

# Purdue University

## Ignite Timing in Liberty Link Soybean

Trial ID: 09S-THP-CTS-71      Protocol ID: 09LLSOY2LCK  
 Location: Throckmorton PAC      Study Director: Paul Marquardt/Melissa Kruger  
 Project ID:      Investigator: Dr. Mark M. Loux  
 Sponsor Contact:

### General Trial Information

**Study Director:** Paul Marquardt/Melissa Kruger      **Title:** Research Associate  
**Investigator:** Dr. William G. Johnson      **Title:** Associate Professor

**Discipline:** H herbicide  
**Trial Status:** E established  
**Initiation Date:** 5/12/09

### Trial Location

**City:** Lafayette  
**State/Prov.:** IN  
**Postal Code:** 47909  
**Country:** USA

### Objectives:

To evaluate Ignite at various timings on glyphosate resistant giant ragweed.

### Personnel

**Study Director:** Paul Marquardt/Melissa Kruger      **Title:** Research Associate  
**Affiliation:** Purdue University  
**Address:** 915 W. State Street, Department of Botany & Plant Path.  
**Location:** West Lafayette, IN  
**Postal Code:** 47907      **E-mail:** pmarquar@purdue.edu  
**Phone No.:** 765-494-4621      **Mobile No.:** 765-409-6369  
**Investigator:** Dr. William G. Johnson      **Title:** Associate Professor  
**Affiliation:** Purdue University  
**Address:** 915 W. State St.  
**Location:** West Lafayette, IN USA  
**Postal Code:** 47907      **E-mail:** wgj@purdue.edu  
**Phone No.:** 765-494-4656

### Cooperator/Landowner

**Cooperator:** Throckmorton Purdue Ag Center      **Role:** Purdue Ag Center  
**Organization:** Purdue University  
**Address 1:** 8343 US 231 S  
**Phone No.:** 765-538-3422  
**Fax No.:** 765-538-3423  
**City:** Lafayette  
**State/Prov:** IN  
**Postal Code:** 47909      **E-mail:** jayyoung@purdue.edu  
**Country:** US

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** S080103      **Description:** Liberty Link  
**BBCH Scale:** BSOY      **Planting Date:** 5/12/09  
**Planting Method:** DIRDRI direct drilled      **Rate, Unit:** 160000 P/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 15 IN      **Spacing Within Row, Unit:** 2.5 IN  
**Seed Bed:** CLOTRA cloddy/trashy      **Soil Temperature, Unit:** 64 F  
**Soil Moisture:** ABONOR above normal      **Emergence Date:** 5/24/09  
**Harvested Width, Unit:** 10 FT      **Harvest Equipment:** Gleaner F3  
**% Standard Moisture:** 13.0      **Harvested Length, Unit:** 25 FT  
**Weighing Equipment:** Carter Double Bucket      **Moisture Meter:** Cart 3" blade

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## Pest Description

- Pest 1 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion
- Pest 2 Type:** W **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail
- Pest 3 Type:** W **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters
- Pest 4 Type:** W **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed
- Pest 5 Type:** W **Code:** AMARE *Amaranthus retroflexus*  
**Common Name:** Redroot pigweed
- Pest 6 Type:** W **Code:** IPOHE *Ipomoea hederacea*  
**Common Name:** Ivyleaf morningglory
- Pest 7 Type:** W **Code:** AMATA *Amaranthus tamariscinus*  
**Common Name:** Common waterhemp

## 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:** 4      **Study Design:** RACOB� Randomized Complete Block (RCB)  
**Untreated Arrangement:** INCLUDED single control randomized in each block

### Field Prep./Maintenance:

1X blanket of glyphosate applied 1 week prior to planting

## Soil Description

**Description Name:** TPAC Field 4A  
**% OM:** 3.1      **Texture:** SIL silt loam  
**pH:** 6      **Soil Name:** Toronto-Millbrook  
**CEC:** 11.1

### Application Description

	A	B	C	D	E	F	G
<b>Application Date:</b>	5/12/09	6/18/09	6/23/09	6/30/09	7/10/09	7/16/09	7/21/09
<b>Time of Day:</b>	5:15 pm	2:10 pm	6:35 AM	7:00 AM	7:45 AM	7:30 AM	9:30 AM
<b>Application Method:</b>	SPRAY						
<b>Application Timing:</b>	PREPRE	22 DAE	MIPOWE	LAPOWE	21 DAB	21 DAC	21 DAD
<b>Application Placement:</b>	BANT						
<b>Applied By:</b>	CB	RH	GK	PM	PM	RH	PM
<b>Air Temperature, Unit:</b>	74 F	82 F	73 F	58 F	69 F	67 F	72 F
<b>% Relative Humidity:</b>	34	72	92	78	86	88	76
<b>Wind Velocity, Unit:</b>	7 MPH	2.5 MPH	1.5 MPH	1.5 MPH	3 MPH	4 MPH	1.5 MPH
<b>Wind Direction:</b>	SSE	W	E	E	SE	W	W
<b>Dew Presence (Y/N):</b>	N no	N no	Y yes				
<b>Soil Temperature, Unit:</b>	64 F	74 F	75 F	70 F	70 F	71 F	65 F
<b>Soil Moisture:</b>	ABONOR	WET	SLIWET	DRY	SLIWET	WET	DRY
<b>% Cloud Cover:</b>	10	40	0	30	85	10	0
<b>Next Rain Occurred On:</b>	5/13/09						

### Crop Stage At Each Application

	A	B	C	D	E	F
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY					
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	00	12	14 90	16	62 90	63 60
<b>Stage Minimum, Percent:</b>			13 10	16	61 10	62 40
<b>Stage Maximum, Percent:</b>			14 90	16	62 90	63 60
<b>Height, Unit:</b>		5 IN	7.5 IN	8 IN	14 IN	21 IN
<b>Height Minimum, Maximum:</b>		4 6	5 10	6 10	10 18	18 24



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Application Equipment					
	A	B	C	D	E
<b>Appl. Equipment:</b>	CO2 BACKPACK				
<b>Equipment Type:</b>	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	17 psi				
<b>Nozzle Type:</b>	FLAT FAN				
<b>Nozzle Size:</b>	XR11002	XR11002	XR11002	XR11002	XR11002
<b>Nozzle Spacing, Unit:</b>	15 IN				
<b>Nozzles/Row:</b>	8	8	8	8	8
<b>Boom Length, Unit:</b>	10 FT				
<b>Boom Height, Unit:</b>	18 IN				
<b>Ground Speed, Unit:</b>	3 MPH				
<b>Carrier:</b>	H2O	H2O	H2O	H2O	H2O
<b>Water Hardness (ppm CaCO3):</b>	150	150	150	150	150
<b>Spray Volume, Unit:</b>	15 gal/ac				
<b>Mix Size, Unit:</b>	1.8 liters				
<b>Propellant:</b>	CO2	CO2	CO2	CO2	CO2
<b>Tank Mix (Y/N):</b>	N no				

  

	F	G
<b>Appl. Equipment:</b>	CO2 BACKPACK	CO2 BACKPACK
<b>Equipment Type:</b>	SPRBAC	SPRBAC
<b>Operating Pressure, Unit:</b>	17 psi	17 psi
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	XR11002	XR11002
<b>Nozzle Spacing, Unit:</b>	15 IN	15 IN
<b>Nozzles/Row:</b>	8	8
<b>Boom Length, Unit:</b>	10 FT	10 FT
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH
<b>Carrier:</b>	H2O	H2O
<b>Water Hardness (ppm CaCO3):</b>	150	150
<b>Spray Volume, Unit:</b>	15 gal/ac	15 gal/ac
<b>Mix Size, Unit:</b>	1.8 liters	1.8 liters
<b>Propellant:</b>	CO2	CO2
<b>Tank Mix (Y/N):</b>	N no	N no

**No. Date By Deviations**

1.5/12/09 PM No-till instead of conventional tillage.

**Reasons:** Due to wet weather conditions we were forced to abandon tillage operations and plant when the field was dry.

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## Ignite Timing in Liberty Link Soybean

Trial ID: 09S-THP-CTS-71      Protocol ID: 09LLSOY2LCK  
 Location: Throckmorton PAC      Study Director: Paul Marquardt/Melissa Kruger  
 Project ID:      Investigator: Dr. Mark M. Loux  
 Sponsor Contact:

Pest Type		W Weed SETFA	W Weed AMBTR	W Weed SETFA	W Weed AMBTR	W Weed SETFA				
Pest Code		Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi				
Pest Scientific Name										
Pest Name		Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail				
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA				
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY				
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max				
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean				
Crop Variety	S080103	S080103	S080103	S080103	S080103	S080103				
Description	8-10"	8-10"	8-10"	8-15"	8-15"	20-28"				
Rating Date	6/29/09	6/29/09	6/29/09	7/8/09	7/8/09	7/20/09				
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	V5	V5	V5	R1	R1	R2				
Pest Stage Majority		8-10"	2-12"	1-18"	1-24"	10-28"				
Pest Density, Unit		100 YD2	3 YD2	30 YD2	3 YD2	25 YD2				
Assessed By	PM	PM	PM	PM	PM	MK				
Days After First/Last Applic.	48 6	48 6	48 6	57 8	57 8	69 4				
Plant-Eval Interval	48 DP-1	48 DP-1	48 DP-1	57 DP-1	57 DP-1	69 DP-1				
Days After Emergence	36 DE-	36 DE-	36 DE-	45 DE-	45 DE-	57 DE-				
ARM Action Codes										
Number of Decimals										
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6
1	Untreated Check				0.0 b	0.0 b	0.0 b	0.0 c	0.0 c	0.0 b
2	Ignite N-PAK AMS	0.4 lb ai/a 2.5 % v/v	B B		1.8 b	95.8 a	96.3 a	93.0 ab	98.0 a	93.3 a
3	Ignite N-PAK AMS Ignite N-PAK AMS	0.4 lb ai/a 2.5 % v/v 0.4 lb ai/a 2.5 % v/v	B B E E		5.5 a	95.0 a	94.5 a	91.5 ab	93.8 a	99.3 a
4	Ignite N-PAK AMS	0.4 lb ai/a 2.5 % v/v	C C		0.0 b	83.8 a	62.5 ab	94.0 ab	22.5 b	94.0 a
5	Ignite N-PAK AMS Ignite N-PAK AMS	0.4 lb ai/a 2.5 % v/v 0.4 lb ai/a 2.5 % v/v	C C F F		0.0 b	81.3 a	90.0 a	75.0 b	85.0 a	97.5 a
6	Ignite N-PAK AMS	0.4 lb ai/a 2.5 % v/v	D D		1.0 b	2.5 b	50.0 ab	95.8 ab	100.0 a	98.5 a
7	Ignite N-PAK AMS Ignite N-PAK AMS	0.4 lb ai/a 2.5 % v/v 0.4 lb ai/a 2.5 % v/v	D D G G		0.0 b	25.0 b	27.5 ab	98.0 a	98.8 a	99.0 a
8	Valor XLT Valor Classic Ignite N-PAK AMS Ignite N-PAK AMS	 1.04 oz ai/a 0.363 oz ai/a 0.4 lb ai/a 2.5 % v/v 0.4 lb ai/a 2.5 % v/v	A A A D D G G		0.0 b	85.5 a	48.8 ab	99.0 a	99.0 a	99.3 a
9	Sharpen Ignite N-PAK AMS Ignite N-PAK AMS	0.357 oz ai/a 0.4 lb ai/a 2.5 % v/v 0.4 lb ai/a 2.5 % v/v	A D D G G		0.0 b	22.5 b	50.0 ab	97.3 a	99.3 a	98.8 a

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Pest Type	W Weed SETFA		W Weed AMBTR		W Weed SETFA		W Weed AMBTR			
Pest Code	Setaria faberi		Ambrosia trifi>		Setaria faberi		Ambrosia trifi>			
Pest Scientific Name	Setaria faberi		Ambrosia trifi>		Setaria faberi		Ambrosia trifi>			
Pest Name	Giant foxtail		Giant ragweed		Giant foxtail		Giant ragweed			
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Crop Variety	S080103	S080103	S080103	S080103	S080103	S080103	S080103	S080103		
Description	8-10"	8-10"	8-10"	8-15"	8-15"	8-15"	20-28"	20-28"		
Rating Date	6/29/09	6/29/09	6/29/09	7/8/09	7/8/09	7/8/09	7/20/09	7/20/09		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Majority	V5	V5	V5	R1	R1	R1	R2	R2		
Pest Stage Majority		8-10"	2-12"	1-18"	1-24"	1-24"	10-28"	10-28"		
Pest Density, Unit		100 YD2	3 YD2	30 YD2	3 YD2	3 YD2	25 YD2	25 YD2		
Assessed By	PM	PM	PM	PM	PM	PM	PM	MK		
Days After First/Last Applic.	48 6	48 6	48 6	57 8	57 8	57 8	69 4	69 4		
Plant-Eval Interval	48 DP-1	48 DP-1	48 DP-1	57 DP-1	57 DP-1	57 DP-1	69 DP-1	69 DP-1		
Days After Emergence	36 DE-	36 DE-	36 DE-	45 DE-	45 DE-	45 DE-	57 DE-	57 DE-		
ARM Action Codes										
Number of Decimals										
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6
10	Valor XLT			A	1.3 b	80.0 a	61.3 ab	99.5 a	100.0 a	99.0 a
	Valor	1.04 oz ai/a		A						
	Classic	0.363 oz ai/a		A						
	Ignite	0.4 lb ai/a		D						
	N-PAK AMS	2.5 % v/v		D						
LSD (P=.05)		2.21			22.24	49.27	14.76	13.22	5.61	
Standard Deviation		1.52			15.30	33.96	10.17	9.11	3.87	
CV		160.28			26.78	58.47	12.07	11.44	4.4	
Bartlett's X2		2.756			23.446	23.513	46.447	36.198	45.777	
P(Bartlett's X2)		0.431			0.001*	0.003*	0.001*	0.001*	0.001*	
Replicate F		1.423			0.189	3.442	0.457	1.510	0.832	
Replicate Prob(F)		0.2576			0.9029	0.0306	0.7147	0.2344	0.4882	
Treatment F		5.147			26.627	3.222	35.859	64.927	256.186	
Treatment Prob(F)		0.0004			0.0001	0.0088	0.0001	0.0001	0.0001	

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)  
 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	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMBTR	CHEAL	SETFA	AMBTR	SETFA	AMBTR		
Pest Scientific Name	Ambrosia trifi>	Chenopodium ai>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>		
Pest Name	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed		
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Crop Variety	S080103	S080103	S080103	S080103	S080103	S080103		
Description	20-28"	20-28"	24-30"	24-30"	30-36"	30-36"		
Rating Date	7/20/09	7/20/09	8/4/09	8/4/09	8/12/09	8/12/09		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	R2	R2	R5	R5	R5	R5		
Pest Stage Majority	12-40"	16-30"	26-48"	36-72"	36-60"	36-72"		
Pest Density, Unit	10 YD2	3 YD2	6.5 FT2	3.5 YD2	55 YD2	4.5 YD2		
Assessed By	MK	MK	RH/JD	RH/JD	RT/CB	RT/CB		
Days After First/Last Applic.	69 4	69 4	84 14	84 14	92 22	92 22		
Plant-Eval Interval	69 DP-1	69 DP-1	84 DP-1	84 DP-1	92 DP-1	92 DP-1		
Days After Emergence	57 DE-	57 DE-	72 DE-	72 DE-	80 DE-	80 DE-		
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	7	8	9	10	11	12
1 Untreated Check			0.0 c	0.0 b	0.0 c	0.0 c	0.0 d	0.0 d
2 Ignite	0.4 lb ai/a B		89.3 a	81.3 a	91.3 b	95.0 a	86.8 b	81.5 b
N-PAK AMS	2.5 % v/v B							
3 Ignite	0.4 lb ai/a B		100.0 a	100.0 a	99.5 a	100.0 a	98.8 a	99.8 a
N-PAK AMS	2.5 % v/v B							
Ignite	0.4 lb ai/a E							
N-PAK AMS	2.5 % v/v E							
4 Ignite	0.4 lb ai/a C		33.8 b	58.8 a	88.3 b	35.0 b	77.5 c	26.3 c
N-PAK AMS	2.5 % v/v C							
5 Ignite	0.4 lb ai/a C		93.5 a	100.0 a	99.8 a	100.0 a	99.3 a	98.5 a
N-PAK AMS	2.5 % v/v C							
Ignite	0.4 lb ai/a F							
N-PAK AMS	2.5 % v/v F							
6 Ignite	0.4 lb ai/a D		96.0 a	96.3 a	96.8 a	100.0 a	91.5 ab	99.3 a
N-PAK AMS	2.5 % v/v D							
7 Ignite	0.4 lb ai/a D		99.3 a	98.3 a	99.8 a	100.0 a	100.0 a	100.0 a
N-PAK AMS	2.5 % v/v D							
Ignite	0.4 lb ai/a G							
N-PAK AMS	2.5 % v/v G							
8 Valor XLT		A	96.3 a	100.0 a	99.8 a	100.0 a	100.0 a	100.0 a
Valor	1.04 oz ai/a A							
Classic	0.363 oz ai/a A							
Ignite	0.4 lb ai/a D							
N-PAK AMS	2.5 % v/v D							
Ignite	0.4 lb ai/a G							
N-PAK AMS	2.5 % v/v G							
9 Sharpen	0.357 oz ai/a A		97.3 a	97.3 a	99.8 a	100.0 a	99.5 a	99.8 a
Ignite	0.4 lb ai/a D							
N-PAK AMS	2.5 % v/v D							
Ignite	0.4 lb ai/a G							
N-PAK AMS	2.5 % v/v G							



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Pest Type	W Weed	W Weed		
Pest Code	AMBTR	SETFA		
Pest Scientific Name	Ambrosia trifida	Setaria faberi		
Pest Name	Giant ragweed	Giant foxtail		
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean	Soybean
Crop Variety	S080103	S080103	S080103	S080103
Description				
Rating Date	10/7/09	10/7/09	10/15/09	10/15/09
Rating Type	CONTRO	CONTRO	YIELD	YIELD
Rating Unit	%	%	LB	BU
Number of Subsamples	1	1	1	1
Crop Stage Majority	R8	R8	R8	R8
Pest Stage Majority	36-72"	36-60"		
Pest Density, Unit	4.5 YD2	55 YD2		
Assessed By	PM	PM	PM	PM
Days After First/Last Applic.	148 78	148 78	156 86	156 86
Plant-Eval Interval	148 DP-1	148 DP-1	156 DP-1	156 DP-1
Days After Emergence	136 DE	136 DE	144 DE	144 DE
ARM Action Codes				TY1
Number of Decimals				1
Trt No.	Treatment	Rate	Appl	
	Name	Rate Unit	Code	
				13 14 15 16
1	Untreated Check	0.0 d		0.0 c 13.33 c 38.5 c
2	Ignite	0.4 lb ai/a B		76.3 b 94.0 b 17.81 ab 51.4 ab
	N-PAK AMS	2.5 % v/v B		
3	Ignite	0.4 lb ai/a B		100.0 a 100.0 a 17.40 ab 50.2 ab
	N-PAK AMS	2.5 % v/v B		
	Ignite	0.4 lb ai/a E		
	N-PAK AMS	2.5 % v/v E		
4	Ignite	0.4 lb ai/a C		20.0 c 93.3 b 16.10 b 46.5 b
	N-PAK AMS	2.5 % v/v C		
5	Ignite	0.4 lb ai/a C		97.5 a 99.0 a 19.85 a 57.3 a
	N-PAK AMS	2.5 % v/v C		
	Ignite	0.4 lb ai/a F		
	N-PAK AMS	2.5 % v/v F		
6	Ignite	0.4 lb ai/a D		100.0 a 99.5 a 20.48 a 59.1 a
	N-PAK AMS	2.5 % v/v D		
7	Ignite	0.4 lb ai/a D		100.0 a 100.0 a 18.23 ab 52.6 ab
	N-PAK AMS	2.5 % v/v D		
	Ignite	0.4 lb ai/a G		
	N-PAK AMS	2.5 % v/v G		
8	Valor XLT		A	100.0 a 100.0 a 18.55 ab 53.6 ab
	Valor	1.04 oz ai/a A		
	Classic	0.363 oz ai/a A		
	Ignite	0.4 lb ai/a D		
	N-PAK AMS	2.5 % v/v D		
	Ignite	0.4 lb ai/a G		
	N-PAK AMS	2.5 % v/v G		
9	Sharpen	0.357 oz ai/a A		100.0 a 100.0 a 17.95 ab 51.8 ab
	Ignite	0.4 lb ai/a D		
	N-PAK AMS	2.5 % v/v D		
	Ignite	0.4 lb ai/a G		
	N-PAK AMS	2.5 % v/v G		

### Purdue University

Pest Type	W Weed	W Weed		
Pest Code	AMBTR	SETFA		
Pest Scientific Name	Ambrosia trifida	Setaria faberi		
Pest Name	Giant ragweed	Giant foxtail		
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name	Soybean	Soybean	Soybean	Soybean
Crop Variety	S080103	S080103	S080103	S080103
Description				
Rating Date	10/7/09	10/7/09	10/15/09	10/15/09
Rating Type	CONTRO	CONTRO	YIELD	YIELD
Rating Unit	%	%	LB	BU
Number of Subsamples	1	1	1	1
Crop Stage Majority	R8	R8	R8	R8
Pest Stage Majority	36-72"	36-60"		
Pest Density, Unit	4.5 YD2	55 YD2		
Assessed By	PM	PM	PM	PM
Days After First/Last Applic.	148 78	148 78	156 86	156 86
Plant-Eval Interval	148 DP-1	148 DP-1	156 DP-1	156 DP-1
Days After Emergence	136 DE	136 DE	144 DE	144 DE
ARM Action Codes				TY1
Number of Decimals				1
Trt No.	Treatment	Rate	Appl Code	
		Rate Unit		
				13 14 15 16
10	Valor XLT		A	99.0 a 99.0 a 18.50 ab 53.4 ab
	Valor	1.04 oz ai/a	A	
	Classic	0.363 oz ai/a	A	
	Ignite	0.4 lb ai/a	D	
	N-PAK AMS	2.5 % v/v	D	
LSD (P=.05)		14.43	2.95	2.063 5.96
Standard Deviation		9.95	2.03	1.416 4.09
CV		12.55	2.3	7.95 7.95
Bartlett's X2		17.806	11.642	6.876 6.877
P(Bartlett's X2)		0.001*	0.02*	0.65 0.65
Replicate F		0.931	0.830	0.233 0.233
Replicate Prob(F)		0.4394	0.4892	0.8724 0.8726
Treatment F		56.940	942.513	7.902 7.901
Treatment Prob(F)		0.0001	0.0001	0.0001 0.0001

# Purdue University

## Ignite Timing in Liberty Link Soybean

Trial ID: 09S-THP-CTS-71      Protocol ID: 09LLSOY2LCK  
 Location: Throckmorton PAC      Study Director: Paul Marquardt/Melissa Kruger  
 Project ID:      Investigator: Dr. Mark M. Loux  
 Sponsor Contact:

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US  
 AMBTR, Ambrosia trifida, = US  
 CHEAL, Chenopodium album, = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Type

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

### Rating Unit

% = percent  
 LB = pound  
 BU = bushel

YD2 = per square yard

FT2 = per square foot

### Plant-Eval Interval

48 DP-1 = 1 5/12/09  
 57 DP-1 = 1 5/12/09  
 69 DP-1 = 1 5/12/09  
 84 DP-1 = 1 5/12/09  
 92 DP-1 = 1 5/12/09  
 148 DP-1 = 1 5/12/09  
 156 DP-1 = 1 5/12/09

### ARM Action Codes

TY1 = 2.88731\*[C15]