

Bayer Fungicides Evaluations in Soybean.

Project Code: 05-BP-Bayer Location: Brookport, IL
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Brookport IL 62910 USA
Trial Status: Final Updated: 11-01-05**Objective:**

Evaluate Bayer CropScience fungicides for managemnet of Asian soybean rust.

Crop 1: GLXMA soybean Variety: P94M70 RR
Planting Method: Seeded Planting Date: 5-23-05
Rate: 75 lb/A Depth: 1.0 IN
Row Spacing: 30 INPlot Width, Unit: 10 FT Plot Length, Unit: 30 FT Reps: 4
Tillage Type: Reduced-Till Study Design: Randomized complete block
Previous Crop, Year: GLXMA, 2004**APPLICATION DESCRIPTION**

	A	B	C	D
Application Date:	07-21-05	08-12-05		
Time of Day:	10:00	10:45		
Application Method:	Spray	Spray	Not applied	Not applied
Application Timing:	R3	21DA-R3	CURATIVE	21DA-CURATIV
Applic. Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	87 F	90 F		
% Relative Humidity:	61	70		
Wind Velocity, Unit:	2-3 MPH	3-4 MPH		
Soil Moisture:	ABONOR	ABONOR		

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GLXMA R3	GLXMA R4	GLXMA NA	GLXMA NA
Height, Unit:	21 IN	40 IN	NA NA	NA NA

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	8002	8002	8002	8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA	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 GLXMA GLXMA GLXMA GLXMA
 Moisture Test wt. Seed wt. Yield Injury Injury Injury Injury
 Percent lb/bu g/1000 bu/A Percent Percent Percent Percent
 10-13-05 10-13-05 10-13-05 10-13-05 07-28-05 08-04-05 08-19-05 09-02-05
 7 DA-A 14 DA-A 7 DA-B 21 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 Test wt. lb/bu	GLXMA Seed wt. g/1000	GLXMA Yield bu/A	GLXMA Injury Percent	GLXMA Injury Percent	GLXMA Injury Percent	GLXMA Injury Percent
1	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	A	13.5	52.9	151	50	1	0	0	0
1	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
1	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	21DA-R3	B								
2	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	A	13.5	53.0	151	47	0	0		0
2	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
2	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	CURATIVE	C								
2	SEE COMMENT #5																
3	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	13.6	52.9	154	47	2	0	1	0
3	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	21DA-R3	B								
3	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	21DA-R3	B								
4	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	13.4	52.9	146	51	0	0		0
4	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	CURATIVE	C								
4	SEE COMMENT #5																
5	ABSOLUTE	4	L	0.156	lb ai/a	5	fl oz/a	R3	A	13.3	53.1	157	54	1	0	1	0
5	ABSOLUTE	4	L	0.156	lb ai/a	5	fl oz/a	21DA-R3	B								
6	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	CURATIVE	C								
6	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	21DA-CURATIV	D								
6	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	21DA-CURATIV	D								
6	SEE COMMENT #5																
7	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	CURATIVE	C								
7	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	21DA-CURATIV	D								
7	SEE COMMENT #5																
8	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	13.5	52.7	148	49	1	0	0	0
8	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	21DA-R3	B								
9	NONTREATED									13.4	53.1	145	53	0	0	0	0
LSD (P=.05)										0.46	0.83	8.1	8.0	1.0	0.0	0.8	0.4
Replicate F										2.817	1.178	0.644	0.423	2.092	0.000	1.143	0.632
Replicate Prob(F)										0.0685	0.3457	0.5968	0.7392	0.1371	1.0000	0.3713	0.6041
Treatment F										0.292	0.226	2.413	1.006	3.275	0.000	1.457	0.789
Treatment Prob(F)										0.9328	0.9628	0.0688	0.4571	0.0234	1.0000	0.2754	0.5897

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Weed Code		Crop Code		GLXMA		GLXMA		GLXMA		GLXMA		GLXMA		GLXMA	
Rating Data Type		FROEYE		FROEYE		FROEYE		FROEYE		BROSPO		BROSPO		DEFOLI	
Rating Unit		% Incid		Sever0-9		% Incid		Sever0-9		% Incid		Sever0-5		Percent	
Rating Date		08-04-05		08-04-05		09-09-05		09-09-05		09-09-05		09-09-05		09-22-05	
Trt-Eval Interval		14 DA-A		14 DA-A		28 DA-B		28 DA-B		28 DA-B		28 DA-B		41 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Prod Unit	Prod Unit	Grow Stg	Appl Code							
1	STRATEGO	2.08	EC	0.114	lb ai/a	7 fl oz/a	R3	A	0	0.0	100	3.5	100	3.50	78
1	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125 % v/v	R3	A							
1	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	21DA-R3	B							
2	STRATEGO	2.08	EC	0.114	lb ai/a	7 fl oz/a	R3	A	0	0.0	100	3.0	100	2.75	81
2	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125 % v/v	R3	A							
2	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	CURATIVE	C							
2	SEE COMMENT #5														
3	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	R3	A	0	0.0	100	2.0	100	3.25	75
3	STRATEGO	2.08	EC	0.162	lb ai/a	10 fl oz/a	21DA-R3	B							
3	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125 % v/v	21DA-R3	B							
4	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	R3	A	0	0.0	100	3.3	100	3.00	88
4	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	CURATIVE	C							
4	SEE COMMENT #5														
5	ABSOLUTE	4	L	0.156	lb ai/a	5 fl oz/a	R3	A	0	0.0	100	1.8	100	3.50	70
5	ABSOLUTE	4	L	0.156	lb ai/a	5 fl oz/a	21DA-R3	B							
6	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	CURATIVE	C							
6	STRATEGO	2.08	EC	0.162	lb ai/a	10 fl oz/a	21DA-CURATIV	D							
6	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125 % v/v	21DA-CURATIV	D							
6	SEE COMMENT #5														
7	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	CURATIVE	C							
7	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	21DA-CURATIV	D							
7	SEE COMMENT #5														
8	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	R3	A	0	0.0	100	4.0	100	3.00	74
8	FOLICUR	3.6	F	0.112	lb ai/a	4 fl oz/a	21DA-R3	B							
9	NONTREATED								0	0.0	100	4.5	100	3.00	79
LSD (P=.05)									0.0	0.00	0.0	1.85	0.0	1.142	13.3
Replicate F									0.000	0.000	0.000	1.234	0.000	0.483	1.638
Replicate Prob(F)									1.0000	1.0000	1.0000	0.3265	1.0000	0.6981	0.2159
Treatment F									0.000	0.000	0.000	2.584	0.000	0.544	1.652
Treatment Prob(F)									1.0000	1.0000	1.0000	0.0552	1.0000	0.7684	0.1904

Trial Comments

1. Protocol: Bayer CropScience.
2. Ratings: CI 5-7 DAT; percent disease incidence at initial application; disease severity 14 da each application and 28 DA final application; percent plant defoliation at end of season when nontreated is 80-90% defoliated.
3. Yield, moisture, test weight, weight per 1000 seeds.
4. Application "C" (CURATIVE) timing is at least 21 DA R3 and when rust is confirmed in the local area.
5. Applications "C" and "D" (CURATIVE and 21DA-CURATIV) were not applied, not needed.
6. Blanket preemergence application of Dual II + Firstate at 1.67 pt/A + 0.6 oz/A, followed by a postemergence application of Roundup Weathermax at 22 oz/A, plus handweeding as needed.
7. DA-A = Days after R3 application. DA-B = Days after 21DA-R3 application.
 FROEYE = Frog eye leafspot. BROSPO = Septoria brown spot. DEFOLI = Soybean defoliation.
 % Incid = Percent incidence. Sever0-5 and Sever0-9 = Severity, rating scales of 0-5 and 0-9, respectively.
8. Harvested 10-13-05, (2) 30 inch rows by 24 ft.