

Comparison of different non-ionic surfactants with glyphosate (9002-0902)

Trial ID: SOY05-09
Conducted: C-14

Study Dir.: Sprague, Powell
Investigator: Christy Sprague

Date Planted: 5/18/09	Row Spacing: 30 IN
Variety: Pioneer 92M61 RR	No. of Reps: 4
Population: 156,000	% OM: 2.8
Soil Type: Clay Loam	pH: 7.0
Plot Size: 10 X 30 FT	Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall moldboard plow, spring soil finished twice
Fertilizer: None

Crop and Weed Description

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

Application Description

Application Timing: POST
Date Treated: 6/24/09
Time Treated: 10:45 am
% Cloud Cover: 0
Air Temp., Unit: 93 F
% Relative Humidity: 56
Wind Speed/Unit/Dir: 2 mph SW
Soil Temp., Unit: 75 F
Soil/Leaf Surface M: 3 3
Soil Moist (1=w 5=d): 3

Crop Stage at Each Application

Crop Name: GLXMA
Height (In.): 8
Stage (L): V4

Weed Stage at Each Application

Weed 1 Name: ABUTH
Height (In.): 2
Stage (L): 4
Weed 2 Name: ANGR
Height (In.): 5
Stage (L): 4
Weed 3 Name: CHEAL
Height (In.): 2-4
Stage (L): many
Weed 4 Name: AMBEL
Height (In.): 5
Stage (L): many
Weed 5 Name: AMAPO
Height (In.): 3-4
Stage (L): many

Weed Density (plants/sq. ft.)

	1	2	3	4	5	6
Weed Name:	ANGR	AMBEL	ABUTH	AMAPO	CHEAL	BRAKA
Density:	20	16	2	<1	3	<1

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom	GPA	Carrier	PSI
	Type	MPH	Type	Size	Height	Spacing	Width			
A	Cub	3.8	AirMix	11015	27"	20"	100"	10	water	35

Comments: Water damage in replication 1 may have put weeds under stress.

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Weed Code								ANGR	AMBEL	ABUTH	CHEAL	ANGR	AMBEL	ABUTH	CHEAL				
Crop Code								GLXMA										GLXMA	
Rating Data Type								injury	control	control	control	control	control	control	control	control	control	injury	
Rating Unit								percent	percent	percent	percent	percent	percent	percent	percent	percent	percent	percent	
Rating Date								7/2/09	7/2/09	7/2/09	7/2/09	7/7/09	7/7/09	7/7/09	7/7/09	7/7/09	7/7/09	7/21/09	
Trt-Eval Interval								8 DA-A	8 DA-A	8 DA-A	8 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	27 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code												
1	Buccaneer	3	SL	16	fl oz/a	POST	A	3	95	73	83	66	99	94	81	76	0		
1	AMS		WG	8.5	lb/100 gal	POST	A												
2	Buccaneer	3	SL	16	fl oz/a	POST	A	6	95	81	73	97	99	97	81	98	0		
2	WE1002-2		L	1	qt/100 gal	POST	A												
2	AMS		WG	8.5	lb/100 gal	POST	A												
3	Buccaneer	3	SL	16	fl oz/a	POST	A	0	95	80	76	97	99	97	84	95	0		
3	WE1003-1		L	1	qt/100 gal	POST	A												
3	AMS		WG	8.5	lb/100 gal	POST	A												
4	Untreated							0	0	0	0	0	0	0	0	0	0		
5	Buccaneer	3	SL	16	fl oz/a	POST	A	2	95	78	75	98	99	96	90	99	0		
5	WE1008-1		L	1	qt/100 gal	POST	A												
5	AMS		WG	8.5	lb/100 gal	POST	A												
6	Buccaneer	3	SL	16	fl oz/a	POST	A	3	95	76	78	97	99	96	87	98	0		
6	WE1138-1		L	1	qt/100 gal	POST	A												
6	AMS		WG	8.5	lb/100 gal	POST	A												
7	Buccaneer	3	SL	16	fl oz/a	POST	A	3	95	70	75	95	99	96	88	95	0		
7	WE1139-1		L	1	qt/100 gal	POST	A												
7	AMS		WG	8.5	lb/100 gal	POST	A												
8	Buccaneer	3	SL	16	fl oz/a	POST	A	3	95	79	87	93	99	97	92	96	0		
8	WE1140-1		L	1	qt/100 gal	POST	A												
8	AMS		WG	8.5	lb/100 gal	POST	A												
LSD (P=.05)								4.5	0.0	7.4	15.6	13.5	0.3	2.8	9.0	14.4	0.0		
Standard Deviation								3.1	0.0	5.0	10.6	9.2	0.2	1.9	6.1	8.6	0.0		
CV								139.97	0.0	7.49	15.51	11.44	0.2	2.3	8.1	10.53	0.0		

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Weed Code	ANGR	CHEAL	AMBEL	AMAPO	ABUTH
Crop Code					
Rating Data Type	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	7/21/09	7/21/09	7/21/09	7/21/09	7/21/09
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	ANGR	CHEAL	AMBEL	AMAPO	ABUTH
1	Buccaneer	3	SL	16	fl oz/a	POST	A	91	88	85	99	89
1	AMS		WG	8.5	lb/100 gal	POST	A					
2	Buccaneer	3	SL	16	fl oz/a	POST	A	94	99	88	99	86
2	WE1002-2		L	1	qt/100 gal	POST	A					
2	AMS		WG	8.5	lb/100 gal	POST	A					
3	Buccaneer	3	SL	16	fl oz/a	POST	A	96	98	94	99	95
3	WE1003-1		L	1	qt/100 gal	POST	A					
3	AMS		WG	8.5	lb/100 gal	POST	A					
4	Untreated							0	0	0	0	0
5	Buccaneer	3	SL	16	fl oz/a	POST	A	97	98	97	99	91
5	WE1008-1		L	1	qt/100 gal	POST	A					
5	AMS		WG	8.5	lb/100 gal	POST	A					
6	Buccaneer	3	SL	16	fl oz/a	POST	A	93	96	87	99	90
6	WE1138-1		L	1	qt/100 gal	POST	A					
6	AMS		WG	8.5	lb/100 gal	POST	A					
7	Buccaneer	3	SL	16	fl oz/a	POST	A	90	93	86	99	86
7	WE1139-1		L	1	qt/100 gal	POST	A					
7	AMS		WG	8.5	lb/100 gal	POST	A					
8	Buccaneer	3	SL	16	fl oz/a	POST	A	94	96	91	99	93
8	WE1140-1		L	1	qt/100 gal	POST	A					
8	AMS		WG	8.5	lb/100 gal	POST	A					

LSD (P=.05)	5.6	7.6	13.1	0.0	8.4
Standard Deviation	3.8	5.1	8.9	0.0	5.7
CV	4.63	6.16	11.36	0.0	7.28