

CMT560 on Soybean Yield - Site 1.

Trial ID: 09-27-M50

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: 06-30-09

Objectives: Describe the benefit of foliar insecticide treatments
 on soybean yield.

Crop 1: GLXMA Soybean Variety: AG 4404 Description: RR/STS
 Planting Method: SEEDED Planting Date: 06-30-09
 Rate, Unit: 75 LB/A Depth, Unit: 1.0 IN
 Row Spacing, Unit: 30 IN

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 29 FT Tillage Type: REDUCED-TILL
 Replications: 6 Study Design: Randomized Complete Block

Prior Crops, Year
 1. ZEAMD 2008

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

% OM: 2.8 Texture: SILT LOAM
 pH: 6 Soil Name: BETHALTO
 CEC: 13 Fert. Level: P1: 67 LB/A, K: 409 LB/A

	Application Description					
	A		B		C	
Application Date:	07-27-09	08-03-09	08-25-09			
Time of Day:	10:00	9:30	11:00			
Application Method:	Spray	Spray	Spray			
Application Timing:	EPOST	MPOST	LPOST			
Application Placement:	BROFOL	BROFOL	BROFOL			
Applied By:	DKP	DKP	NVH			
Air Temperature, Unit:	76 F	75 F	78 F			
% Relative Humidity:	76	92	86			
Wind Velocity, Unit:	3 MPH	7 MPH	4 MPH			
Wind Direction:	S	S	S			
Dew Presence (Y/N):	N	N	N			
Soil Moisture:	NORMAL	ABONOR	NORMAL			
% Cloud Cover:	10	60	5			

	07-27-09	08-03-09	08-25-09
Crop stage at application:	V1-V2	V4	R3
Height Min, Max (inch):	2 5	6 9	24 30

	07-27-09	08-03-09	08-25-09
Pest Stage At Each Application			
Application Date:	07-27-09	08-03-09	08-25-09
Weed Code:	NA	NA	NA

	Application Equipment					
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer			
Operating Pressure:	30 PSI	30 PSI	30 PSI			
Nozzle Type:	Flat fan	Flat fan	Flat fan			
Nozzle Size:	XR 8002	XR 8002	XR 8002			
Boom Length, Unit:	10 FT	10 FT	10 FT			
Spray Volume, Unit:	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	GLXMA
11-08-09	11-08-09	11-08-09
Moisture	Test wt.	Yield
Percent	lb/bu	bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Unit	Other Rate	Other Unit	Growth Stage	Appl Code			
1	NONTREATED									11.7 a	56.4 a	47 b
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	EPOST	A	11.8 a	56.3 a	51 a
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	MPOST	B			
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
2	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	LPOST	C			
2	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	EPOST	A	11.7 a	56.4 a	51 a
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	EPOST	A			
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	MPOST	B			
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	MPOST	B			
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
3	CMT560	2	SL	0.078	lb ai/a	5	fl oz/a	LPOST	C			
3	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	LPOST	C			
3	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	EPOST	A	11.8 a	56.4 a	50 a
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	MPOST	B			
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
4	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	LPOST	C			
4	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	EPOST	A	11.8 a	56.2 a	50 a
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	EPOST	A			
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	EPOST	A			
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	MPOST	B			
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	MPOST	B			
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	MPOST	B			
5	CMT560	2	SL	0.094	lb ai/a	6	fl oz/a	LPOST	C			
5	SUPERB HC	100	SL	0.25	% v/v	0.25	% v/v	LPOST	C			
5	N-PAK AMS	3.4	SL	2	lb ai/a	3.92	% v/v	LPOST	C			
LSD (P=.05)										0.15	0.40	1.8
Replicate F										0.550	1.535	13.512
Replicate Prob(F)										0.7366	0.2240	0.0001
Treatment F										0.278	0.430	5.764
Treatment Prob(F)										0.8889	0.7849	0.0030

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

Trial Comments

1. Protocol: Bayer (B5A).
2. Ratings:
3. Application timing instructions: The EPOST and MPOST applications should coincide with traditional Roundup timings, make the LPOST application 30 days after MPOST.
4. Yield plus grain quality.
5. Monitor insects (below ground).
6. Blanket PRE application of Firstrate (0.031 lbai/A) + Spartan (0.25 lbai/A) + Dual II Magnum (1.27 lbai/A) was applied on 7-1-09.
7. Harvested 11-8-09, (2) 30 inch rows by 26 ft.