

Soybean Variety by Fungicide Study.

Project Code: 05-20A-W250      Location: Belleville Reseach Center  
 Investigator: Bryan Young

**Investigator:** Bryan Young, Associate Professor, Southern Illinois University

**City State Zip Country:**            Belleville            IL 62221 USA  
**Trial Status:** Final                    **Updated:**            11-14-05

**Objective:**

Evaluate soybean fungicides applied to different soybean varieties to determine if the benefits of a fungicide application varies by soybean variety.

**Crop 1:**                    GLXMA soybean                    **Variety:**            See treatment list  
**Planting Method:** Seeded                    **Planting Date:** 5-17-05  
**Rate:**                    75            lb/A                    **Depth:**            1.0 IN  
**Row Spacing:**            30 IN

**Plot Width, Unit:** 7.5 FT                    **Plot Length, Unit:** 27 FT                    **Reps:** 4  
**Tillage Type:**            Reduced-Till                    **Study Design:** Factorial  
**Previous Crop, Year:** GLXMA, 2004

**Field Prep./Maintenance:** N 0 LB/A, P205 100 LB/A, K20 200 LB/A

**Soil Name:** Ebbert                    **% OM:** 2.6                    **pH:** 6.1                    **CEC:** 13  
**Texture:**            Silt loam                    **Fert. Level:** P1: 78 LB/A, K: 423 LB/A

**APPLICATION DESCRIPTION**

**A**  
**Application Date:**            07-20-05  
**Time of Day:**                    12:00  
**Application Method:**            Spray  
**Application Timing:**            R3  
**Applic. Placement:**            BROFOL  
**Air Temp., Unit:**            88 F  
**% Relative Humidity:**            62  
**Wind Velocity, Unit:**            5-8 MPH  
**Soil Moisture:**                    BELNOR

**CROP STAGE AT EACH APPLICATION**

**A**  
**Crop 1 Code, Stage:**            GLXMA R3  
**Height, Unit:**                    30-36 IN

**APPLICATION EQUIPMENT**

**A**  
**Appl. Equipment:**            CO2 sprayer  
**Operating Pressure:**            40 PSI  
**Nozzle Type:**                    Flat fan  
**Nozzle Size:**                    med.droplets  
**Boom Length, Unit:**            5 FT  
**Spray Volume, Unit:**            20 GPA

**NOTES:**

Soybean Variety by Fungicide Study.

Project Code: 05-20A-W250 Location: Belleville Reseach Center  
 Investigator: Bryan Young

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

GLXMA 80% LD DAP    GLXMA Moisture Percent    GLXMA Yield bu/A    GLXMA Injury Percent 07-27-05 7 DA-A    GLXMA Injury Percent 08-03-05 14 DA-A    GLXMA Injury Percent 08-10-05 21 DA-A    GLXMA Disease Percent 08-03-05 14 DA-A    GLXMA Disease Percent 08-10-05 21 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA 80% LD DAP	GLXMA Moisture Percent	GLXMA Yield bu/A	GLXMA Injury Percent 07-27-05 7 DA-A	GLXMA Injury Percent 08-03-05 14 DA-A	GLXMA Injury Percent 08-10-05 21 DA-A	GLXMA Disease Percent 08-03-05 14 DA-A	GLXMA Disease Percent 08-10-05 21 DA-A
1	QUADRIS	2.08	F	0.101	lb ai/a	6.2	fl oz/a	R3	A	138	14.2	69	0	0	0	0	0
1	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
1	ASGROW 4403 RR																
2	QUADRIS	2.08	F	0.101	lb ai/a	6.2	fl oz/a	R3	A	134	11.4	74	0	0	0	0	0
2	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
2	STINE S4542																
3	QUADRIS	2.08	F	0.101	lb ai/a	6.2	fl oz/a	R3	A	131	13.4	73	0	0	0	0	0
3	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
3	GARST 4112																
4	QUADRIS	2.08	F	0.101	lb ai/a	6.2	fl oz/a	R3	A	140	11.9	63	0	0	0	0	0
4	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
4	PIONEER 94M30 RR																
5	QUADRIS EXTRA	2.34	SC	0.091	lb ai/a	5	fl oz/a	R3	A	136	13.8	70	0	0	0	0	0
5	ASGROW 4403 RR																
6	QUADRIS EXTRA	2.34	SC	0.091	lb ai/a	5	fl oz/a	R3	A	133	11.4	71	0	0	0	0	0
6	STINE S4542																
7	QUADRIS EXTRA	2.34	SC	0.091	lb ai/a	5	fl oz/a	R3	A	128	13.5	74	0	0	0	0	0
7	GARST 4112																
8	QUADRIS EXTRA	2.34	SC	0.091	lb ai/a	5	fl oz/a	R3	A	138	12.0	61	0	0	0	0	0
8	PIONEER 94M30 RR																
9	QUILT	1.67	F	0.183	lb ai/a	14	fl oz/a	R3	A	137	13.9	67	0	0	0	0	0
9	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
9	ASGROW 4403 RR																
10	QUILT	1.67	F	0.183	lb ai/a	14	fl oz/a	R3	A	134	11.6	68	0	0	0	0	0
10	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
10	STINE S4542																
11	QUILT	1.67	F	0.183	lb ai/a	14	fl oz/a	R3	A	130	13.4	73	0	0	0	0	0
11	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
11	GARST 4112																
12	QUILT	1.67	F	0.183	lb ai/a	14	fl oz/a	R3	A	138	11.9	63	0	0	0	0	0
12	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	R3	A								
12	PIONEER 94M30 RR																
13	QUADRIS EXTRA	2.34	SC	0.073	lb ai/a	4	fl oz/a	R3	A	136	13.8	70	0	0	0	0	0
13	WARRIOR	1	CS	0.025	lb ai/a	3.2	fl oz/a	R3	A								
13	ASGROW 4403 RR																
14	QUADRIS EXTRA	2.34	SC	0.073	lb ai/a	4	fl oz/a	R3	A	134	11.4	70	0	0	0	0	0
14	WARRIOR	1	CS	0.025	lb ai/a	3.2	fl oz/a	R3	A								
14	STINE S4542																
15	QUADRIS EXTRA	2.34	SC	0.073	lb ai/a	4	fl oz/a	R3	A	128	13.6	72	0	0	0	0	0
15	WARRIOR	1	CS	0.025	lb ai/a	3.2	fl oz/a	R3	A								
15	GARST 4112																
16	QUADRIS EXTRA	2.34	SC	0.073	lb ai/a	4	fl oz/a	R3	A	138	11.9	60	0	0	0	0	0
16	WARRIOR	1	CS	0.025	lb ai/a	3.2	fl oz/a	R3	A								
16	PIONEER 94M30 RR																
17	HEADLINE	2.09	EC	0.101	lb ai/a	6.2	fl oz/a	R3	A	139	14.1	70	0	0	0	0	0
17	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
17	ASGROW 4403 RR																
18	HEADLINE	2.09	EC	0.101	lb ai/a	6.2	fl oz/a	R3	A	136	11.4	72	0	0	0	0	0
18	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
18	STINE S4542																
19	HEADLINE	2.09	EC	0.101	lb ai/a	6.2	fl oz/a	R3	A	133	13.5	78	0	0	0	0	0
19	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
19	GARST 4112																

Soybean Variety by Fungicide Study.

Project Code: 05-20A-W250 Location: Belleville Reseach Center  
 Investigator: Bryan Young

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

GLXMA 80% LD DAP    GLXMA Moisture Percent    GLXMA Yield bu/A    GLXMA Injury Percent 07-27-05 7 DA-A    GLXMA Injury Percent 08-03-05 14 DA-A    GLXMA Injury Percent 08-10-05 21 DA-A    GLXMA Disease Percent 08-03-05 14 DA-A    GLXMA Disease Percent 08-10-05 21 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA 80% LD DAP	GLXMA Moisture Percent	GLXMA Yield bu/A	GLXMA Injury Percent 07-27-05 7 DA-A	GLXMA Injury Percent 08-03-05 14 DA-A	GLXMA Injury Percent 08-10-05 21 DA-A	GLXMA Disease Percent 08-03-05 14 DA-A	GLXMA Disease Percent 08-10-05 21 DA-A
20	HEADLINE	2.09	EC	0.101	lb ai/a	6.2	fl oz/a	R3	A	142	11.9	64	0	0	0	0	0
20	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
20	PIONEER 94M30 RR																
21	LAREDO	2	EC	0.109	lb ai/a	7	fl oz/a	R3	A	133	13.8	69	0	0	0	0	0
21	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
21	ASGROW 4403 RR																
22	LAREDO	2	EC	0.109	lb ai/a	7	fl oz/a	R3	A	131	11.6	62	0	0	0	0	0
22	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
22	STINE S4542																
23	LAREDO	2	EC	0.109	lb ai/a	7	fl oz/a	R3	A	126	13.5	72	0	0	0	0	0
23	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
23	GARST 4112																
24	LAREDO	2	EC	0.109	lb ai/a	7	fl oz/a	R3	A	135	12.0	60	0	0	0	0	0
24	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
24	PIONEER 94M30 RR																
25	DOMARK	1.9	ME	0.122	lb ai/a	8.2	fl oz/a	R3	A	135	13.8	69	0	0	0	0	0
25	ASGROW 4403 RR																
26	DOMARK	1.9	ME	0.122	lb ai/a	8.2	fl oz/a	R3	A	133	11.4	66	0	0	0	0	0
26	STINE S4542																
27	DOMARK	1.9	ME	0.122	lb ai/a	8.2	fl oz/a	R3	A	128	13.5	74	0	0	0	0	0
27	GARST 4112																
28	DOMARK	1.9	ME	0.122	lb ai/a	8.2	fl oz/a	R3	A	137	12.0	56	0	0	0	0	0
28	PIONEER 94M30 RR																
29	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	134	13.7	65	0	0	0	0	0
29	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
29	ASGROW 4403 RR																
30	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	131	11.4	66	0	0	0	0	0
30	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
30	STINE S4542																
31	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	126	13.5	74	0	0	0	0	0
31	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
31	GARST 4112																
32	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	135	11.8	61	0	0	0	0	0
32	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
32	PIONEER 94M30 RR																
33	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	A	138	14.0	66	0	0	0	0	0
33	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
33	ASGROW 4403 RR																
34	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	A	134	11.4	66	0	0	0	0	0
34	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
34	STINE S4542																
35	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	A	130	13.5	76	0	0	0	0	0
35	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
35	GARST 4112																
36	STRATEGO	2.08	EC	0.114	lb ai/a	7	fl oz/a	R3	A	137	12.0	60	0	0	0	0	0
36	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
36	PIONEER 94M30 RR																
37	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	R3	A	138	14.3	72	0	0	0	0	0
37	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
37	ASGROW 4403 RR																
38	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	R3	A	135	11.5	70	0	0	0	0	0
38	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
38	STINE S4542																

Soybean Variety by Fungicide Study.

Project Code: 05-20A-W250 Location: Belleville Reseach Center  
 Investigator: Bryan Young

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

GLXMA 80% LD DAP    GLXMA Moisture Percent    GLXMA Yield bu/A    GLXMA Injury Percent 07-27-05 7 DA-A    GLXMA Injury Percent 08-03-05 14 DA-A    GLXMA Injury Percent 08-10-05 21 DA-A    GLXMA Disease Percent 08-03-05 14 DA-A    GLXMA Disease Percent 08-10-05 21 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA 80% LD DAP	GLXMA Moisture Percent	GLXMA Yield bu/A	GLXMA Injury Percent 07-27-05 7 DA-A	GLXMA Injury Percent 08-03-05 14 DA-A	GLXMA Injury Percent 08-10-05 21 DA-A	GLXMA Disease Percent 08-03-05 14 DA-A	GLXMA Disease Percent 08-10-05 21 DA-A
39	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	R3	A	132	13.5	75	0	0	0	0	0
39	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
39	GARST 4112																
40	STRATEGO	2.08	EC	0.162	lb ai/a	10	fl oz/a	R3	A	140	11.9	53	0	0	0	0	0
40	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
40	PIONEER 94M30 RR																
41	HEADLINE	2.09	EC	0.077	lb ai/a	4.7	fl oz/a	R3	A	138	13.7	70	0	0	0	0	0
41	FOLICUR	3.6	F	0.087	lb ai/a	3.1	fl oz/a	R3	A								
41	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
41	ASGROW 4403 RR																
42	HEADLINE	2.09	EC	0.077	lb ai/a	4.7	fl oz/a	R3	A	136	11.5	70	0	0	0	0	0
42	FOLICUR	3.6	F	0.087	lb ai/a	3.1	fl oz/a	R3	A								
42	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
42	STINE S4542																
43	HEADLINE	2.09	EC	0.077	lb ai/a	4.7	fl oz/a	R3	A	133	13.4	76	0	0	0	0	0
43	FOLICUR	3.6	F	0.087	lb ai/a	3.1	fl oz/a	R3	A								
43	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
43	GARST 4112																
44	HEADLINE	2.09	EC	0.077	lb ai/a	4.7	fl oz/a	R3	A	141	12.0	65	0	0	0	0	0
44	FOLICUR	3.6	F	0.087	lb ai/a	3.1	fl oz/a	R3	A								
44	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
44	PIONEER 94M30 RR																
45	PUNCH	100	LIQ			4	fl oz/a	R3	A	134	13.9	64	0	0	0	0	0
45	ASGROW 4403 RR																
46	PUNCH	100	LIQ			4	fl oz/a	R3	A	132	11.3	68	0	0	0	0	0
46	STINE S4542																
47	PUNCH	100	LIQ			4	fl oz/a	R3	A	127	13.7	75	0	0	0	0	0
47	GARST 4112																
48	PUNCH	100	LIQ			4	fl oz/a	R3	A	134	11.9	59	0	0	0	0	0
48	PIONEER 94M30 RR																
49	CHARISMA	100	LIQ			10	fl oz/a	R3	A	133	13.8	65	0	0	0	0	0
49	ASGROW 4403 RR																
50	CHARISMA	100	LIQ			10	fl oz/a	R3	A	133	11.4	69	0	0	0	0	0
50	STINE S4542																
51	CHARISMA	100	LIQ			10	fl oz/a	R3	A	127	13.5	72	0	0	0	0	0
51	GARST 4112																
52	CHARISMA	100	LIQ			10	fl oz/a	R3	A	135	11.8	53	0	0	0	0	0
52	PIONEER 94M30 RR																
53	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	136	14.2	69	0	0	0	0	0
53	TOPSIN	4.5	FL	0.35	lb ai/a	10	fl oz/a	R3	A								
53	ASGROW 4403 RR																
54	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	133	11.4	69	0	0	0	0	0
54	TOPSIN	4.5	FL	0.35	lb ai/a	10	fl oz/a	R3	A								
54	STINE S4542																
55	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	130	13.4	73	0	0	0	0	0
55	TOPSIN	4.5	FL	0.35	lb ai/a	10	fl oz/a	R3	A								
55	GARST 4112																
56	FOLICUR	3.6	F	0.112	lb ai/a	4	fl oz/a	R3	A	135	12.0	60	0	0	0	0	0
56	TOPSIN	4.5	FL	0.35	lb ai/a	10	fl oz/a	R3	A								
56	PIONEER 94M30 RR																
57	HEADLINE	2.09	EC	0.101	lb ai/a	6.2	fl oz/a	R3	A	141	14.2	70	0	0	0	0	0
57	WARRIOR	1	CS	0.025	lb ai/a	3.2	fl oz/a	R3	A								
57	ACTIVATOR 90	100	LIQ	0.125	% v/v	0.125	% v/v	R3	A								
57	ASGROW 4403 RR																

Soybean Variety by Fungicide Study.

Project Code: 05-20A-W250 Location: Belleville Reseach Center  
 Investigator: Bryan Young

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

GLXMA 80% LD DAP    GLXMA Moisture Percent    GLXMA Yield bu/A    GLXMA Injury Percent 07-27-05 7 DA-A    GLXMA Injury Percent 08-03-05 14 DA-A    GLXMA Injury Percent 08-10-05 21 DA-A    GLXMA Disease Percent 08-03-05 14 DA-A    GLXMA Disease Percent 08-10-05 21 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Prod Rate	Prod Unit	Grow Stg	Appl Code	GLXMA 80% LD DAP	GLXMA Moisture Percent	GLXMA Yield bu/A	GLXMA Injury Percent 07-27-05 7 DA-A	GLXMA Injury Percent 08-03-05 14 DA-A	GLXMA Injury Percent 08-10-05 21 DA-A	GLXMA Disease Percent 08-03-05 14 DA-A	GLXMA Disease Percent 08-10-05 21 DA-A
58	HEADLINE	2.09	EC	0.101	6.2	fl oz/a	R3	A	139	11.5	71	0	0	0	0	0
58	WARRIOR	1	CS	0.025	3.2	fl oz/a	R3	A								
58	ACTIVATOR 90	100	LIQ	0.125	0.125	% v/v	R3	A								
58	STINE S4542															
59	HEADLINE	2.09	EC	0.101	6.2	fl oz/a	R3	A	134	13.8	76	0	0	0	0	0
59	WARRIOR	1	CS	0.025	3.2	fl oz/a	R3	A								
59	ACTIVATOR 90	100	LIQ	0.125	0.125	% v/v	R3	A								
59	GARST 4112															
60	HEADLINE	2.09	EC	0.101	6.2	fl oz/a	R3	A	141	11.9	72	0	0	0	0	0
60	WARRIOR	1	CS	0.025	3.2	fl oz/a	R3	A								
60	ACTIVATOR 90	100	LIQ	0.125	0.125	% v/v	R3	A								
60	PIONEER 94M30 RR															
61	NONTREATED								133	13.9	63	0	0	0	0	0
61	ASGROW 4403 RR															
62	NONTREATED								131	11.3	69	0	0	0	0	0
62	STINE S4542															
63	NONTREATED								126	13.3	71	0	0	0	0	0
63	GARST 4112															
64	NONTREATED								133	12.0	54	0	0	0	0	0
64	PIONEER 94M30 RR															
LSD (P=.05)									2.6	0.35	6.9	0.0	0.0	0.0	0.0	0.0
Replicate F									1.713	2.110	3.801	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)									0.1658	0.1004	0.0112	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F									18.701	70.833	5.661	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)									0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000

Trial Comments

1. Protocol: ISPOB.
2. Ratings: CI 7, 14, and 21 DAT. Disease incidence and severity 14 and 21 DAT (look for septoria, downy mildew, and frog-eye).  
 Percent defoliation from Japanese beetle.  
 Record date 80% leaf drop.
3. Yield.
4. Blanket preemergence application of Dual II Magnum + Firstrate at 1.4 + 0.031 lb ai/A applied 5-17-05.
5. Application timing may be earlier if rust infection occurs.
6. Monitor for aphids, blanket Warrior application if needed.
7. 80% LD = 80 percent leaf drop.
8. Harvested (2) 30 inch rows by 24 ft.  
 Soybean varieties Asgrow 4403 and Garst 4112 were harvested on 10-10-05.  
 Soybean varieties Stine 4542 and Pioneer 94M30 were harvested on 10-19-05.