

Control of Volunteer Liberty Link Corn in Liberty Link Soybean.

Trial ID: 09-T4-N60

Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 06-27-09

Objectives: Identify effective tank-mixtures for control of volunteer
 Liberty Link corn in Liberty Link soybean.

Crop 1: GLXMA Soybean Variety: S080122 Description: LL
 Planting Method: SEEDS Planting Date: 06-27-09
 Rate, Unit: 75 LB/A Depth, Unit: 1.0 IN
 Row Spacing, Unit: 30 IN

Pest 1 Type: W Code: ZEAMX Zea mays L. corn, volunteer
 Pest Description: Liberty Link corn
 Pest 2 Type: W Code: AMATA Amaranthus rudis Sauer waterhemp, common
 Pest 3 Type: W Code: IPOHE Ipomoea hederacea (L.) Jacq. morningglory, ivyleaf

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 27 FT Tillage Type: REDUCED-TILL
 Replications: 3 Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2008

Field Prep./Maintenance: N 0 LB/A, P205 0 LB/A, K20 100 LB/A

% OM: 2.8 Texture: SILT LOAM
 pH: 6.4 Soil Name: BETHALTO
 CEC: 14 Fert. Level: P1: 118 LB/A, K: 466 LB/A

Application Description

A
 Application Date: 07-23-09
 Time of Day: 8:30
 Application Method: Spray
 Application Timing: 12-18"CN
 Application Placement: BROFOL
 Applied By: NVH
 Air Temperature, Unit: 70 F
 % Relative Humidity: 92
 Wind Velocity, Unit: 3 MPH
 Wind Direction: W
 Dew Presence (Y/N): Y
 Soil Moisture: NORMAL
 % Cloud Cover: 10

07-23-09
 Crop stage at application: V3-V4
 Height Min, Max (inch): 5 7

Pest Stage At Each Application

Application Date: 07-23-09
 Weed Code: ZEAMX
 Stage Majority (leaves): 4
 Stage Min, Max: 4 4
 Height Majority: 12 IN
 Height Min, Max: 10 16
 Density, Unit: 1 FT2
 Weed Code: AMATA
 Stage Majority (leaves): 7
 Stage Min, Max: 4 12
 Height Majority: 6 IN
 Height Min, Max: 1.5 10
 Density, Unit: 6 FT2
 Weed Code: IPOHE
 Stage Majority (leaves): 4
 Stage Min, Max: 2 6
 Height Majority: 5 IN
 Height Min, Max: 1.5 6
 Density, Unit: 1 FT2

Application Equipment

Appl. Equipment: CO2 sprayer
 Operating Pressure: 30 PSI
 Nozzle Type: Flat fan
 Nozzle Size: XR 8002
 Boom Length, Unit: 7.5 FT
 Spray Volume, Unit: 15 GPA

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Pest Code										ZEAMX		ZEAMX		ZEAMX	
Crop Code										GLXMA		GLXMA		GLXMA	
Rating Date										07-30-09		08-06-09		08-20-09	
Rating Data Type										Injury		Injury		Injury	
Rating Unit										Percent		Percent		Percent	
Rating Timing										Control		Control		Control	
Trt-Eval Interval										Percent		Percent		Percent	
										7 DA-A		14 DA-A		28 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN A		8 de		1 b		0 b	
1	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN A						7 f	
1	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN A						2 b	
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A							
1	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A							
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN A		21 c		1 b		0 b	
2	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN A						18 e	
2	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN A						2 b	
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A							
2	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A							
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN A							
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN A		23 bc		1 b		0 b	
3	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN A						23 d	
3	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN A						3 b	
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A							
3	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A							
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN A							
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN A		10 d		0 b		0 b	
4	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN A						10 f	
4	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN A						3 b	
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN A							
5	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN A		4 f		0 b		0 b	
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A						72 a	
5	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A						99 a	
6	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN A		6 ef		0 b		0 b	
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A						69 ab	
6	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A						99 a	
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN A							
7	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN A		5 f		0 b		0 b	
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A						70 a	
7	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A						99 a	
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN A							
8	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN A		3 f		0 b		0 b	
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN A						72 a	
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A		3 f		0 b		0 b	
9	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A						0 g	
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN A		24 b		7 a		4 a	
10	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN A						52 c	
10	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN A						99 a	
10	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN A							
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A							
10	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A							
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN A		30 a		5 a		4 a	
11	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN A						64 b	
11	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN A						99 a	
11	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN A							
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN A							
11	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN A							
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN A							
12	NONTREATED									0 g		0 b		0 b	
LSD (P=.05)										2.7		3.2		0.8	
Replicate F										2.399		1.306		2.200	
Replicate Prob(F)										0.1142		0.2911		0.1346	
Treatment F										126.328		4.885		42.250	
Treatment Prob(F)										0.0001		0.0008		0.0001	

Means followed by same letter do not significantly differ (P=.05, LSD)

Control of Volunteer Liberty Link Corn in Liberty Link Soybean.

Trial ID: 09-T4-N60

Location: Belleville Res. Center

									AMATA	AMATA	AMATA	IPOHE	IPOHE	IPOHE	
Pest Code									07-30-09	08-06-09	08-20-09	07-30-09	08-06-09	08-20-09	
Crop Code									Control	Control	Control	Control	Control	Control	
Rating Date									Percent	Percent	Percent	Percent	Percent	Percent	
Rating Data Type															
Rating Unit															
Rating Timing															
Trt-Eval Interval									7 DA-A	14 DA-A	28 DA-A	7 DA-A	14 DA-A	28 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	95 a	92 a	83 ab	96 ab	93 a	87 a
1	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
1	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
1	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
2	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	96 a	93 a	81 ab	97 a	97 a	88 a
2	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
2	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
2	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
2	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN	A						
3	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	97 a	91 a	85 a	97 a	95 a	91 a
3	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
3	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
3	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
4	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	8 b	2 b	0 c	55 c	43 b	37 b
4	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
4	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
4	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
5	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	96 a	90 a	82 ab	97 a	92 a	92 a
5	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
5	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
6	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	94 a	88 a	63 b	92 b	94 a	87 a
6	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
6	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
6	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	12-18"CN	A						
7	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	97 a	91 a	82 ab	96 ab	95 a	90 a
7	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
7	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
7	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
8	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A	0 c	0 b	0 c	0 d	0 c	0 c
8	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
9	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A	98 a	96 a	93 a	96 ab	95 a	89 a
9	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
10	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	96 a	92 a	81 ab	93 ab	91 a	86 a
10	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
10	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
10	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A						
10	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
10	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
11	SYNCHRONY XP	28.4	WG			0.375	oz/a	12-18"CN	A	97 a	97 a	91 a	97 a	97 a	92 a
11	CLASSIC	25	WG	0.00504	lb ai/a			12-18"CN	A						
11	HARMONY SG	50	SG	0.00162	lb ai/a			12-18"CN	A						
11	ASSURE II	0.88	EC	0.0344	lb ai/a	5	fl oz/a	12-18"CN	A						
11	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	12-18"CN	A						
11	AMS	100	SG	3	lb/a	3	lb/a	12-18"CN	A						
11	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	12-18"CN	A						
12	NONTREATED									0 c	0 b	0 c	0 d	0 c	0 c
LSD (P=.05)										7.8	9.7	20.8	4.1	8.8	14.6
Replicate F										0.619	0.815	0.022	0.737	0.779	2.080
Replicate Prob(F)										0.5476	0.4554	0.9787	0.4899	0.4713	0.1488
Treatment F										251.707	155.797	28.461	716.981	158.452	51.778
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

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Trial ID: 09-T4-N60

Location: Belleville Res. Center

Trial Comments

1. Protocol: DuPont (USA-09-115).
2. Ratings: CI/WC at 7, 14, and 28 DAT.
3. Volunteer corn was P33K44 planted 7-2-09.
4. Not harvested.