

MSU Weed Science Research Program

Evaluation of UAP Additives for Weed Control in Soybean

Trial ID: SOY06-06
 Conducted: T-12 east

Study Dir.: Sprague, Powell
 Investigator: Christy Sprague

Date Planted: 5/9/2006	Row Spacing: 30 IN
Variety: Garst 1827 RR/STS	No. of Reps: 4
Population: 155,000 seed/acre	% OM: 3.4
Soil Type: Loam	pH: 7.2
Plot Size: 10 X 35 FT	Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall moldboard plow
 Soil Finish 5/8/06, 5/9/06
Fertilizer: None at planting

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	BRAKA/SINAR	MUSTARD, WILD	BRASSICA KABER
2.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
3.	ANGR	Annual grass	mainly foxtail, panicum
4.	AMARE	PIGWEEED, REDROOT	AMARANTHUS RETROFLEXUS L.
5.	AMBEL	RAGWEEED, COMMON	AMBROSIA ELATIOR L.
6.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
7.	STEME	CHICKWEEED, COMMON	STELLARIA MEDIA (L.) VILL./CYR.
8.	SOLPT	NIGHTSHADE, EASTERN BLACK	SOLANUM PTYCANTHUM DUNAL
Crop	Code	Common Name	
1.	GLXMA	SOYBEAN	

Application Description

A
Application Timing: POST
Date Treated: 6/9/2006
Time Treated: 10:40 am
% Cloud Cover: 100
Air Temp., Unit: 64 F
% Relative Humidity: 50
Wind Speed/Unit/Dir: 6 mph N
Soil Temp., Unit: 64 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.): 4-6"
Stage (L): 1-2 tri

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Weed Stage at Each Application

A

Weed 1 Name: BRAKA/SINAR
Height (In.): 1-6"
Stage (L): 6-10
Weed 2 Name: CHEAL
Height (In.): 1-3"
Stage (L): 6-12
Weed 3 Name: ANGR
Height (In.): 2-4"
Stage (L): 2-5
Weed 4 Name: AMARE
Height (In.): 1-3"
Stage (L): 4-8
Weed 5 Name: AMBEL
Height (In.): 1-4"
Stage (L): 4-8
Weed 6 Name: ABUTH
Height (In.): 1-3"
Stage (L): 2-4
Weed 7 Name: STEME
Height (In.): .5-1"
Stage (L): 4-6
Weed 8 Name: SOLPT
Height (In.): .5-1.5"
Stage (L): 2-4

Weed Density (plants/sq. ft.)

	1	2	3	4	5
Date:	7/21/2006	7/21/2006	7/21/2006	7/21/2006	7/21/2006
Weed Name:	CHEAL	ABUTH	ANGR	BRAKA	AMBEL
Density:	3	2	7	3	4

Application Equipment

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Boom				
	Type	MPH	Type	Size	Height	Spacing	Width	GPA	Carrier	PSI
A	CUB	3.8	AirMix	11003	22"	20"	100"	19	water	27

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Weed Code	GLXMA	ANGR	CHEAL	AMARE	AMBEL	ABUTH	BRAKA
Crop Code	injury	control	control	control	control	control	control
Rating Data Type	percent	percent	percent	percent	percent	percent	percent
Rating Unit	6/22/2006	6/22/2006	6/22/2006	6/22/2006	6/22/2006	6/22/2006	6/22/2006
Rating Date	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A
Trt-Eval Interval							

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code							
1	Roundup WeatherMax	4.5	22	fl oz/a	POST	A	0	98	92	98	97	88	98
1	Choice WeatherMaster		0.5	% v/v	POST	A							
2	Mirage Plus	3	32	fl oz/a	POST	A	3	95	94	97	97	90	99
2	Choice WeatherMaster		0.5	% v/v	POST	A							
3	LI 6130	3	32	fl oz/a	POST	A	3	94	86	95	96	90	99
3	Choice WeatherMaster		0.5	% v/v	POST	A							
4	LI 6173	3	32	fl oz/a	POST	A	0	97	97	99	99	91	99
4	Choice WeatherMaster		0.5	% v/v	POST	A							
5	Mirage	3	32	fl oz/a	POST	A	0	94	77	98	94	89	97
5	LI 700		0.25	% v/v	POST	A							
5	Choice WeatherMaster		0.5	% v/v	POST	A							
6	LI 6171	3	32	fl oz/a	POST	A	3	95	68	99	97	86	99
6	LI 700		0.25	% v/v	POST	A							
6	Choice WeatherMaster		0.5	% v/v	POST	A							
7	Untreated						0	0	0	0	0	0	0
8	LI 6139		22	fl oz/a	POST	A	1	86	71	96	98	87	99
8	Choice WeatherMaster		0.5	% v/v	POST	A							
9	LI 6139		22	fl oz/a	POST	A	1	85	66	93	92	79	98
9	LI 700		0.25	% v/v	POST	A							
9	Choice WeatherMaster		0.5	% v/v	POST	A							
10	LI 6139		22	fl oz/a	POST	A	0	95	73	96	96	85	98
10	LI 700		0.5	% v/v	POST	A							
10	Choice WeatherMaster		0.5	% v/v	POST	A							
11	Mirage	3	32	fl oz/a	POST	A	0	95	85	99	97	87	98
11	Flame		0.25	% v/v	POST	A							
12	Mirage	3	32	fl oz/a	POST	A	1	94	74	98	96	86	99
12	Flame		0.5	% v/v	POST	A							
13	Mirage	3	32	fl oz/a	POST	A	1	96	89	99	98	95	97
13	Activator 90		0.25	% v/v	POST	A							
13	AMS		17	lb/100 gal	POST	A							
LSD (P=.05)							2.9	6.3	14.4	4.3	3.8	8.4	1.7
Standard Deviation							2.0	4.4	10.1	3.0	2.7	5.9	1.2
CV							208.17	5.1	13.48	3.38	3.0	7.29	1.32

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Weed Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH	BRAKA
Crop Code						
Rating Data Type	control	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent
Rating Date	7/7/2006	7/7/2006	7/7/2006	7/7/2006	7/7/2006	7/7/2006
Trt-Eval Interval	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Form Conc	Rate	Unit	Grow Stg	Appl Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH	BRAKA
1	Roundup WeatherMax	4.5	22	fl oz/a	POST	A	91	79	88	95	87	97
1	Choice WeatherMaster		0.5	% v/v	POST	A						
2	Mirage Plus	3	32	fl oz/a	POST	A	88	90	88	95	85	98
2	Choice WeatherMaster		0.5	% v/v	POST	A						
3	LI 6130	3	32	fl oz/a	POST	A	84	81	88	98	94	98
3	Choice WeatherMaster		0.5	% v/v	POST	A						
4	LI 6173	3	32	fl oz/a	POST	A	89	92	89	99	92	97
4	Choice WeatherMaster		0.5	% v/v	POST	A						
5	Mirage	3	32	fl oz/a	POST	A	85	77	88	92	89	95
5	LI 700		0.25	% v/v	POST	A						
5	Choice WeatherMaster		0.5	% v/v	POST	A						
6	LI 6171	3	32	fl oz/a	POST	A	87	82	89	98	91	98
6	LI 700		0.25	% v/v	POST	A						
6	Choice WeatherMaster		0.5	% v/v	POST	A						
7	Untreated						0	0	0	0	0	0
8	LI 6139		22	fl oz/a	POST	A	81	84	86	97	89	95
8	Choice WeatherMaster		0.5	% v/v	POST	A						
9	LI 6139		22	fl oz/a	POST	A	79	78	91	96	85	95
9	LI 700		0.25	% v/v	POST	A						
9	Choice WeatherMaster		0.5	% v/v	POST	A						
10	LI 6139		22	fl oz/a	POST	A	89	78	89	97	91	95
10	LI 700		0.5	% v/v	POST	A						
10	Choice WeatherMaster		0.5	% v/v	POST	A						
11	Mirage	3	32	fl oz/a	POST	A	89	83	91	99	90	99
11	Flame		0.25	% v/v	POST	A						
12	Mirage	3	32	fl oz/a	POST	A	86	79	91	97	88	94
12	Flame		0.5	% v/v	POST	A						
13	Mirage	3	32	fl oz/a	POST	A	88	83	92	97	90	99
13	Activator 90		0.25	% v/v	POST	A						
13	AMS		17	lb/100 gal	POST	A						
LSD (P=.05)							6.7	8.8	7.1	5.1	9.4	4.6
Standard Deviation							4.7	6.2	5.0	3.5	6.5	3.2
CV							5.84	8.19	6.04	3.97	7.96	3.59