

MSU Weed Science Research Program

Soybean tolerance to PRE applied Warrant

Trial ID: SOY01-12
Conducted: T-10 Campus

Study Dir.: Sprague, Powell
Investigator: Christy Sprague

Date Planted: May/17/2012 **Row Spacing:** 30 IN
Variety: Asgrow 2330 **No. of Reps:** 4
Population: 150,000 seeds/acre **% OM:** 2.3
Soil Type: Loam **pH:** 7.5
Plot Size: 10 X 35 FT **Design:** RANDOMIZED COMPLETE BLOCK

Tillage: Fall chisel plow, spring soil finish

Fertilizer: None at planting

Crop Code Common Name
1. GLXMA SOYBEAN

Application Description

	A	B	C	D
Application Timing:	EPP	PRE	V2-V3	V5-V6
Date Treated:	Apr/25/2012	May/17/2012	Jun/14/2012	Jun/26/2012
Time Treated:	10:00 AM	2:45 PM	10:45 AM	9:00 AM
% Cloud Cover:	20	10	0	0
Air Temp., Unit:	53 F	72 F	78 F	71 F
% Relative Humidity:	46	26	33	45
Wind Speed/Unit/Dir:	3 mph W	1 mph W	3 mph S	.5 mph S
Soil Temp., Unit:	48 F	69 F	69 F	70 F
Soil/Leaf Surface M:	3 5	3 5	5 5	5 5
Soil Moist (1=w 5=d):	3	3	5	5

Crop Stage at Each Application

	A	B	C	D
Crop Name:	GLXMA	GLXMA	GLXMA	GLXMA
Height (In.):	-	-	6"	10"
Stage (L):	-	-	V2	V6

Weed Stage at Each Application

	A	B	C	D
Height (In.):	-	-	-	-
Stage (L):	-	-	-	-

Application Equipment

Appl	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Nozzle Width	Boom	GPA	Carrier	PSI
A	Cub	3.8	AirMix	11003	22"	20"	100"	19	water	28	
B	Cub	3.8	AIXR	11003	22"	20"	100"	19	Water	28	
C	Cub	3.8	AIXR	11003	25"	20"	100"	19	Water	28	
D	Cub	3.8	AIXR	11003	27"	20"	100"	19	Water	28	

Comments: 5/22/12 & 6/14/12- Broadcast application of Roundup PowerMax (22 fl oz/A) + AMS (17 lb/100 gal) to entire study

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Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Data Type	injury	injury	injury	injury	moisture	yield
Rating Unit	percent	percent	percent	percent	percent	bu/acre
Rating Date	Jun/13/2012	Jun/25/2012	Jul/03/2012	Jul/10/2012	Oct/01/2012	Oct/01/2012
Trt-Eval Interval	27 DA-B	11 DA-C	7 DA-D	14 DA-D	97 DA-D	at 13% M
ARM Action Codes						TY1
# Subsamples, Dec.	0	0	0	0	1	1

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code	GLXMA injury Jun/13/2012	GLXMA injury Jun/25/2012	GLXMA injury Jul/03/2012	GLXMA injury Jul/10/2012	GLXMA moisture percent Oct/01/2012	GLXMA yield bu/acre at 13% M TY1
1	Untreated							0	0	0	0	9.9	42.9
2	Warrant	3	L	3	pt/a	EPP	A	0	0	0	0	10.0	40.0
3	Warrant	3	L	3	pt/a	PRE	B	0	4	1	1	9.9	40.5
4	Reflex	2	L	1	pt/a	PRE	B	0	2	0	0	9.9	41.1
	Warrant	3	L	3	pt/a	PRE	B						
5	Valor	51	WG	2	oz/a	PRE	B	9	5	0	0	9.9	39.2
	Warrant	3	L	3	pt/a	PRE	B						
6	Authority XL	70	WG	3	oz/a	PRE	B	0	1	0	0	9.9	40.5
	Warrant	3	L	3	pt/a	PRE	B						
7	Warrant	3	L	6	pt/a	PRE	B	5	9	2	2	10.0	39.7
8	Warrant	3	L	3	pt/a	PRE	B	0	4	5	3	9.9	37.9
	Warrant	3	L	3	pt/a	V2-V3	C						
9	Warrant	3	L	3	pt/a	PRE	B	0	1	3	2	10.0	36.0
	Warrant	3	L	3	pt/a	V5-V6	D						
10	Warrant	3	L	3	pt/a	PRE	B	0	4	6	4	9.9	41.0
	Warrant	3	L	3	pt/a	V2-V3	C						
	Warrant	3	L	3	pt/a	V5-V6	D						
11	Warrant	3	L	3	pt/a	EPP	A	0	0	5	3	9.9	39.8
	Warrant	3	L	3	pt/a	V2-V3	C						
	Warrant	3	L	3	pt/a	V5-V6	D						
12	Harness	7	L	1.3	pt/a	PRE	B	2	3	0	0	9.8	43.0
LSD (P=.05)								2.1	3.3	2.1	2.0	0.16	5.95
CV								108.84	86.86	84.34	128.05	1.13	10.28

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