

Fungicide Studies, Soybean or Corn

12-12-06 (06-Tamms-FungScrn)

Southern Illinois University

General Soybean Fungicide Screen - Tamms.

Project Code: 06-Tamms-FungScrn Location: Tamms, IL
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Tamms IL 62988 USA
Trial Status: Final **Updated:** 10-30-06

Objective:

Evaluate various fungicides applied in soybean for disease management and yield enhancement.

Crop 1:	GLXMA soybean	Variety:	FS4646 RR
Planting Method:	Seeded	Planting Date:	5-15-06
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	30 IN	Seed Bed:	No Till
		Soil Moisture:	ABOVE NORMAL

Plot Width, Unit:	10 FT	Plot Length, Unit:	24 FT	Reps:	5
Tillage Type:	No-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	GLXMA, 2005				
Field Prep./Maintenance:	N 18 LB/A, P205 46 LB/A, K20 60 LB/A				

APPLICATION DESCRIPTION

	A	B
Application Date:	7-5-06	7-25-06
Time of Day:		11:30
Application Method:	Spray	Spray
Application Timing:	V5	R3
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:		83 F
% Relative Humidity:		66
Wind Velocity, Unit:		4 MPH
Dew Presence (Y/N):		N
Soil Moisture:		NORMAL
% Cloud Cover:		0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GLXMA	GLXMA R3
Height, Unit:	IN	36 IN

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	50 PSI	50 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA

NOTES:

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Weed Code
 Crop Code
 Rating Data Type
 Rating Unit
 Rating Date
 Trt-Eval Interval

GLXMA GLXMA GLXMA GLXMA
 Moisture Yield FROEYE FROEYE
 Percent bu/A Sever0-9 Sever0-9
 10-4-06 10-4-06 8-15-06 9-9-06
 21 DA-B 46 DA-B

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA Moisture Percent	GLXMA Yield bu/A	GLXMA FROEYE Sever0-9	GLXMA FROEYE Sever0-9
1	QUADRIS	2.08	F	0.101	lb ai/a	6.2	fl oz/a	R3	B	13.0	55	1.0	3.6
1	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	B				
2	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R3	B	12.8	58	1.2	3.4
2	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	B				
3	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	B	13.2	52	3.4	6.1
4	DOMARK	1.9	ME	0.074	lb ai/a	5	fl oz/a	R3	B	13.4	56	2.2	5.2
5	HEADLINE SBR (CO-PACK)					7.8	fl oz/a	R3	B	12.7	53	2.0	3.2
5	->TEBUCONAZOLE	3.6	F	0.087	lb ai/a			R3	B				
5	->HEADLINE	2.09	EC	0.077	lb ai/a			R3	B				
6	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	B	13.0	55	1.6	3.6
7	QUILT	1.67	F	0.183	lb ai/a	14	fl oz/a	R3	B	13.1	58	1.4	4.2
8	HEADLINE/CARAMBA (CO-PACK)					11.9	fl oz/a	R3	B	13.3	52	1.6	3.8
8	->CARAMBA	0.75	SL	0.044	lb ai/a			R3	B				
8	->HEADLINE	2.09	EC	0.072	lb ai/a			R3	B				
9	CARAMBA	0.75	SL	0.048	lb ai/a	8.2	fl oz/a	R3	B	13.3	57	2.2	5.2
10	LAREDO	2	EC	0.109	lb ai/a	7	fl oz/a	R3	B	13.3	56	2.4	6.0
11	NONTREATED									13.3	50	3.4	7.4
12	NONTREATED									13.4	53	3.6	7.6
13	ECHO 720	6	L	0.94	lb ai/a	20	fl oz/a	V5	A	13.3	51	1.6	5.6
13	ECHO 720	6	L	0.94	lb ai/a	20	fl oz/a	R3	B				
14	ECHO 720	6	L	0.94	lb ai/a	20	fl oz/a	V5	A	13.6	54	1.8	4.4
14	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	B				
LSD (P= .05)										0.69	9.6	1.38	1.53
Replicate F										6.318	1.350	2.793	2.660
Replicate Prob(F)										0.0003	0.2643	0.0355	0.0428
Treatment F										0.893	0.562	2.956	7.179
Treatment Prob(F)										0.5658	0.8726	0.0027	0.0001

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Weed Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Code	SDS	SDS	SDS	SDS	CERKIK	CERKIK	STEPOD
Rating Data Type	% Incid	Sever0-9	% Incid	Sever0-9	Sever0-5	Sever0-5	Sever0-5
Rating Unit	8-15-06	8-15-06	9-9-06	9-9-06	8-15-06	9-9-06	10-4-06
Rating Date	21 DA-B	21 DA-B	46 DA-B	46 DA-B	21 DA-B	46 DA-B	EOS
Trt-Eval Interval							

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA % Incid	GLXMA Sever0-9	GLXMA % Incid	GLXMA Sever0-9	GLXMA Sever0-5	GLXMA Sever0-5	GLXMA Sever0-5
1	QUADRIS	2.08	F	0.101	lb ai/a	6.2	fl oz/a	R3	B	0	0.2	2	0.2	0.00	0.40	1.80
1	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	B							
2	HEADLINE	2.09	EC	0.098	lb ai/a	6	fl oz/a	R3	B	2	0.4	5	0.6	0.00	0.00	2.00
2	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	B							
3	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	B	6	1.0	10	1.2	0.00	0.00	2.60
4	DOMARK	1.9	ME	0.074	lb ai/a	5	fl oz/a	R3	B	0	0.0	0	0.0	0.00	0.00	3.40
5	HEADLINE SBR (CO-PACK)					7.8	fl oz/a	R3	B	6	0.8	7	0.6	0.00	0.00	1.80
5	->TEBUCONAZOLE	3.6	F	0.087	lb ai/a			R3	B							
5	->HEADLINE	2.09	EC	0.077	lb ai/a			R3	B							
6	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	B	0	0.0	2	0.4	0.00	0.00	2.40
7	QUILT	1.67	F	0.183	lb ai/a	14	fl oz/a	R3	B	7	0.8	8	0.4	0.00	0.00	1.40
8	HEADLINE/CARAMBA (CO-PACK)					11.9	fl oz/a	R3	B	19	2.0	26	1.6	0.00	0.00	2.40
8	->CARAMBA	0.75	SL	0.044	lb ai/a			R3	B							
8	->HEADLINE	2.09	EC	0.072	lb ai/a			R3	B							
9	CARAMBA	0.75	SL	0.048	lb ai/a	8.2	fl oz/a	R3	B	27	2.0	30	2.0	0.00	0.00	3.80
10	LAREDO	2	EC	0.109	lb ai/a	7	fl oz/a	R3	B	0	0.0	0	0.0	0.00	0.00	3.80
11	NONTREATED									0	0.0	0	0.0	0.00	0.40	3.60
12	NONTREATED									2	0.4	4	0.8	0.00	0.00	3.40
13	ECHO 720	6	L	0.94	lb ai/a	20	fl oz/a	V5	A	1	0.2	2	0.4	0.00	0.00	3.20
13	ECHO 720	6	L	0.94	lb ai/a	20	fl oz/a	R3	B							
14	ECHO 720	6	L	0.94	lb ai/a	20	fl oz/a	V5	A	6	1.0	7	0.8	0.00	0.00	2.20
14	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	B							
LSD (P=05)										6.7	0.98	12.7	0.99	0.000	0.432	1.123
Replicate F										0.674	0.974	0.191	1.050	0.000	0.736	0.698
Replicate Prob(F)										0.6133	0.4296	0.9419	0.3905	1.0000	0.5717	0.5971
Treatment F										11.637	3.934	4.323	2.975	0.000	0.906	4.244
Treatment Prob(F)										0.0001	0.0002	0.0001	0.0026	1.0000	0.5531	0.0001

Trial Comments

1. Protocol: BASF, Sipcam.
2. Ratings: CI/DI/DS at 21 + 42 DAT.
3. Yield.
4. Treatments 1-10 and 12 are single application only.
 For trials conducted in soybean rust areas (i.e. SE US) make two sequential applications of the same treatment. The first at R3 and the second 21 days after the first application.
 Apply the first application earlier than R3 if rust is a threat (should be made preventatively).
5. Blanket application of Dual Magnum (1.33 pt/A) + Firstrate (0.6 oz/A) applied PRE.
 Use glyphosate POST if needed to maintain weed-free.
6. FROEYE = Frog eye leafspot. SDS = Soybean sudden death syndrome.
 CERKIK = Cercospora kikuchii. STEPOD = Stem and pod diseases. % Incid = Percent incidence.
 Sever0-5 and Sever0-9 = Severity, rating scales of 0-5 and 0-9, respectively.
 DA-B = Days after R3 application. EOS = End of season.
7. Ratings on 8-15-06 at 21 DA-B were also 41 days after the V5 application.
 Ratings scheduled for 21 days after the V5 application were not made.
8. Harvested 10-4-06, (2) 30 inch rows by 20 ft.