

Liberty Link versus Roundup Ready Soybean Yield.

Trial ID: 09-T4-S240

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: Determine the yield of Liberty Link and Roundup Ready soybean within the associated herbicide programs used for each trait.

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

Plot Width, Unit: 30 FT Site Type: FIELD
 Plot Length, Unit: 54 FT Tillage Type: REDUCED-TILL
 Replications: 6 Study Design: Non-Randomized

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		B		C	
Application Date:	06-27-09	07-22-09	08-12-09			
Time of Day:	5:00	8:00	9:00			
Application Method:	Spray	Spray	Spray			
Application Timing:	PRE	2-4"W	2-4"RG			
Application Placement:	BROSOI	BROFOL	BROFOL			
Applied By:	NVH	NVH	DKP			
Air Temperature, Unit:	94 F	78 F	70 F			
% Relative Humidity:	58	80	92			
Wind Velocity, Unit:	1 MPH	5 MPH	1 MPH			
Wind Direction:	W	N	S			
Dew Presence (Y/N):	N	N	Y			
Soil Moisture:	NORMAL	NORMAL	NORMAL			
% Cloud Cover:	0	100	5			

	06-27-09	07-22-09	08-12-09
Crop stage at application:	NA	V2-V3	R2
Height Min, Max (inch):	2	4 26	32

	Pest Stage At Each Application		
	06-27-09	07-22-09	08-12-09
Weed Code:	NA	NA	NA

	Application Equipment					
	CO2 sprayer		CO2 sprayer		CO2 sprayer	
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	10 FT	10 FT	10 FT	10 FT	10 FT	10 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA	15 GPA

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Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

GLXMA GLXMA
11-03-09 11-03-09
Moisture Yield
Percent bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	SO80122 LL									13.6 a	42 c
1	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W	B		
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
1	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"RG	C		
1	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
2	SO70146 LL									12.5 bc	50 a
2	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W	B		
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
2	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"RG	C		
2	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
3	SO7014 LL									12.8 b	44 b
3	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"W	B		
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
3	IGNITE 280	2.34	EC	0.402	lb ai/a	22	fl oz/a	2-4"RG	C		
3	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
4	AG4005 RR									12.1 c	50 a
4	AUTHORITY FIRST	70	WG	0.14	lb ai/a	3.2	oz/a	PRE	A		
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B		
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"W	B		
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"RG	C		
4	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-4"RG	C		
LSD (P=.05)										0.49	1.6
Treatment F										15.159	51.186
Treatment Prob(F)										0.0001	0.0001

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

Trial Comments

1. Protocol: Bayer (MRB).
2. Ratings: None.
3. Yield, (harvest rows 4+5 and rows 8+9).
4. Mixing and spraying instructions:
Mix size should fit a 2.5 gallon can or (3) 3 liter bottles.
If using (3) 3 liter bottles must adjust mix amounts for 0.02 gallons overage per bottle.
Spray the center 8 rows of the 12 row plots. Make (2) passes with a 10 ft boom.
5. Harvested 11-3-09, (4) 30 inch rows by 51 ft.