.0	0.0	0.0
Bartlett's X2	0.0	0.0	0.0	0.0
P(Bartlett's X2)
Replicate F	1.000	0.000	0.000	0.000
Replicate Prob(F)	0.3816	1.0000	1.0000	1.0000
Treatment F	22477.926	0.000	0.000	0.000
Treatment Prob(F)	0.0001	1.0000	1.0000	1.0000

Ohio State University Horticulture and Crop Science

IGNITE LL EFFICACY AND TIMING OF IGNITE FOLLOW UP APPLICATION

Title No. 2:

Trial ID: 10LLSOY2 Protocol ID: 10LLSOY2
Location: Western Branch F-8 Study Director: Bryan Reeb
Project ID: 10LLSOY2 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
ECHCG, Echinochloa crus-galli, = US
AMBTR, Ambrosia trifida, = US
AMARE, Amaranthus retroflexus, = US
CHEAL, Chenopodium album, = US
POLPY, Polygonum pensylvanicum, = US
HIBTR, Hibiscus trionum, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

PHYCHL = phytotoxicity - chlorosis
PHYLMA = phytotoxicity - leaf malformation
PHYGEN = phytotoxicity - general / injury

Rating Unit

% = percent

Plant-Eval Interval

35 DP-1 = 1 May-6-2010
47 DP-1 = 1 May-6-2010
56 DP-1 = 1 May-6-2010
71 DP-1 = 1 May-6-2010