

MSU Weed Science Research Program

Comparison of soil-applied herbicides for use in soybean

Trial ID: SOY04-13 Study Dir.: Sprague, Powell
 Conducted: Campus C-12 Investigator: Christy Sprague

Date Planted: May/08/2013 **Row Spacing:** 30 IN
Variety: AG2433RR **No. of Reps:** 4
Population: 155,000 seeds/A **% OM:** 3.9
Soil Type: Silt loam **pH:** 7.6
Plot Size: 10 X 30 FT **Design:** RANDOMIZED COMPLETE BLOCK

Tillage: Fall chisel plow, spring soil finish x2

Fertilizer: None
Crop Code Common Name
 1. GLXMA SOYBEAN

Application Description

Application Timing: A
 PRE
Date Treated: May/08/2013
Time Treated: 2:00 PM
% Cloud Cover: 60
Air Temp., Unit: 80 F
% Relative Humidity: 27
Wind Speed/Unit/Dir: 4 mph NE
Soil Temp., Unit: 68 F
Soil/Leaf Surface M: 3 -
Soil Moist (1=w 5=d): 3

Crop Stage at Each Application

Crop Name: A
 GLXMA
Height (In.): -
Stage (L): -

Weed Density (plants/sq. ft.)

	1	2	3	4
Date:	Jul/11/2013	Jul/11/2013	Jul/11/2013	Jul/11/2013
Weed Name:	ANGR	CHEAL	AMBEL	ABUTH
Density:	14	4	39	<1

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom			
A	Type	MPH	Type	Size	Height	Spacing	Width	GPA	Carrier	PSI
A	Cub	3.8	AIXR	11003	22"	20"	100"	19	water	35

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Trial ID: SOY04-13 Study Dir.: Sprague, Powell
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Weed Code	ANGR	CHEAL	AMBEL	GLXMA
Crop Code	GLXMA			GLXMA
Rating Data Type	injury	control	control	injury
Rating Unit	percent	percent	percent	percent
Rating Date	Jun/05/2013	Jun/05/2013	Jun/05/2013	Jun/19/2013
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	42 DA-A
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Grow Stg	Appl Code	GLXMA injury percent	ANGR control percent	CHEAL control percent	AMBEL control percent	GLXMA injury percent
1	Valor	51	WG	2	oz/a	PRE	A	21	99	96	75	0
2	Valor	51	WG	3	oz/a	PRE	A	35	99	99	86	2
3	Fierce	76	WG	3	oz/a	PRE	A	28	99	99	90	2
4	Fierce	76	WG	3.75	oz/a	PRE	A	40	99	99	94	4
5	Valor XLT	40	WG	3	oz/a	PRE	A	20	99	99	83	7
6	Gangster FR	84	WG	0.4	oz/a	PRE	A	23	99	99	92	4
	Gangster V	51	WG	2	oz/a	PRE	A					
7	Untreated							0	0	0	0	0
8	Authority XL	70	WG	4	oz/a	PRE	A	0	53	99	55	0
9	Sonic	70	WG	3.2	oz/a	PRE	A	0	54	99	53	0
10	Sonic	70	WG	4	oz/a	PRE	A	0	56	99	61	0
11	Enlite (2.8 oz/A)							19	99	99	84	1
	Classic (Premix)	25	WG	0.32	oz/a	PRE	A					
	Valor (Premix)	51	WG	2	oz/a	PRE	A					
	Harmony SG (Premix)	50	WG	0.5	oz/a	PRE	A					
12	Fierce	76	WG	2.5	oz/a	PRE	A	25	99	99	94	10
	Classic	25	WG	1	oz/a	PRE	A					
13	Fierce	76	WG	2.75	oz/a	PRE	A	23	99	99	92	3
	Classic	25	WG	1	oz/a	PRE	A					
14	Fierce	76	WG	3	oz/a	PRE	A	29	99	99	97	8
	Classic	25	WG	1	oz/a	PRE	A					
15	Fierce	76	WG	2.5	oz/a	PRE	A	23	99	99	97	7
	Gangster FR	84	WG	0.3	oz/a	PRE	A					
16	Fierce	76	WG	2.75	oz/a	PRE	A	29	99	99	97	8
	Gangster FR	84	WG	0.3	oz/a	PRE	A					
17	Fierce	76	WG	3	oz/a	PRE	A	34	98	99	96	9
	Gangster FR	84	WG	0.3	oz/a	PRE	A					
18	Fierce	76	WG	2.75	oz/a	PRE	A	33	99	99	99	11
	Gangster FR	84	WG	0.4	oz/a	PRE	A					
19	Fierce	76	WG	2.75	oz/a	PRE	A	31	99	99	95	7
	Classic	25	WG	0.33	oz/a	PRE	A					
LSD (P=.05)								8.1	6.7	1.8	7.7	5.8
CV								26.58	5.44	1.36	6.73	95.13

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

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Weed Code		ANGR	CHEAL	AMBEL	ABUTH	GLXMA
Crop Code						
Rating Data Type		control	control	control	control	injury
Rating Unit		percent	percent	percent	percent	percent
Rating Date		Jun/19/2013	Jun/19/2013	Jun/19/2013	Jun/19/2013	Jul/03/2013
Trt-Eval Interval		42 DA-A	42 DA-A	42 DA-A	42 DA-A	56 DA-A
# Subsamples, Dec.		0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg	Code	ANGR	CHEAL	AMBEL	ABUTH	GLXMA
1	Valor	51	WG	2	oz/a	PRE	A	84	93	56	99	0
2	Valor	51	WG	3	oz/a	PRE	A	97	99	73	99	0
3	Fierce	76	WG	3	oz/a	PRE	A	99	99	75	99	0
4	Fierce	76	WG	3.75	oz/a	PRE	A	99	99	85	99	0
5	Valor XLT	40	WG	3	oz/a	PRE	A	98	99	71	99	2
6	Gangster FR	84	WG	0.4	oz/a	PRE	A	99	99	83	99	1
	Gangster V	51	WG	2	oz/a	PRE	A					
7	Untreated							0	0	0	0	0
8	Authority XL	70	WG	4	oz/a	PRE	A	75	99	28	99	0
9	Sonic	70	WG	3.2	oz/a	PRE	A	58	99	40	99	0
10	Sonic	70	WG	4	oz/a	PRE	A	64	99	54	99	0
11	Enlite (2.8 oz/A)							98	99	72	99	0
	Classic (Premix)	25	WG	0.32	oz/a	PRE	A					
	Valor (Premix)	51	WG	2	oz/a	PRE	A					
	Harmony SG (Premix)	50	WG	0.5	oz/a	PRE	A					
12	Fierce	76	WG	2.5	oz/a	PRE	A	99	99	84	99	1
	Classic	25	WG	1	oz/a	PRE	A					
13	Fierce	76	WG	2.75	oz/a	PRE	A	99	99	79	99	1
	Classic	25	WG	1	oz/a	PRE	A					
14	Fierce	76	WG	3	oz/a	PRE	A	99	99	84	99	1
	Classic	25	WG	1	oz/a	PRE	A					
15	Fierce	76	WG	2.5	oz/a	PRE	A	99	99	89	99	1
	Gangster FR	84	WG	0.3	oz/a	PRE	A					
16	Fierce	76	WG	2.75	oz/a	PRE	A	99	99	89	99	2
	Gangster FR	84	WG	0.3	oz/a	PRE	A					
17	Fierce	76	WG	3	oz/a	PRE	A	98	99	89	99	2
	Gangster FR	84	WG	0.3	oz/a	PRE	A					
18	Fierce	76	WG	2.75	oz/a	PRE	A	99	99	92	99	3
	Gangster FR	84	WG	0.4	oz/a	PRE	A					
19	Fierce	76	WG	2.75	oz/a	PRE	A	99	99	84	99	0
	Classic	25	WG	0.33	oz/a	PRE	A					
LSD (P=.05)								8.4	3.9	10.8	0.0	1.8
CV								6.83	2.95	10.95	0.0	206.55

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

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Weed Code	ANGR	CHEAL	AMBEL	ABUTH
Crop Code				
Rating Data Type	control	control	control	control
Rating Unit	percent	percent	percent	percent
Rating Date	Jul/03/2013	Jul/03/2013	Jul/03/2013	Jul/03/2013
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Grow Stg	Appl Code	ANGR	CHEAL	AMBEL	ABUTH
1	Valor	51	WG	2	oz/a	PRE	A	83	96	41	99
2	Valor	51	WG	3	oz/a	PRE	A	85	99	64	99
3	Fierce	76	WG	3	oz/a	PRE	A	99	99	66	99
4	Fierce	76	WG	3.75	oz/a	PRE	A	99	99	80	99
5	Valor XLT	40	WG	3	oz/a	PRE	A	96	99	55	99
6	Gangster FR	84	WG	0.4	oz/a	PRE	A	78	99	71	99
	Gangster V	51	WG	2	oz/a	PRE	A				
7	Untreated							0	0	0	0
8	Authority XL	70	WG	4	oz/a	PRE	A	66	99	10	99
9	Sonic	70	WG	3.2	oz/a	PRE	A	61	99	25	99
10	Sonic	70	WG	4	oz/a	PRE	A	68	99	35	99
11	Enlite (2.8 oz/A)							89	99	59	99
	Classic (Premix)	25	WG	0.32	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.5	oz/a	PRE	A				
12	Fierce	76	WG	2.5	oz/a	PRE	A	98	99	73	99
	Classic	25	WG	1	oz/a	PRE	A				
13	Fierce	76	WG	2.75	oz/a	PRE	A	98	99	69	99
	Classic	25	WG	1	oz/a	PRE	A				
14	Fierce	76	WG	3	oz/a	PRE	A	99	99	77	99
	Classic	25	WG	1	oz/a	PRE	A				
15	Fierce	76	WG	2.5	oz/a	PRE	A	98	99	79	99
	Gangster FR	84	WG	0.3	oz/a	PRE	A				
16	Fierce	76	WG	2.75	oz/a	PRE	A	97	99	78	99
	Gangster FR	84	WG	0.3	oz/a	PRE	A				
17	Fierce	76	WG	3	oz/a	PRE	A	96	99	78	99
	Gangster FR	84	WG	0.3	oz/a	PRE	A				
18	Fierce	76	WG	2.75	oz/a	PRE	A	99	99	83	99
	Gangster FR	84	WG	0.4	oz/a	PRE	A				
19	Fierce	76	WG	2.75	oz/a	PRE	A	98	99	75	99
	Classic	25	WG	0.33	oz/a	PRE	A				
LSD (P=.05)								7.7	2.3	13.3	0.0
CV								6.48	1.72	16.03	0.0

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