

## Soybean tolerance to Cobra and Flexstar

Trial ID: SOY15-11  
 Conducted: B-9S Crops

Study Dir.: Sprague, Powell  
 Investigator: Christy Sprague

**Date Planted:** 05/11/11  
**Variety:** Pioneer 92M61  
**Population:** 155,000  
**Soil Type:** Loam  
**Plot Size:** 10 X 30 FT

**Row Spacing:** 30 IN  
**No. of Reps:** 4  
**% OM:** 2.9  
**pH:** 7.3  
**Design:** RANDOMIZED COMPLETE BLOCK

**Tillage:** Fallow 2010 - Installed tile drainage

**Fertilizer:** None at planting

Crop	Code	Common Name
1.	GLXMA	SOYBEAN

	Application Description			
	A	B	C	D
<b>Application Timing:</b>	V2	V6	R1	R3
<b>Date Treated:</b>	06/13/11	06/27/11	07/07/11	08/04/11
<b>Time Treated:</b>	11:00 AM	3:30 PM	11:45 AM	7:00 PM
<b>% Cloud cover:</b>	0	80	80	10
<b>Air Temp., Unit:</b>	69 F	71 F	80 F	74 F
<b>% Relative Humidity:</b>	50	66	44	63
<b>wind Speed/Unit/Dir:</b>	3 mph NW	5 mph SE	2 mph E	3 mph SW
<b>Soil Temp., Unit:</b>	64 F	67 F	76 F	76 F
<b>Soil/Leaf Surface M:</b>	5 5	5 5	5 5	2 5
<b>Soil Moist (1=w 5=d):</b>	3	3	4	2

	Crop Stage at Each Application			
	A	B	C	D
<b>Crop Name:</b>	GLXMA	GLXMA	GLXMA	GLXMA
<b>Height (In.):</b>	4-5"	9"	16-18"	36-40"
<b>Stage (L):</b>	V2	V6	R1	R3

	Application Equipment									
Appl	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
A	Cub	3.8	AirMix	11003	22"	20"	100"	19	Water	28
B	Cub	3.8	AirMix	11003	26"	20"	100"	19	Water	28
C	Cub	3.8	AirMix	11003	26"	20"	100"	19	Water	28
D	Cub	3.8	AirMix	11003	35"	20"	100"	19	Water	28

**Comments:** Roundup PowerMax (22 fl oz/A) + AMS (17 lb/100 gal) + warrant (3 pt/A) was applied to the entire study on June 9, 2011. The study was maintained weed-free throughout the growing season.

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Weed Code								GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Code								injury	injury	injury	injury	injury	injury
Rating Data Type								percent	percent	percent	percent	percent	percent
Rating Unit								06/16/11	06/20/11	06/27/11	06/30/11	07/06/11	07/12/11
Rating Date								3 DA-A	7 DA-A	14 DA-A	3 DA-B	9 DA-B	5 DA-C
Trt-Eval Interval								0	0	0	0	0	0
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
1	Cobra	2	EC	8	fl oz/a	V2	A	25	21	14		3	1
1	Herbimax (COC)		L	0.5	% v/v	V2	A						
2	Cobra	2	EC	12.5	fl oz/a	V2	A	30	25	15		4	4
2	Herbimax (COC)		L	0.5	% v/v	V2	A						
3	Flexstar	1.88	L	1	pt/a	V2	A	14	13	6		2	0
3	Herbimax (COC)		L	1	% v/v	V2	A						
3	AMS		WG	8.5	lb/100 gal	V2	A						
4	Untreated							0	0	0	0	0	0
5	Cobra	2	EC	8	fl oz/a	V6	B	0	0	0	11	7	5
5	Herbimax (COC)		L	0.5	% v/v	V6	B						
6	Cobra	2	EC	12.5	fl oz/a	V6	B	0	0	0	33	18	12
6	Herbimax (COC)		L	0.5	% v/v	V6	B						
7	Flexstar	1.88	L	1	pt/a	V6	B	0	0	0	15	8	5
7	Herbimax (COC)		L	1	% v/v	V6	B						
7	AMS		WG	8.5	lb/100 gal	V6	B						
8	Cobra	2	EC	8	fl oz/a	R1	C	0	0	0	0	0	16
8	Herbimax (COC)		L	0.5	% v/v	R1	C						
9	Cobra	2	EC	12.5	fl oz/a	R1	C	0	0	0	0	0	19
9	Herbimax (COC)		L	0.5	% v/v	R1	C						
10	Flexstar	1.88	L	1	pt/a	R1	C	0	0	0	0	0	11
10	Herbimax (COC)		L	1	% v/v	R1	C						
10	AMS		WG	8.5	lb/100 gal	R1	C						
11	Cobra	2	EC	8	fl oz/a	R3	D	0	0	0	0	0	0
11	Herbimax (COC)		L	0.5	% v/v	R3	D						
12	Cobra	2	EC	12.5	fl oz/a	R3	D	0	0	0	0	0	0
12	Herbimax (COC)		L	0.5	% v/v	R3	D						
13	Flexstar	1.88	L	1	pt/a	R3	D	0	0	0	0	0	0
13	Herbimax (COC)		L	1	% v/v	R3	D						
13	AMS		WG	8.5	lb/100 gal	R3	D						
14	Weed-free							0	0	0	0	0	0
LSD (P=.05)								0.7	1.5	1.2	1.7	1.8	2.7
Standard Deviation								0.5	1.0	0.9	1.2	1.3	1.9
CV								9.93	24.85	35.06	22.17	42.01	37.5

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	# Subsamples, Dec.	GLXMA injury percent 07/19/11 12 DA-C	GLXMA injury percent 08/09/11 5 DA-D	GLXMA injury percent 08/19/11 15 DA-D	GLXMA moisture percent 10/31/11	GLXMA yield bu/acre 10/31/11 at 13% M	
1	Cobra	2	EC	8	fl oz/a	V2	A	1	0	0	14.5	64.6
1	Herbimax (COC)		L	0.5	% v/v	V2	A					
2	Cobra	2	EC	12.5	fl oz/a	V2	A	2	0	0	14.5	68.1
2	Herbimax (COC)		L	0.5	% v/v	V2	A					
3	Flexstar	1.88	L	1	pt/a	V2	A	0	0	0	14.2	68.3
3	Herbimax (COC)		L	1	% v/v	V2	A					
3	AMS		WG	8.5	lb/100 gal	V2	A					
4	Untreated							0	0	0	14.3	63.9
5	Cobra	2	EC	8	fl oz/a	V6	B	3	0	0	14.5	67.7
5	Herbimax (COC)		L	0.5	% v/v	V6	B					
6	Cobra	2	EC	12.5	fl oz/a	V6	B	8	1	0	14.5	63.1
6	Herbimax (COC)		L	0.5	% v/v	V6	B					
7	Flexstar	1.88	L	1	pt/a	V6	B	2	0	0	14.5	65.4
7	Herbimax (COC)		L	1	% v/v	V6	B					
7	AMS		WG	8.5	lb/100 gal	V6	B					
8	Cobra	2	EC	8	fl oz/a	R1	C	13	0	0	14.4	64.6
8	Herbimax (COC)		L	0.5	% v/v	R1	C					
9	Cobra	2	EC	12.5	fl oz/a	R1	C	15	1	0	14.5	62.4
9	Herbimax (COC)		L	0.5	% v/v	R1	C					
10	Flexstar	1.88	L	1	pt/a	R1	C	9	0	0	14.7	70.2
10	Herbimax (COC)		L	1	% v/v	R1	C					
10	AMS		WG	8.5	lb/100 gal	R1	C					
11	Cobra	2	EC	8	fl oz/a	R3	D	0	9	6	14.5	59.9
11	Herbimax (COC)		L	0.5	% v/v	R3	D					
12	Cobra	2	EC	12.5	fl oz/a	R3	D	0	7	6	14.6	59.5
12	Herbimax (COC)		L	0.5	% v/v	R3	D					
13	Flexstar	1.88	L	1	pt/a	R3	D	0	6	4	14.6	67.9
13	Herbimax (COC)		L	1	% v/v	R3	D					
13	AMS		WG	8.5	lb/100 gal	R3	D					
14	Weed-free							0	0	0	14.4	66.2
LSD (P=.05)							3.1	1.1	0.7	0.29	7.76	
Standard Deviation							2.2	0.8	0.5	0.20	5.43	
CV							59.31	48.81	45.89	1.39	8.33	