

## Cheminova Asian Soybean Rust Study - 2.

Project Code: 05-BP-Cheminova-2 Location: Belleville Research Center

Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA  
 Trial Status: Final Updated: 11-01-05

**Objective:**

Evaluate flutriafol for management 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 IN

Plot 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:	08-04-05	08-19-05	08-31-05	
Time of Day:	12:00	10:00	14:00	
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	R3	14DA-A	21DA-A	28DA-A
Applic. Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	90 F	88 F	87 F	
% Relative Humidity:	40	88	56	
Wind Velocity, Unit:	2-5 MPH	2-3 MPH	7-10 MPH	
Soil Moisture:	BELNOR	NORMAL	ABONOR	

**CROP STAGE AT EACH APPLICATION**

	A	B	C	D
Crop 1 Code, Stage:	GLXMA R4	GLXMA R5	GLXMA R6	GLXMA NA
Height, Unit:	30 IN	36-45 IN	40-45 IN	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 Moisture Percent 10-13-05	GLXMA Test wt. lb/bu 10-13-05	GLXMA Yield bu/A 10-14-05	GLXMA Injury Percent 08-11-05 7 DA-A	GLXMA Injury Percent 08-18-05 14 DA-A	GLXMA Injury Percent 08-25-05 6 DA-B	GLXMA Injury Percent 09-01-05 13 DA-B	GLXMA Injury Percent 09-09-05 9 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code										
1	NONTREATED									15.1	53.2	54	0	0	0	0	0	0	0
2	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	14.9	53.2	52	0	0	0	0	0	0	0
3	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	15.1	53.4	49	0	0	0	0	0	0	0
3	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	21DA-A	C										
4	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	14.7	53.4	50	0	0	0	0	0	0	0
4	FLUTRIAFOL	1	SC	0.086	lb ai/a	11	fl oz/a	21DA-A	C										
5	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	14.9	53.4	51	0	0	0	0	0	0	0
5	FLUTRIAFOL	1	SC	0.109	lb ai/a	14	fl oz/a	21DA-A	C										
6	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	14.9	53.5	52	0	0	0	0	0	0	0
6	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	28DA-A	D										
7	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A										
7	FLUTRIAFOL	1	SC	0.086	lb ai/a	11	fl oz/a	28DA-A	D										
7	SEE COMMENT #5																		
8	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A										
8	FLUTRIAFOL	1	SC	0.109	lb ai/a	14	fl oz/a	28DA-A	D										
8	SEE COMMENT #5																		
9	TEBUCONAZOLE	3.6	FL	0.084	lb ai/a	3	fl oz/a	R3	A	15.0	53.7	55	0	0	0	0	0	0	0
9	TEBUCONAZOLE	3.6	FL	0.084	lb ai/a	3	fl oz/a	14DA-A	B										
10	TEBUCONAZOLE	3.6	FL	0.112	lb ai/a	4	fl oz/a	R3	A	14.8	53.1	54	0	0	0	0	0	0	0
10	TEBUCONAZOLE	3.6	FL	0.112	lb ai/a	4	fl oz/a	14DA-A	B										
11	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	15.0	53.8	56	0	0	0	0	0	0	0
11	T-METHYL	4.5	L	0.21	lb ai/a	6	fl oz/a	R3	A										
11	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	21DA-A	C										
11	T-METHYL	4.5	L	0.21	lb ai/a	6	fl oz/a	21DA-A	C										
12	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	15.0	53.8	57	0	0	0	0	0	0	0
12	T-METHYL	4.5	L	0.35	lb ai/a	10	fl oz/a	R3	A										
12	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	21DA-A	C										
12	T-METHYL	4.5	L	0.35	lb ai/a	10	fl oz/a	21DA-A	C										
LSD (P=.05)										0.35	0.62	5.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Replicate F										1.513	2.704	0.952	1.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)										0.2337	0.0652	0.4306	0.4079	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F										1.053	1.107	2.174	1.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)										0.4264	0.3911	0.0607	0.4635	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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Investigator: Bryan YoungWeed Code  
Crop Code  
Rating Data Type  
Rating Unit  
Rating Date  
Trt-Eval Interval

GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
FROEYE	FROEYE	FROEYE	FROEYE	BROSPO	BROSPO	STEPOD
% Incid	Sever0-9	% Incid	Sever0-9	% Incid	Sever0-5	Sever0-9
08-25-05	08-25-05	09-09-05	09-09-05	09-09-05	09-09-05	10-13-05
21 DA-A	21 DA-A	21 DA-B	21 DA-B	21 DA-B	21 DA-B	43 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA FROEYE % Incid	GLXMA FROEYE Sever0-9	GLXMA FROEYE % Incid	GLXMA FROEYE Sever0-9	GLXMA BROSPO % Incid	GLXMA BROSPO Sever0-5	GLXMA STEPOD Sever0-9
1	NONTREATED									0	0.0	100	4.3	100	4.00	6.8
2	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	0	0.0	100	4.3	100	3.75	6.8
3	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	0	0.0	100	4.0	100	4.50	6.8
3	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	21DA-A	C							
4	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	0	0.0	100	3.3	100	3.50	6.8
4	FLUTRIAFOL	1	SC	0.086	lb ai/a	11	fl oz/a	21DA-A	C							
5	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	0	0.0	100	4.3	100	3.75	5.8
5	FLUTRIAFOL	1	SC	0.109	lb ai/a	14	fl oz/a	21DA-A	C							
6	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	0	0.0	100	3.8	100	3.50	6.5
6	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	28DA-A	D							
7	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A							
7	FLUTRIAFOL	1	SC	0.086	lb ai/a	11	fl oz/a	28DA-A	D							
7	SEE COMMENT #5															
8	FLUTRIAFOL	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A							
8	FLUTRIAFOL	1	SC	0.109	lb ai/a	14	fl oz/a	28DA-A	D							
8	SEE COMMENT #5															
9	TEBUCONAZOLE	3.6	FL	0.084	lb ai/a	3	fl oz/a	R3	A	0	0.0	100	4.5	100	3.75	6.8
9	TEBUCONAZOLE	3.6	FL	0.084	lb ai/a	3	fl oz/a	14DA-A	B							
10	TEBUCONAZOLE	3.6	FL	0.112	lb ai/a	4	fl oz/a	R3	A	0	0.0	100	3.8	100	3.50	6.3
10	TEBUCONAZOLE	3.6	FL	0.112	lb ai/a	4	fl oz/a	14DA-A	B							
11	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	0	0.0	100	3.8	100	3.75	6.0
11	T-METHYL	4.5	L	0.21	lb ai/a	6	fl oz/a	R3	A							
11	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	21DA-A	C							
11	T-METHYL	4.5	L	0.21	lb ai/a	6	fl oz/a	21DA-A	C							
12	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	R3	A	0	0.0	100	2.5	100	3.50	5.3
12	T-METHYL	4.5	L	0.35	lb ai/a	10	fl oz/a	R3	A							
12	IMPACT	1	SC	0.0547	lb ai/a	7	fl oz/a	21DA-A	C							
12	T-METHYL	4.5	L	0.35	lb ai/a	10	fl oz/a	21DA-A	C							
LSD (P=.05)										0.0	0.00	0.0	1.38	0.0	0.765	1.13
Replicate F										0.000	0.000	0.000	0.323	0.000	0.600	0.273
Replicate Prob(F)										1.0000	1.0000	1.0000	0.8086	1.0000	0.6206	0.8445
Treatment F										0.000	0.000	0.000	1.542	0.000	1.400	1.836
Treatment Prob(F)										1.0000	1.0000	1.0000	0.1839	1.0000	0.2369	0.1072

## Trial Comments

- Protocol: Cheminova. Same as 05-BP-Cheminova.
- Ratings: CI 7 DAT; CI and disease incidence and severity at 14 and 21 DAT.
- DA-A = Days after R3 application. DA-B = Days after 14DA-A application.
- Application timing "C" should be 18-21 days after the first application.
- For treatments 7+8, the planned 28DA-A application could not be applied on time as the previous flutriafol applications exhausted the supply and resupply was delayed well past application timing.
- Blanket preemergence application of Dual II + Firstrate 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.
- Overall there was low occurrence of SDS symptoms, as rated on 8-25-05.  
Overall there was low occurrence of frog eye leafspot and septoria brown spot on 8-25-05 probably due to hot and dry conditions.
- DA-A = Days after R3 application. DA-B = Days after 14DA-A application. DA-C = Days after 21DA-A application.  
Ratings at 14 DA-A were prior to the 14DA-A and 21DA-A applications.  
Ratings at 6 DA-B were also 21DA-A and were prior to the 21DA-A application.  
Ratings at 13 DA-B were also 28 DA-A and 1 DA-C. Ratings at 9 DA-C were also 21 DA-B.  
FROEYE = Frog eye leafspot. BROSPO = Septoria brown spot.  
STEPOD = Stem and pod diseases, consisting of approximately 95% anthracnose and 5% pod and stem blight.  
% Incid = Percent incidence. Sever0-5 and Sever0-9 = Severity, rating scales of 0-5 and 0-9, respectively.
- Harvested 10-13-05, (2) 30 inch rows by 24 ft.