

MSU Weed Science Research Program

Evaluation of Trivence for weed control in soybean

Trial ID: SOY08-13 Study Dir.: Sprague, Powell
 Conducted: Campus C-14 Investigator: Christy Sprague

Date Planted: May/08/2013 **Row Spacing:** 30 IN
Variety: AG2433RR **No. of Reps:** 4
Population: 155,000 seeds/A **% OM:** 2.9
Soil Type: Silt loam **pH:** 7.0
Plot Size: 10 X 30 FT **Design:** RANDOMIZED COMPLETE BLOCK

Tillage: Fall chisel, spring soil finish x2
Fertilizer: None

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	ANGR	mainly foxtail species	SETARIA SP.
2.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
3.	AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
4.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
5.	SINAR	MUSTARD, WILD	SINAPIS ARVENSIS L.
Crop	Code	Common Name	
1.	GLXMA	SOYBEAN	

Application Description

	A	B
Application Timing:	PRE	POST
Date Treated:	May/08/2013	Jun/19/2013
Time Treated:	4:30 PM	10:00 AM
% Cloud Cover:	60	0
Air Temp., Unit:	80 F	63 F
% Relative Humidity:	27	47
Wind Speed/Unit/Dir:	4 mph NE	4 mph NE
Soil Temp., Unit:	68 F	60 F
Soil/Leaf Surface M:	3 -	2 4
Soil Moist (1=w 5=d):	3	2

Crop Stage at Each Application

	A	B
Crop Name:	GLXMA	GLXMA
Height (In.):	-	7"
Stage (L):	-	V3

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height (In.):	-	8"
Stage (L):	-	5
Weed 2 Name:	CHEAL	CHEAL
Height (In.):	-	4"
Stage (L):	-	12
Weed 3 Name:	AMBEL	AMBEL
Height (In.):	-	6"
Stage (L):	-	many
Weed 4 Name:	ABUTH	ABUTH
Height (In.):	-	2"
Stage (L):	-	4
Weed 5 Name:	SINAR	SINAR
Height (In.):	-	6"
Stage (L):	-	bolting

Weed Density (plants/sq. ft.)

	1	2	3	4	5
Date:	Jul/11/2013	Jul/11/2013	Jul/11/2013	Jul/11/2013	Jul/11/2013
Weed Name:	ANGR	CHEAL	AMBEL	ABUTH	SINAR
Density:	14	5	40	3	4

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom				
	Type	MPH	Type	Size	Height	Spacing	Width	GPA	Carrier	PSI	
A	Cub	3.8	AIXR	11003	22"	20"	100"	19	water	30	
B	Cub	3.8	AIXR	11003	25"	20"	100"	19	water	35	

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Weed Code							ANGR	CHEAL	AMBEL
Crop Code						GLXMA			
Rating Data Type						injury	control	control	control
Rating Unit						percent	percent	percent	percent
Rating Date						Jun/07/2013	Jun/07/2013	Jun/07/2013	Jun/07/2013
Trt-Eval Interval						30 DA-A	30 DA-A	30 DA-A	30 DA-A
# Subsamples, Dec.						0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code				
1	Envive (3.5 oz/A)							24	99	99	94
	Classic (Premix)	25	WG	1.28	oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.2	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
2	Envive (3.5 oz/A)							29	99	99	96
	Classic (Premix)	25	WG	1.28	oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.2	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
3	Canopy	75	WG	4	oz/a	PRE	A	5	98	99	66
	Cinch	7.64	L	1	pt/a	PRE	A				
4	Canopy	75	WG	4	oz/a	PRE	A	6	96	99	68
	Cinch	7.64	L	1	pt/a	PRE	A				
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
5	Untreated							0	0	0	0
6	Trivence (8 oz/A)							25	99	99	97
	Classic (Premix)	25	WG	1.25	oz/a	PRE	A				
	Sencor (Premix)	75	WG	4.75	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
7	Trivence (8 oz/A)							35	99	99	96
	Classic (Premix)	25	WG	1.25	oz/a	PRE	A				
	Sencor (Premix)	75	WG	4.75	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
8	Boundary	6.5	L	1.5	pt/a	PRE	A	7	99	99	69
9	Boundary	6.5	L	1.5	pt/a	PRE	A	6	99	99	69
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
LSD (P=.05)								6.3	2.2	0.0	4.2
CV								28.52	1.7	0.0	3.96

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

MSU Weed Science Research Program

Weed Code	ABUTH	SINAR	GLXMA	ANGR
Crop Code				
Rating Data Type	control	control	injury	control
Rating Unit	percent	percent	percent	percent
Rating Date	Jun/07/2013	Jun/07/2013	Jun/18/2013	Jun/18/2013
Trt-Eval Interval	30 DA-A	30 DA-A	41 DA-A	41 DA-A
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code	ABUTH	SINAR	GLXMA	ANGR
1	Envive (3.5 oz/A)							99	99	9	97
	Classic (Premix)	25	WG	1.28	oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.2	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
2	Envive (3.5 oz/A)							99	99	11	96
	Classic (Premix)	25	WG	1.28	oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.2	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
3	Canopy	75	WG	4	oz/a	PRE	A	99	99	9	96
	Cinch	7.64	L	1	pt/a	PRE	A				
4	Canopy	75	WG	4	oz/a	PRE	A	98	99	8	95
	Cinch	7.64	L	1	pt/a	PRE	A				
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
5	Untreated							0	0	0	0
6	Trivence (8 oz/A)							99	99	8	97
	Classic (Premix)	25	WG	1.25	oz/a	PRE	A				
	Sencor (Premix)	75	WG	4.75	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
7	Trivence (8 oz/A)							99	99	14	98
	Classic (Premix)	25	WG	1.25	oz/a	PRE	A				
	Sencor (Premix)	75	WG	4.75	oz/a	PRE	A				
	Valor (Premix)	51	WG	2	oz/a	PRE	A				
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
8	Boundary	6.5	L	1.5	pt/a	PRE	A	86	99	3	97
9	Boundary	6.5	L	1.5	pt/a	PRE	A	83	99	3	98
	Abundit Extra	3	SL	1	qt/a	POST	B				
	AMS		WG	17	lb/100 gal	POST	B				
LSD (P=.05)								12.3	0.0	4.9	3.1
CV								9.98	0.0	48.45	2.49

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

MSU Weed Science Research Program

Weed Code	CHEAL	AMBEL	ABUTH	SINAR						
Crop Code										
Rating Data Type	control	control	control	control						
Rating Unit	percent	percent	percent	percent						
Rating Date	Jun/18/2013	Jun/18/2013	Jun/18/2013	Jun/18/2013						
Trt-Eval Interval	41 DA-A	41 DA-A	41 DA-A	41 DA-A						
# Subsamples, Dec.	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Grow Stg	Appl Code				
1	Envive (3.5 oz/A)						99	92	99	99
	Classic (Premix)	25	WG	1.28 oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.2 oz/a	PRE	A				
	Valor (Premix)	51	WG	2 oz/a	PRE	A				
2	Envive (3.5 oz/A)						99	93	99	99
	Classic (Premix)	25	WG	1.28 oz/a	PRE	A				
	Harmony SG (Premix)	50	WG	0.2 oz/a	PRE	A				
	Valor (Premix)	51	WG	2 oz/a	PRE	A				
	Abundit Extra	3	SL	1 qt/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
3	Canopy	75	WG	4 oz/a	PRE	A	99	65	99	99
	Cinch	7.64	L	1 pt/a	PRE	A				
4	Canopy	75	WG	4 oz/a	PRE	A	99	66	99	99
	Cinch	7.64	L	1 pt/a	PRE	A				
	Abundit Extra	3	SL	1 qt/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
5	Untreated						0	0	0	0
6	Trivence (8 oz/A)						99	93	99	99
	Classic (Premix)	25	WG	1.25 oz/a	PRE	A				
	Sencor (Premix)	75	WG	4.75 oz/a	PRE	A				
	Valor (Premix)	51	WG	2 oz/a	PRE	A				
7	Trivence (8 oz/A)						99	91	99	99
	Classic (Premix)	25	WG	1.25 oz/a	PRE	A				
	Sencor (Premix)	75	WG	4.75 oz/a	PRE	A				
	Valor (Premix)	51	WG	2 oz/a	PRE	A				
	Abundit Extra	3	SL	1 qt/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
8	Boundary	6.5	L	1.5 pt/a	PRE	A	97	64	80	97
9	Boundary	6.5	L	1.5 pt/a	PRE	A	98	59	83	87
	Abundit Extra	3	SL	1 qt/a	POST	B				
	AMS		WG	17 lb/100 gal	POST	B				
LSD (P=.05)							2.3	5.7	14.2	11.8
CV							1.78	5.64	11.56	9.4

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

MSU Weed Science Research Program

Weed Code										
Crop Code										
Rating Data Type						GLXMA	ANGR	CHEAL	AMBEL	ABUTH
Rating Unit						injury	control	control	control	control
Rating Date						percent	percent	percent	percent	percent
Trt-Eval Interval						Jul/03/2013	Jul/03/2013	Jul/03/2013	Jul/03/2013	Jul/03/2013
# Subsamples, Dec.						14 DA-B	14 DA-B	14 DA-B	14 DA-B	14 DA-B
						0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code					
1	Envive (3.5 oz/A)							1	97	99	82	99
	Classic (Premix)	25	WG	1.28	oz/a	PRE	A					
	Harmony SG (Premix)	50	WG	0.2	oz/a	PRE	A					
	Valor (Premix)	51	WG	2	oz/a	PRE	A					
2	Envive (3.5 oz/A)							4	99	99	97	99
	Classic (Premix)	25	WG	1.28	oz/a	PRE	A					
	Harmony SG (Premix)	50	WG	0.2	oz/a	PRE	A					
	Valor (Premix)	51	WG	2	oz/a	PRE	A					
	Abundit Extra	3	SL	1	qt/a	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
3	Canopy	75	WG	4	oz/a	PRE	A	3	98	99	40	99
	Cinch	7.64	L	1	pt/a	PRE	A					
4	Canopy	75	WG	4	oz/a	PRE	A	5	99	99	95	99
	Cinch	7.64	L	1	pt/a	PRE	A					
	Abundit Extra	3	SL	1	qt/a	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
5	Untreated							0	0	0	0	0
6	Trivence (8 oz/A)							0	97	99	91	99
	Classic (Premix)	25	WG	1.25	oz/a	PRE	A					
	Sencor (Premix)	75	WG	4.75	oz/a	PRE	A					
	Valor (Premix)	51	WG	2	oz/a	PRE	A					
7	Trivence (8 oz/A)							4	99	99	97	99
	Classic (Premix)	25	WG	1.25	oz/a	PRE	A					
	Sencor (Premix)	75	WG	4.75	oz/a	PRE	A					
	Valor (Premix)	51	WG	2	oz/a	PRE	A					
	Abundit Extra	3	SL	1	qt/a	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
8	Boundary	6.5	L	1.5	pt/a	PRE	A	0	98	97	39	75
9	Boundary	6.5	L	1.5	pt/a	PRE	A	0	99	99	95	98
	Abundit Extra	3	SL	1	qt/a	POST	B					
	AMS		WG	17	lb/100 gal	POST	B					
LSD (P=.05)								5.5	1.3	1.6	8.6	13.7
CV								208.55	1.04	1.28	8.33	11.05

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

MSU Weed Science Research Program

Weed Code										
Crop Code										
Rating Data Type										
Rating Unit										
Rating Date										
Trt-Eval Interval										
# Subsamples, Dec.										

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Grow Stg	Appl Code					
1	Envive (3.5 oz/A)						0	77	99	30	98
	Classic (Premix)	25	WG	1.28 oz/a	PRE	A					
	Harmony SG (Premix)	50	WG	0.2 oz/a	PRE	A					
	Valor (Premix)	51	WG	2 oz/a	PRE	A					
2	Envive (3.5 oz/A)						0	91	99	96	98
	Classic (Premix)	25	WG	1.28 oz/a	PRE	A					
	Harmony SG (Premix)	50	WG	0.2 oz/a	PRE	A					
	Valor (Premix)	51	WG	2 oz/a	PRE	A					
	Abundit Extra	3	SL	1 qt/a	POST	B					
	AMS		WG	17 lb/100 gal	POST	B					
3	Canopy	75	WG	4 oz/a	PRE	A	0	94	99	0	99
	Cinch	7.64	L	1 pt/a	PRE	A					
4	Canopy	75	WG	4 oz/a	PRE	A	0	97	99	89	97
	Cinch	7.64	L	1 pt/a	PRE	A					
	Abundit Extra	3	SL	1 qt/a	POST	B					
	AMS		WG	17 lb/100 gal	POST	B					
5	Untreated						0	0	0	0	0
6	Trivence (8 oz/A)						0	85	99	35	99
	Classic (Premix)	25	WG	1.25 oz/a	PRE	A					
	Sencor (Premix)	75	WG	4.75 oz/a	PRE	A					
	Valor (Premix)	51	WG	2 oz/a	PRE	A					
7	Trivence (8 oz/A)						0	91	99	95	98
	Classic (Premix)	25	WG	1.25 oz/a	PRE	A					
	Sencor (Premix)	75	WG	4.75 oz/a	PRE	A					
	Valor (Premix)	51	WG	2 oz/a	PRE	A					
	Abundit Extra	3	SL	1 qt/a	POST	B					
	AMS		WG	17 lb/100 gal	POST	B					
8	Boundary	6.5	L	1.5 pt/a	PRE	A	0	96	99	0	95
9	Boundary	6.5	L	1.5 pt/a	PRE	A	0	96	99	93	93
	Abundit Extra	3	SL	1 qt/a	POST	B					
	AMS		WG	17 lb/100 gal	POST	B					
LSD (P=.05)							0.0	9.7	0.7	9.1	4.2
CV							0.0	8.23	0.55	12.77	3.31

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