

MSU Weed Science Research Program

Evaluation of Water Quality Products and Coverage G-20

Trial ID: SOY11-07
Conducted: C-18E

Study Dir.: Sprague, Powell
Investigator: Christy Sprague

Date Planted: 5/8/07	Row Spacing: 30 IN
Variety: Pioneer 91M91	No. of Reps: 4
Population: 155,000 seeds/acre	% OM: 2.6
Soil Type: Sandy Clay Loam	pH: 6.7
Plot Size: 10 X 30 FT	Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall Chisel Plow, Spring Soil X2
Fertilizer: None at Planting

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
2.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
3.	AMAPO	AMARANTH, POWELL	AMARANTHUS POWELLII S.WATS.
4.	CHEAL	COMMON LAMBSQUARTERS	CHENOPODIUM ALBUM L.
5.	ANGR	mostly foxtail species	SETARIA SP.
Crop	Code	Common Name	
1.	GLXMA	SOYBEAN	

Application Description

A

Application Timing: POST
Date Treated: 6/11/07
Time Treated: 11:30 am
% Cloud Cover: 0
Air Temp., Unit: 80 F
% Relative Humidity: 42
Wind Speed/Unit/Dir: 6 mph NE
Soil Temp., Unit: 76 F
Soil/Leaf Surface M: 5 5
Soil Moist (1=w 5=d): 5

Crop Stage at Each Application

A

Crop Name: GLXMA
Height (In.): 5-7"
Stage (L): V2

Weed Stage at Each Application

A

Weed 1 Name: AMBEL
Height (In.): 2-5"
Stage (L): 6-many

Weed 2 Name: ABUTH
Height (In.): 1-4"
Stage (L): 2-4

Weed 3 Name: AMAPO
Height (In.): 1-3"
Stage (L): 4-10

Weed 4 Name: CHEAL
Height (In.): 1/2-3"
Stage (L): 2-many

Weed 5 Name: ANGR
Height (In.): 2-5"
Stage (L): 3-4

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Weed Density (plants/sq. ft.)

	1	2	3	4	5
Date:	7/9/07	7/9/07	7/9/07	7/9/07	7/9/07
Weed Name:	CHEAL	ABUTH	ANGR	AMAPO	AMBEL
Density:	20	< 1	16	5	11

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom			
	Type	MPH	Type	Size	Height	Spacing	Width	GPA	Carrier	PSI
A	CUB	3.8	AirMix	11003	27"	20"	100"	19	Water	27

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Weed Code								ANGR	CHEAL	AMAPO	AMBEL	ABUTH	ANGR	AMBEL	
Crop Code						GLXMA									
Rating Data Type						injury		control	control	control	control	control	control	control	
Rating Unit						percent		percent	percent	percent	percent	percent	percent	percent	
Rating Date						6/18/07		6/18/07	6/18/07	6/18/07	6/18/07	6/18/07	6/25/07	6/25/07	
Trt-Eval Interval						7 DA-A		7 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code								
1	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	0	63	50	58	46	25	55	40
1	Buccaneer Plus	3	SL	8	fl oz/a	POST	A								
2	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	0	74	53	68	53	38	70	39
2	Cut-Rate		WG	3	lb/100 gal	POST	A								
2	Buccaneer Plus	3	SL	8	fl oz/a	POST	A								
2	Coverage G-20		L	2	fl oz/100 gal	POST	A								
3	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	0	80	53	61	50	36	76	44
3	Cut-Rate		WG	4	lb/100 gal	POST	A								
3	Buccaneer Plus	3	SL	8	fl oz/a	POST	A								
3	Coverage G-20		L	2	fl oz/100 gal	POST	A								
4	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	0	83	63	92	58	51	87	42
4	Bronc Max		WG	2	qt/a	POST	A								
4	Buccaneer Plus	3	SL	8	fl oz/a	POST	A								
4	Coverage G-20		L	2	fl oz/100 gal	POST	A								
5	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	0	86	60	80	58	55	85	48
5	AMS		WG	17	lb/100 gal	POST	A								
5	Buccaneer Plus	3	SL	8	fl oz/a	POST	A								
5	Coverage G-20		L	2	fl oz/100 gal	POST	A								
6	Untreated							0	0	0	0	0	0	0	0
LSD (P=.05)								0.0	7.3	3.7	13.4	6.8	11.3	11.5	11.3
Standard Deviation								0.0	4.9	2.5	8.9	4.5	7.5	7.6	7.5
CV								0.0	7.59	5.32	14.86	10.3	21.81	12.18	21.13

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Weed Code						AMAPO	ABUTH	CHEAL	ANGR	AMBEL	ABUTH	AMAPO		
Crop Code						control	control	control	control	control	control	control		
Rating Data Type						percent	percent	percent	percent	percent	percent	percent		
Rating Unit						6/25/07	6/25/07	6/25/07	7/10/07	7/10/07	7/10/07	7/10/07		
Rating Date						14 DA-A	14 DA-A	14 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A		
Trt-Eval Interval						14 DA-A	14 DA-A	14 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code							
1	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	81	18	33	46	58		
1	Buccaneer Plus	3	SL	8	fl oz/a	POST	A					73		
												98		
2	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	86	25	35	65	64		
2	Cut-Rate		WG	3	lb/100 gal	POST	A					46		
2	Buccaneer Plus	3	SL	8	fl oz/a	POST	A					97		
2	Coverage G-20		L	2	fl oz/100 gal	POST	A							
3	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	81	26	41	60	65		
3	Cut-Rate		WG	4	lb/100 gal	POST	A					35		
3	Buccaneer Plus	3	SL	8	fl oz/a	POST	A					99		
3	Coverage G-20		L	2	fl oz/100 gal	POST	A							
4	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	95	34	65	76	68		
4	Bronc Max		WG	2	qt/a	POST	A					52		
4	Buccaneer Plus	3	SL	8	fl oz/a	POST	A					99		
4	Coverage G-20		L	2	fl oz/100 gal	POST	A							
5	CACL (400 ppm)		WG	0.147	g/100 ml	POST	A	93	46	48	71	68		
5	AMS		WG	17	lb/100 gal	POST	A					70		
5	Buccaneer Plus	3	SL	8	fl oz/a	POST	A					99		
5	Coverage G-20		L	2	fl oz/100 gal	POST	A							
6	Untreated							0	0	0	0	0		
LSD (P=.05)								7.0	11.7	9.2	14.5	13.5	13.4	1.8
Standard Deviation								4.6	7.7	6.1	9.5	8.9	8.8	1.2
CV								6.31	31.19	16.46	17.99	16.56	19.18	1.47