

Ohio State University  
Horticulture and Crop Science

Program Approaches in Liberty Link Soybeans (Study 2).

Trial ID: 08LLSOY2 Protocol ID: 08LLSOY2  
Location: CLARKSBURG, OHIO Study Director: Anthony F. Dobbels  
Investigator: Dr. Mark M. Loux

**General Trial Information**

Study Director: Anthony F. Dobbels  
Investigator: Dr. Mark M. Loux

**Crop Description**

Crop 1: GLXMA Glycine max Soybean  
Variety: SG 3888NLL  
BBCH Scale: BSOY Planting Date: May/06/2008  
Planting Method: JOHN DEERE 7200 Rate, Unit: 183000 SEED/A  
Depth, Unit: 1 IN  
Row Spacing, Unit: 15 IN  
Seed Bed: CONVENTIONAL Soil Temperature, Unit: 69 F  
Soil Moisture: DRY/DRY

**Pest Description**

Pest 1 Type: W Code: AMBTR Ambrosia trifida  
Common Name: Giant ragweed  
Pest 2 Type: W Code: CHEAL Chenopodium album  
Common Name: Common lambsquarters  
Pest 3 Type: W Code: SETFA Setaria faberi  
Common Name: Giant foxtail  
Pest 4 Type: W Code: HIBTR Hibiscus trionum  
Common Name: Venice mallow  
Pest 5 Type: W Code: AMBEL Ambrosia artemisiifolia  
Common Name: Common ragweed

**Site and Design**

Plot Width, Unit: 10 FT  
Plot Length, Unit: 30 FT Tillage Type: CONVENTIOANL  
Replications: 3 Study Design: Randomized Complete Block

**Field Prep./Maintenance:**

BURNDOWN ENTIRE TRIAL WITH 3 PT GRAMOXONE INTION + NIS 0.25% V/V 5-6-08

**Soil Description**

Description Name: BLUCK'S  
% Sand: 24.5 % OM: 2.9 Texture: SILTY CLAY LOAM  
% Silt: 48.9 pH: 6.8 Soil Name: KOKOMO  
% Clay: 26.6 CEC: 11.7 Fert. Level: GOOD  
Analyzed By:  
Calmer soil testing labs, Westerville, OH 43081

**Application Description**

	A	B	C	D	E	F	G
Application Date:	May/06/2008	May/28/2008	Jun/17/2008	Jun/17/2008	Jun/24/2008	Jun/24/2008	Jul/08/2008
Time of Day:	6:00 P.M.						
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	22 DAP	21 DAB	8-12" WDS	8-12"RE	12-18"WDS	12-18"WDS
Application Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Applied By:	BRUCE	JOHN	BRUCE	BRUCE	BRUCE	BRUCE	MARK
Air Temperature, Unit:	74 F	60 F	73 F	73 F	77 F	77 F	71 F
% Relative Humidity:	50	48	49	49	78	78	65
Wind Velocity, Unit:	5 MPH	8 MPH	4 MPH	4 MPH	1 MPH	1 MPH	1 MPH
Wind Direction:	S	NE	W	W	W	W	W
Soil Temperature, Unit:	69 F	59 F	65 F	65 F	67 F	67 F	65 F
Soil Moisture:	DRY/DRY	MOIST/MOIS	DRY/MOIST	DRY/MOIST	DRY/MOIST	DRY/MOIST	DRY/MOIST
% Cloud Cover:	25	10	5	5	30	30	8
Next Rain Occurred On:	May/08/2008						

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**H**  
**Application Date:** Jul/15/2008  
**Time of Day:** 8:00 A.M.  
**Application Method:** SPRAY  
**Application Timing:** 21 DAF  
**Application Placement:** BROADCAST  
**Applied By:** BRUCE  
**Air Temperature, Unit:** 72 F  
**% Relative Humidity:** 70  
**Wind Velocity, Unit:** 1 MPH  
**Wind Direction:** W  
**Soil Temperature, Unit:** 64 F  
**Soil Moisture:** MOIS/MOIST  
**% Cloud Cover:** 10  
**Next Rain Occurred On:**

**Crop Stage At Each Application**

	A		B		C		D		E		F		G	
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
<b>Stage Scale Used:</b>	DESC		DESC		DESC		DESC		DESC		DESC		DESC	
<b>Stage Majority, Percent:</b>	V3		V4		V4		V5		V5		R-1		R-1	
<b>Height, Unit:</b>	3		IN	7	IN	7	IN	8	IN	8	IN	8	IN	18
<b>Height Minimum, Maximum:</b>	2.5		3.5	6	8	6	8	6	8	6	8	6	8	21

**H**  
**Crop 1 Code, BBCH Scale:** GLXMA BSOY  
**Stage Scale Used:** DESC  
**Stage Majority, Percent:** R-2  
**Height, Unit:** 22 IN  
**Height Minimum, Maximum:** 20 24

**Pest Stage At Each Application**

	A		B		C		D		E		F		G		
<b>Pest 1 Code, Disc., Scale:</b>	AMBTR	W	AMBTR	W	BBCH	AMBTR	W	BBCH	AMBTR	W	BBCH	AMBTR	W	AMBTR	W
<b>Stage Majority, Percent:</b>	2 LEAF		12 LVS		12 LVS		10 LVS		>12LVS		>12 LV		>12 LV		
<b>Stage Minimum, Percent:</b>	2 LEAF		12 LVS		12 LVS		4 LVS		4 LVS		8 LVS		8 LVS		
<b>Stage Maximum, Percent:</b>	2 LEAF		12 LVS		12 LVS		>12LVS		>12LVS		>12 LV		>12 LV		
<b>Height, Unit:</b>	1.5		IN	8	IN	8	IN	10	IN	18	IN	14	IN	14	
<b>Height Minimum, Maximum:</b>	1		2	6	11	6	11	4	14	2	22	6	20	20	
<b>Pest 2 Code, Disc., Scale:</b>	CHEAL	W	CHEAL	W	BBCH	CHEAL	W	BBCH	CHEAL	W	BBCH	CHEAL	W	CHEAL	W
<b>Stage Majority, Percent:</b>	2 LEAF		8 LVS		8 LVS		>12LVS		>12LVS		>12LVS		>12LVS		
<b>Stage Minimum, Percent:</b>	2 LEAF		8 LVS		8 LVS		8 LVS		8 LVS		8 LVS		8 LVS		
<b>Stage Maximum, Percent:</b>	2 LEAF		8 LVS		8 LVS		>12LVS		>12LVS		>12LVS		>12LVS		
<b>Height, Unit:</b>	0.75		IN	6	IN	6	IN	12	IN	12	IN	17	IN	17	
<b>Height Minimum, Maximum:</b>	0.5		1	4	12	4	12	2	17	2	17	2	17	17	
<b>Pest 3 Code, Disc., Scale:</b>	SETFA	W	SETFA	W	SETFA	W	SETFA	W	SETFA	W	SETFA	W	SETFA	W	
<b>Stage Majority, Percent:</b>	3 LVS		3 LVS		3 LVS		3 LVS		3 LVS		3 LVS		3 LVS		
<b>Stage Minimum, Percent:</b>	2 LVS		2 LVS		2 LVS		2 LVS		2 LVS		2 LVS		2 LVS		
<b>Stage Maximum, Percent:</b>	4 LVS		4 LVS		4 LVS		4 LVS		4 LVS		4 LVS		4 LVS		
<b>Height, Unit:</b>	7		IN	10	IN	10	IN	10	IN	10	IN	10	IN	10	
<b>Height Minimum, Maximum:</b>	2		9	2	18	2	18	2	18	2	18	2	18	18	
<b>Pest 4 Code, Disc., Scale:</b>	HIBTR	W	HIBTR	W	HIBTR	W	HIBTR	W	HIBTR	W	HIBTR	W	HIBTR	W	
<b>Stage Majority, Percent:</b>	3 LVS		8 LVS		>12 LV		>12 LV		>12 LV		>12 LV		>12 LV		
<b>Stage Minimum, Percent:</b>	2 LVS		4 LVS		6 LVS		6 LVS		6 LVS		6 LVS		6 LVS		
<b>Stage Maximum, Percent:</b>	6 LVS		>12LVS		>12 LV		>12 LV		>12 LV		>12 LV		>12 LV		
<b>Height, Unit:</b>	3		IN	7	IN	14	IN	14	IN	14	IN	14	IN	14	
<b>Height Minimum, Maximum:</b>	2		4	2	9	6	16	2	16	2	16	2	16	16	
<b>Pest 5 Code, Disc., Scale:</b>	AMBEL	W	AMBEL	W	AMBEL	W	AMBEL	W	AMBEL	W	AMBEL	W	AMBEL	W	
<b>Stage Majority, Percent:</b>	8 LVS		>12 LV		>12 LV		>12 LV		>12 LV		>12 LV		>12 LV		
<b>Stage Minimum, Percent:</b>	2 LVS		8 LVS		8 LVS		8 LVS		8 LVS		8 LVS		8 LVS		
<b>Stage Maximum, Percent:</b>	>12LVS		>12 LV		>12 LV		>12 LV		>12 LV		>12 LV		>12 LV		
<b>Height, Unit:</b>	8		IN	14	IN	14	IN	14	IN	14	IN	14	IN	14	
<b>Height Minimum, Maximum:</b>	2		12	8	17	8	17	2	17	2	17	2	17	17	

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**H**

Pest 1 Code, Disc., Scale: AMBTR W  
 Stage Majority, Percent: >12 LV  
 Stage Minimum, Percent: 6 LVS  
 Stage Maximum, Percent: >12 LV  
 Height, Unit: 18 IN  
 Height Minimum, Maximum: 7 20

Pest 2 Code, Disc., Scale: CHEAL W  
 Stage Majority, Percent: >12 LV  
 Stage Minimum, Percent: 8 LVS  
 Stage Maximum, Percent:  
 Height, Unit: 7 IN  
 Height Minimum, Maximum: 4 9

Pest 3 Code, Disc., Scale: SETFA W  
 Stage Majority, Percent:  
 Stage Minimum, Percent:  
 Stage Maximum, Percent:  
 Height, Unit:  
 Height Minimum, Maximum:

Pest 4 Code, Disc., Scale: HIBTR W  
 Stage Majority, Percent: >12 LV  
 Stage Minimum, Percent: 6 LVS  
 Stage Maximum, Percent: >12 LV  
 Height, Unit: 7 IN  
 Height Minimum, Maximum: 4 8

Pest 5 Code, Disc., Scale: AMBEL W  
 Stage Majority, Percent:  
 Stage Minimum, Percent:  
 Stage Maximum, Percent:  
 Height, Unit:  
 Height Minimum, Maximum:

**Application Equipment**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b>Appl. Equipment:</b>	BACKPACK	BACKPACK	BACKPACK	BACKPACK	BACKPACK	BACKPACK
<b>Operating Pressure, Unit:</b>	53 PSI	53 PSI	53 PSI	53 PSI	53 PSI	53 PSI
<b>Nozzle Type:</b>	TEEJET DG	TEEJET DG	TEEJET DG	TEEJET DG	TEEJET DG	TEEJET DG
<b>Nozzle Size:</b>	11002	11002	11002	11002	11002	11002
<b>Nozzle Spacing, Unit:</b>	18 IN	18 IN	18 IN	18 IN	18 IN	18 IN
<b>Boom Length, Unit:</b>	10 FT	10 FT	10 FT	10 FT	10 FT	10 FT
<b>Boom Height, Unit:</b>	20 IN	20 IN	20 IN	20 IN	20 IN	20 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	WATER	WATER	WATER	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA	20 GPA
<b>Mix Size, Unit:</b>	3 Liters	3 Liters	3 Liters	3 Liters	3 Liters	3 Liters
<b>Propellant:</b>	CO2	CO2	CO2	CO2	CO2	CO2

  

	<b>G</b>	<b>H</b>	<b>I</b>
<b>Appl. Equipment:</b>	BACKPACK	BACKPACK	BACKPACK
<b>Operating Pressure, Unit:</b>	53 PSI	53 PSI	53 PSI
<b>Nozzle Type:</b>	TEEJET DG	TEEJET DG	TEEJET DG
<b>Nozzle Size:</b>	11002	11002	11002
<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>	20 GPA	20 GPA	20 GPA
<b>Mix Size, Unit:</b>	3 Liters	3 Liters	3 Liters
<b>Propellant:</b>	CO2	CO2	CO2

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Investigator: Dr. Mark M. Loux

Pest Type						W Weed	W Weed	W Weed		W Weed	
Pest Code						AMBTR	CHEAL	HIBTR		SETFA	
Crop Code					GLXMA				GLXMA		
BBCH Scale					BSOY				BSOY		
Crop Name					Soybean				Soybean		
Rating Date					Jun/09/2008	Jun/09/2008	Jun/09/2008	Jun/09/2008	Jun/24/2008	Jun/24/2008	
Rating Data Type					PHYTO	CONTROL	CONTROL	CONTROL	PHYTO	CONTROL	
Rating Unit					PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
Days After First/Last Applic.					34 12	34 12	34 12	34 12	49 0	49 0	
Plant-Eval Interval					34 DP-1	34 DP-1	34 DP-1	34 DP-1	49 DP-1	49 DP-1	
Number of Decimals					0	0	0	0	0	0	
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	5	6
1	Untreated Check					0 a	0 c	0 b	0 b	0 c	0 d
2	Valor XLT					15 a	93 a	100 a	100 a	6 a	100 a
2	Valor	2.05	oz/a	PREPRE	A						
2	Classic	1.45	oz/a	PREPRE	A						
2	Ignite	22	fl oz/a	MIPOWE	E						
2	Ammonium Sulfate	4	qt/a	MIPOWE	E						
2	Ignite	22	fl oz/a	LAPOWE	G						
2	Ammonium Sulfate	4	qt/a	LAPOWE	G						
3	Gangster			PREPRE	A	12 a	88 a	100 a	100 a	2 bc	73 ab
3	Valor	1.5	oz/a	PREPRE	A						
3	FirstRate	0.3	oz/a	PREPRE	A						
3	Ignite	22	fl oz/a	MIPOWE	E						
3	Ammonium Sulfate	4	qt/a	MIPOWE	E						
3	Ignite	22	fl oz/a	LAPOWE	G						
3	Ammonium Sulfate	4	qt/a	LAPOWE	G						
4	Prefix	2	pt/a	PREPRE	A	8 a	87 a	100 a	100 a	3 bc	100 a
4	Ignite	22	fl oz/a	MIPOWE	E						
4	Ammonium Sulfate	4	qt/a	MIPOWE	E						
4	Ignite	22	fl oz/a	LAPOWE	G						
4	Ammonium Sulfate	4	qt/a	LAPOWE	G						
5	BAS 800 04H	1	oz/a	PREPRE	A	7 a	47 b	100 a	100 a	0 c	50 bc
5	Ignite	22	fl oz/a	MIPOWE	E						
5	Ammonium Sulfate	4	qt/a	MIPOWE	E						
5	Ignite	22	fl oz/a	LAPOWE	G						
5	Ammonium Sulfate	4	qt/a	LAPOWE	G						
6	BAS 804	2	oz/a	PREPRE	A	8 a	85 a	100 a	100 a	2 bc	83 a
6	Ignite	22	fl oz/a	MIPOWE	E						
6	Ammonium Sulfate	4	qt/a	MIPOWE	E						
6	Ignite	22	fl oz/a	LAPOWE	G						
6	Ammonium Sulfate	4	qt/a	LAPOWE	G						
7	Ignite	22	fl oz/a	22 DAWE	B					6 a	100 a
7	Ammonium Sulfate	4	qt/a	22 DAWE	B						
7	Ignite	22	fl oz/a	LAPOWE	C						
7	Ammonium Sulfate	4	qt/a	LAPOWE	C						
8	Ignite	22	fl oz/a	MIPOWE	D					5 ab	99 a
8	Ammonium Sulfate	4	qt/a	MIPOWE	D						
8	Ignite	22	fl oz/a	LAPOWE	G						
8	Ammonium Sulfate	4	qt/a	LAPOWE	G						
9	Ignite	22	fl oz/a	LAPOWE	F					0 c	27 cd
9	Ammonium Sulfate	4	qt/a	LAPOWE	F						
9	Flexstar	20	fl oz/a	LAPOWE	F						
9	Destiny (MSO)	0.5	% v/v	LAPOWE	F						
10	Ignite	22	fl oz/a	LAPOWE	F					0 c	0 d
10	Ammonium Sulfate	4	qt/a	LAPOWE	F						

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Pest Type		W Weed	W Weed	W Weed		W Weed
Pest Code		AMBTR	CHEAL	HIBTR		SETFA
Crop Code	GLXMA				GLXMA	
BBCH Scale	BSOY				BSOY	
Crop Name	Soybean				Soybean	
Rating Date	Jun/09/2008	Jun/09/2008	Jun/09/2008	Jun/09/2008	Jun/24/2008	Jun/24/2008
Rating Data Type	PHYTO	CONTROL	CONTROL	CONTROL	PHYTO	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Days After First/Last Applic.	34 12	34 12	34 12	34 12	49 0	49 0
Plant-Eval Interval	34 DP-1	34 DP-1	34 DP-1	34 DP-1	49 DP-1	49 DP-1
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	5	6
11	Ignite	22	fl oz/a	LAPOWE	F					0 c	0 d
11	Ammonium Sulfate	4	qt/a	LAPOWE	F						
11	Ignite	22	fl oz/a	LAPOWE	H						
11	Ammonium Sulfate	4	qt/a	LAPOWE	H						
12	Ignite	33	fl oz/a	LAPOWE	F					0 c	0 d
12	Ammonium Sulfate	4	qt/a	LAPOWE	F						
13	Ignite	33	fl oz/a	LAPOWE	F					0 c	0 d
13	Ammonium Sulfate	4	qt/a	LAPOWE	F						
13	Ignite	22	fl oz/a	LAPOWE	H						
13	Ammonium Sulfate	4	qt/a	LAPOWE	H						
14	Ignite	44	fl oz/a	LAPOWE	F					0 c	0 d
14	Ammonium Sulfate	4	qt/a	LAPOWE	F						
15	Ignite	44	fl oz/a	LAPOWE	F					0 c	0 d
15	Ammonium Sulfate	4	qt/a	LAPOWE	F						
15	Ignite	22	fl oz/a	LAPOWE	H						
15	Ammonium Sulfate	4	qt/a	LAPOWE	H						
16	Ignite	22	fl oz/a	LAPOWE	F					0 c	0 d
16	Ammonium Sulfate	4	qt/a	LAPOWE	F						
16	Flexstar	10	fl oz/a	LAPOWE	F						
17	Ignite	22	fl oz/a	LAPOWE	F					0 c	0 d
17	Ammonium Sulfate	4	qt/a	LAPOWE	F						
17	Flexstar	10	fl oz/a	LAPOWE	F						
17	Destiny (MSO)	0.5	% v/v	LAPOWE	F						
18	Ignite	22	fl oz/a	LAPOWE	F					0 c	0 d
18	Ammonium Sulfate	4	qt/a	LAPOWE	F						
18	Flexstar	20	fl oz/a	LAPOWE	F						
LSD (P=.05)						10.1	28.2	0.0	0.0	2.0	27.6
Standard Deviation						5.6	15.5	0.0	0.0	1.2	16.6
CV						66.63	23.28	0.0	0.0	81.3	47.17
Bartlett's X2						1.845	8.055	0.0	0.0	0.59	12.286
P(Bartlett's X2)						0.605	0.09	.	.	0.964	0.015*
Replicate F						0.135	0.536	0.000	0.000	0.477	3.739
Replicate Prob(F)						0.8752	0.6008	1.0000	1.0000	0.6262	0.0341
Treatment F						2.486	16.844	0.000	0.000	11.738	21.288
Treatment Prob(F)						0.1033	0.0001	1.0000	1.0000	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	W Weed					
Pest Code	AMBTR	CHEAL	HIBTR	SETFA	AMBTR	CHEAL	HIBTR					
Crop Code												
BBCH Scale												
Crop Name												
Rating Date	Jun/24/2008	Jun/24/2008	Jun/24/2008	Jul/08/2008	Jul/08/2008	Jul/08/2008	Jul/08/2008					
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT					
Days After First/Last Applic.	49 0	49 0	49 0	63 0	63 0	63 0	63 0					
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	63 DP-1	63 DP-1	63 DP-1	63 DP-1					
Number of Decimals	0	0	0	0	0	0	0					
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	7	8	9	10	11	12	13
1	Untreated Check					0 c	0 b	0 c	0 b	0 d	0 b	0 c
2	Valor XLT					80 ab	100 a	100 a	100 a	98 ab	100 a	100 a
2	Valor	2.05	oz/a	PREPRE	A							
2	Classic	1.45	oz/a	PREPRE	A							
2	Ignite	22	fl oz/a	MIPOWE	E							
2	Ammonium Sulfate	4	qt/a	MIPOWE	E							
2	Ignite	22	fl oz/a	LAPOWE	G							
2	Ammonium Sulfate	4	qt/a	LAPOWE	G							
3	Gangster			PREPRE	A	78 ab	100 a	100 a	100 a	94 abc	100 a	100 a
3	Valor	1.5	oz/a	PREPRE	A							
3	FirstRate	0.3	oz/a	PREPRE	A							
3	Ignite	22	fl oz/a	MIPOWE	E							
3	Ammonium Sulfate	4	qt/a	MIPOWE	E							
3	Ignite	22	fl oz/a	LAPOWE	G							
3	Ammonium Sulfate	4	qt/a	LAPOWE	G							
4	Prefix	2	pt/a	PREPRE	A	70 b	100 a	100 a	100 a	92 abc	100 a	100 a
4	Ignite	22	fl oz/a	MIPOWE	E							
4	Ammonium Sulfate	4	qt/a	MIPOWE	E							
4	Ignite	22	fl oz/a	LAPOWE	G							
4	Ammonium Sulfate	4	qt/a	LAPOWE	G							
5	BAS 800 04H	1	oz/a	PREPRE	A	33 c	97 a	87 b	93 a	81 abc	100 a	89 ab
5	Ignite	22	fl oz/a	MIPOWE	E							
5	Ammonium Sulfate	4	qt/a	MIPOWE	E							
5	Ignite	22	fl oz/a	LAPOWE	G							
5	Ammonium Sulfate	4	qt/a	LAPOWE	G							
6	BAS 804	2	oz/a	PREPRE	A	63 b	100 a	100 a	100 a	83 abc	100 a	100 a
6	Ignite	22	fl oz/a	MIPOWE	E							
6	Ammonium Sulfate	4	qt/a	MIPOWE	E							
6	Ignite	22	fl oz/a	LAPOWE	G							
6	Ammonium Sulfate	4	qt/a	LAPOWE	G							
7	Ignite	22	fl oz/a	22 DAWE	B	100 a	100 a	100 a	100 a	100 a	100 a	98 a
7	Ammonium Sulfate	4	qt/a	22 DAWE	B							
7	Ignite	22	fl oz/a	LAPOWE	C							
7	Ammonium Sulfate	4	qt/a	LAPOWE	C							
8	Ignite	22	fl oz/a	MIPOWE	D	99 a	99 a	99 a	100 a	88 abc	93 a	73 ab
8	Ammonium Sulfate	4	qt/a	MIPOWE	D							
8	Ignite	22	fl oz/a	LAPOWE	G							
8	Ammonium Sulfate	4	qt/a	LAPOWE	G							
9	Ignite	22	fl oz/a	LAPOWE	F	20 c	0 b	0 c	90 a	85 abc	90 a	70 ab
9	Ammonium Sulfate	4	qt/a	LAPOWE	F							
9	Flexstar	20	fl oz/a	LAPOWE	F							
9	Destiny (MSO)	0.5	% v/v	LAPOWE	F							
10	Ignite	22	fl oz/a	LAPOWE	F	0 c	0 b	0 c	95 a	73 c	75 a	47 b
10	Ammonium Sulfate	4	qt/a	LAPOWE	F							
11	Ignite	22	fl oz/a	LAPOWE	F	0 c	0 b	0 c	95 a	74 c	82 a	50 b
11	Ammonium Sulfate	4	qt/a	LAPOWE	F							
11	Ignite	22	fl oz/a	LAPOWE	H							
11	Ammonium Sulfate	4	qt/a	LAPOWE	H							
12	Ignite	33	fl oz/a	LAPOWE	F	0 c	0 b	0 c	100 a	80 abc	85 a	72 ab
12	Ammonium Sulfate	4	qt/a	LAPOWE	F							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	HIBTR	SETFA	AMBTR	CHEAL	HIBTR
Crop Code							
BBCH Scale							
Crop Name							
Rating Date	Jun/24/2008	Jun/24/2008	Jun/24/2008	Jul/08/2008	Jul/08/2008	Jul/08/2008	Jul/08/2008
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Days After First/Last Applic.	49 0	49 0	49 0	63 0	63 0	63 0	63 0
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	63 DP-1	63 DP-1	63 DP-1	63 DP-1
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	7	8	9	10	11	12	13
13	Ignite	33	fl oz/a	LAPOWE	F	0 c	0 b	0 c	99 a	87 abc	78 a	80 ab
13	Ammonium Sulfate	4	qt/a	LAPOWE	F							
13	Ignite	22	fl oz/a	LAPOWE	H							
13	Ammonium Sulfate	4	qt/a	LAPOWE	H							
14	Ignite	44	fl oz/a	LAPOWE	F	0 c	0 b	0 c	98 a	82 abc	78 a	50 b
14	Ammonium Sulfate	4	qt/a	LAPOWE	F							
15	Ignite	44	fl oz/a	LAPOWE	F	0 c	0 b	0 c	100 a	91 abc	83 a	88 ab
15	Ammonium Sulfate	4	qt/a	LAPOWE	F							
15	Ignite	22	fl oz/a	LAPOWE	H							
15	Ammonium Sulfate	4	qt/a	LAPOWE	H							
16	Ignite	22	fl oz/a	LAPOWE	F	0 c	0 b	0 c	99 a	78 bc	90 a	63 ab
16	Ammonium Sulfate	4	qt/a	LAPOWE	F							
16	Flexstar	10	fl oz/a	LAPOWE	F							
17	Ignite	22	fl oz/a	LAPOWE	F	0 c	0 b	0 c	99 a	77 bc	82 a	47 b
17	Ammonium Sulfate	4	qt/a	LAPOWE	F							
17	Flexstar	10	fl oz/a	LAPOWE	F							
17	Destiny (MSO)	0.5	% v/v	LAPOWE	F							
18	Ignite	22	fl oz/a	LAPOWE	F	0 c	0 b	0 c	90 a	78 bc	82 a	73 ab
18	Ammonium Sulfate	4	qt/a	LAPOWE	F							
18	Flexstar	20	fl oz/a	LAPOWE	F							
LSD (P=.05)						20.3	2.3	4.6	10.3	12.4	17.1	27.2
Standard Deviation						12.2	1.4	2.7	6.2	7.4	10.3	16.3
CV						40.22	3.55	7.19	6.68	9.26	12.16	22.55
Bartlett's X2						16.75	3.77	4.838	28.227	20.44	6.167	7.631
P(Bartlett's X2)						0.01*	0.052	0.028*	0.001*	0.117	0.801	0.813
Replicate F						1.095	1.417	1.157	5.156	1.032	2.253	4.335
Replicate Prob(F)						0.3459	0.2565	0.3266	0.0111	0.3672	0.1220	0.0210
Treatment F						31.457	3965.584	968.129	42.817	25.199	14.939	7.953
Treatment Prob(F)						0.0001	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	SETFA	AMBTR	CHEAL	HIBTR					
Crop Code									
BBCH Scale									
Crop Name									
Rating Date	Aug/06/2008	Aug/06/2008	Aug/06/2008	Aug/06/2008					
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL					
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT					
Days After First/Last Applic.	92 22	92 22	92 22	92 22					
Plant-Eval Interval	92 DP-1	92 DP-1	92 DP-1	92 DP-1					
Number of Decimals	0	0	0	0					
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	14	15	16	17
1	Untreated Check					0 b	0 e	0 c	0 b
2	Valor XLT					100 a	96 a	100 a	100 a
2	Valor	2.05	oz/a	PREPRE	A				
2	Classic	1.45	oz/a	PREPRE	A				
2	Ignite	22	fl oz/a	MIPOWE	E				
2	Ammonium Sulfate	4	qt/a	MIPOWE	E				
2	Ignite	22	fl oz/a	LAPOWE	G				
2	Ammonium Sulfate	4	qt/a	LAPOWE	G				
3	Gangster			PREPRE	A	100 a	100 a	100 a	100 a
3	Valor	1.5	oz/a	PREPRE	A				
3	FirstRate	0.3	oz/a	PREPRE	A				
3	Ignite	22	fl oz/a	MIPOWE	E				
3	Ammonium Sulfate	4	qt/a	MIPOWE	E				
3	Ignite	22	fl oz/a	LAPOWE	G				
3	Ammonium Sulfate	4	qt/a	LAPOWE	G				
4	Prefix	2	pt/a	PREPRE	A	100 a	100 a	100 a	100 a
4	Ignite	22	fl oz/a	MIPOWE	E				
4	Ammonium Sulfate	4	qt/a	MIPOWE	E				
4	Ignite	22	fl oz/a	LAPOWE	G				
4	Ammonium Sulfate	4	qt/a	LAPOWE	G				
5	BAS 800 04H	1	oz/a	PREPRE	A	100 a	100 a	100 a	100 a
5	Ignite	22	fl oz/a	MIPOWE	E				
5	Ammonium Sulfate	4	qt/a	MIPOWE	E				
5	Ignite	22	fl oz/a	LAPOWE	G				
5	Ammonium Sulfate	4	qt/a	LAPOWE	G				
6	BAS 804	2	oz/a	PREPRE	A	100 a	97 a	100 a	100 a
6	Ignite	22	fl oz/a	MIPOWE	E				
6	Ammonium Sulfate	4	qt/a	MIPOWE	E				
6	Ignite	22	fl oz/a	LAPOWE	G				
6	Ammonium Sulfate	4	qt/a	LAPOWE	G				
7	Ignite	22	fl oz/a	22 DAWE	B	100 a	88 ab	100 a	93 a
7	Ammonium Sulfate	4	qt/a	22 DAWE	B				
7	Ignite	22	fl oz/a	LAPOWE	C				
7	Ammonium Sulfate	4	qt/a	LAPOWE	C				
8	Ignite	22	fl oz/a	MIPOWE	D	100 a	99 a	100 a	100 a
8	Ammonium Sulfate	4	qt/a	MIPOWE	D				
8	Ignite	22	fl oz/a	LAPOWE	G				
8	Ammonium Sulfate	4	qt/a	LAPOWE	G				
9	Ignite	22	fl oz/a	LAPOWE	F	98 a	85 ab	98 a	97 a
9	Ammonium Sulfate	4	qt/a	LAPOWE	F				
9	Flexstar	20	fl oz/a	LAPOWE	F				
9	Destiny (MSO)	0.5	% v/v	LAPOWE	F				
10	Ignite	22	fl oz/a	LAPOWE	F	100 a	50 d	73 b	88 a
10	Ammonium Sulfate	4	qt/a	LAPOWE	F				
11	Ignite	22	fl oz/a	LAPOWE	F	100 a	100 a	93 a	100 a
11	Ammonium Sulfate	4	qt/a	LAPOWE	F				
11	Ignite	22	fl oz/a	LAPOWE	H				
11	Ammonium Sulfate	4	qt/a	LAPOWE	H				
12	Ignite	33	fl oz/a	LAPOWE	F	100 a	62 cd	91 a	100 a
12	Ammonium Sulfate	4	qt/a	LAPOWE	F				

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	HIBTR
Crop Code				
BBCH Scale				
Crop Name				
Rating Date	Aug/06/2008	Aug/06/2008	Aug/06/2008	Aug/06/2008
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Days After First/Last Applic.	92 22	92 22	92 22	92 22
Plant-Eval Interval	92 DP-1	92 DP-1	92 DP-1	92 DP-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	14	15	16	17
13	Ignite	33	fl oz/a	LAPOWE	F	100 a	100 a	100 a	100 a
13	Ammonium Sulfate	4	qt/a	LAPOWE	F				
13	Ignite	22	fl oz/a	LAPOWE	H				
13	Ammonium Sulfate	4	qt/a	LAPOWE	H				
14	Ignite	44	fl oz/a	LAPOWE	F	100 a	63 cd	93 a	90 a
14	Ammonium Sulfate	4	qt/a	LAPOWE	F				
15	Ignite	44	fl oz/a	LAPOWE	F	100 a	100 a	97 a	100 a
15	Ammonium Sulfate	4	qt/a	LAPOWE	F				
15	Ignite	22	fl oz/a	LAPOWE	H				
15	Ammonium Sulfate	4	qt/a	LAPOWE	H				
16	Ignite	22	fl oz/a	LAPOWE	F	100 a	67 cd	97 a	100 a
16	Ammonium Sulfate	4	qt/a	LAPOWE	F				
16	Flexstar	10	fl oz/a	LAPOWE	F				
17	Ignite	22	fl oz/a	LAPOWE	F	98 a	60 cd	93 a	90 a
17	Ammonium Sulfate	4	qt/a	LAPOWE	F				
17	Flexstar	10	fl oz/a	LAPOWE	F				
17	Destiny (MSO)	0.5	% v/v	LAPOWE	F				
18	Ignite	22	fl oz/a	LAPOWE	F	93 a	72 bc	100 a	100 a
18	Ammonium Sulfate	4	qt/a	LAPOWE	F				
18	Flexstar	20	fl oz/a	LAPOWE	F				
LSD (P=.05)						4.7	14.0	10.7	10.8
Standard Deviation						2.8	8.4	6.4	6.5
CV						2.98	10.48	7.05	7.02
Bartlett's X2						5.08	15.753	8.141	2.426
P(Bartlett's X2)						0.079	0.072	0.32	0.658
Replicate F						2.125	2.259	6.682	2.736
Replicate Prob(F)						0.1350	0.1199	0.0036	0.0791
Treatment F						211.000	30.062	40.685	39.162
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)  
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