

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
 Conducted: Campus C-16 Investigator: Christy Sprague

Date Planted: May/07/2015 Row Spacing: 30 IN
 Variety: MCIA2308N No. of Reps: 4
 Population: 150,000 seeds/A % OM: 2.7
 Soil Type: Loam pH: 7.1
 Plot Size: 10 X 30 FT Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall chisel plow; soil finish twice
 Fertilizer: None at planting

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/07/2015	Jun/19/2015
Time Treated:	12:20 pm	5:00 pm
% Cloud Cover:	50	40
Air Temp., Unit:	81 F	70 F
% Relative Humidity:	50	54
Wind Speed/Unit/Dir:	4 mph S	5 mph N
Soil Temp., Unit:	60 F	72 F
Soil/Leaf Surface M:	5 -	3 5
Soil Moist (1=w 5=d):	4	4

Crop Stage at Each Application

	A	B
Crop Name:	GLXMA	GLXMA
Height (In.):	-	10"
Stage (L):	-	V4

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height (In.):	-	5"
Stage (L):	-	4
Weed 2 Name:	CHEAL	CHEAL
Height (In.):	-	3"
Stage (L):	-	6
Weed 3 Name:	AMBEL	AMBEL
Height (In.):	-	6"
Stage (L):	-	10
Weed 4 Name:	ABUTH	ABUTH
Height (In.):	-	0.5"
Stage (L):	-	cot
Weed 5 Name:	SINAR	SINAR
Height (In.):	-	-
Stage (L):	-	-

Weed Density (plants/sq. ft.)

	1	2	3	4	5
Date:	Jun/09/2015	Jun/09/2015	Jun/09/2015	Jun/09/2015	Jun/09/2015
Weed Name:	ANGR	CHEAL	AMBEL	ABUTH	SINAR
Density:	207	2	99	1	17

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	20"	20"	100"	19	Water	28	
B	Cub	3.8	AIXR	11003	28"	20"	100"	19	Water	28	

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Weed Code	GLXMA	GLXMA	ANGR	CHEAL	AMBEL
Crop Code	injury	injury	control	control	control
Rating Data Type	percent	percent	percent	percent	percent
Rating Unit	Jun/03/2015	Jun/19/2015	Jun/19/2015	Jun/19/2015	Jun/19/2015
Rating Date	27 DA-A	0 DA-B	0 DA-B	0 DA-B	0 DA-B
Trt-Eval Interval	0	0	0	0	0
# Subsamples, Dec.					

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Valor	51	WG	2.5	oz/a	PRE	A	33	10	76	99	80
1	Prowl H2O	3.8	L	2	pt/a	PRE	A					
1	Cobra	2	L	8	fl oz/a	POST	B					
1	SelectMax	0.97	L	12	fl oz/a	POST	B					
1	Crop oil concentrate		L	1	% v/v	POST	B					
1	AMS		WG	2.5	lb/a	POST	B					
2	Fierce	76	WG	3.75	oz/a	PRE	A	39	20	97	99	88
2	Cobra	2	L	8	fl oz/a	POST	B					
2	Crop oil concentrate		L	1	% v/v	POST	B					
2	AMS		WG	2.5	lb/a	POST	B					
3	Valor XLT	40.3	WG	4	oz/a	PRE	A	35	29	97	99	94
3	Zidua	85	WG	2.5	oz/a	PRE	A					
4	Trivence	61.3	WG	8	oz/a	PRE	A	34	25	97	99	97
4	Zidua	85	WG	2.5	oz/a	PRE	A					
5	Trivence	61.3	WG	10	oz/a	PRE	A	33	23	82	99	89
5	Flexstar	1.88	L	12	fl oz/a	POST	B					
5	Assure II	0.88	L	7	fl oz/a	POST	B					
5	Crop oil concentrate		L	1	% v/v	POST	B					
5	AMS		WG	2.5	lb/a	POST	B					
6	Untreated							0	0	0	0	0
7	Boundary	6.5	L	2.4	pt/a	PRE	A	17	2	99	99	73
7	Flexstar	1.88	L	1	pt/a	POST	B					
7	Crop oil concentrate		L	1	% v/v	POST	B					
7	AMS		WG	2.5	lb/a	POST	B					
8	Python	80	WG	0.8	oz/a	PRE	A	20	6	99	99	81
8	Boundary	6.5	L	2	pt/a	PRE	A					
8	Flexstar	1.88	L	1	pt/a	POST	B					
8	Crop oil concentrate		L	1	% v/v	POST	B					
8	AMS		WG	2.5	lb/a	POST	B					
9	Authority MAXX	66	WG	6	oz/a	PRE	A	26	25	99	99	88
9	Boundary	6.5	L	2	pt/a	PRE	A					
9	Ultra Blazer	2	L	1	pt/a	POST	B					
9	Surfactant		L	0.25	% v/v	POST	B					
9	AMS		WG	2.5	lb/a	POST	B					
10	Canopy	75	WG	2.25	oz/a	PRE	A	16	8	99	99	88
10	Prefix	5.29	L	2	pt/a	PRE	A					
10	Flexstar	1.88	L	12	fl oz/a	POST	B					
10	Crop oil concentrate		L	1	% v/v	POST	B					
10	AMS		WG	2.5	lb/a	POST	B					
11	Optill Pro - Optill	68	WG	2	oz/a	PRE	A	30	15	99	99	84
11	Optill Pro - Outlook	6	L	10	fl oz/a	PRE	A					
11	Outlook	6	L	8	fl oz/a	PRE	A					
11	Metribuzin	75	WG	5	oz/a	PRE	A					
11	Cobra	2	L	8	fl oz/a	POST	B					
11	Crop oil concentrate		L	1	% v/v	POST	B					
11	AMS		WG	2.5	lb/a	POST	B					

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Weed Code	GLXMA	GLXMA	ANGR	CHEAL	AMBEL
Crop Code	injury	injury	control	control	control
Rating Data Type	percent	percent	percent	percent	percent
Rating Unit	Jun/03/2015	Jun/19/2015	Jun/19/2015	Jun/19/2015	Jun/19/2015
Rating Date	27 DA-A	0 DA-B	0 DA-B	0 DA-B	0 DA-B
Trt-Eval Interval	0	0	0	0	0
# Subsamples, Dec.					

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
12	Metribuzin	75	WG	5	oz/a	PRE	A	21	1	99	99	75
12	Dual II Magnum	7.64	L	1.33	pt/a	PRE	A					
12	Linex	4	L	1	pt/a	PRE	A					
12	Marvel	3	L	7.25	fl oz/a	POST	B					
12	Crop oil concentrate		L	1	% v/v	POST	B					
12	AMS		WG	2.5	lb/100 gal	POST	B					
13	Sonic	70	WG	6.4	oz/a	PRE	A	30	15	96	99	77
13	Warrant	3	L	3	pt/a	PRE	A					
13	Flexstar	1.88	L	1	pt/a	POST	B					
13	Crop oil concentrate		L	1	% v/v	POST	B					
13	AMS		WG	2.5	lb/a	POST	B					
14	Tricor	75	WG	8	oz/a	PRE	A	8	1	54	99	57
14	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
14	Ultra Blazer	2	L	1.5	pt/a	POST	B					
14	SelectMax	0.97	L	9	fl oz/a	POST	B					
14	Surfactant		L	0.25	% v/v	POST	B					
15	Tricor	75	WG	8	oz/a	PRE	A	9	1	53	99	60
15	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
15	Storm	2	L	1.5	pt/a	POST	B					
15	SelectMax	0.97	L	9	fl oz/a	POST	B					
15	Surfactant		L	0.25	% v/v	POST	B					
16	Authority MTZ	45	WG	16	oz/a	PRE	A	16	1	75	99	52
16	Marvel	3	L	7.25	fl oz/a	POST	B					
16	SelectMax	0.97	L	9	fl oz/a	POST	B					
16	Crop oil concentrate		L	1	% v/v	POST	B					
16	AMS		WG	2.5	lb/100 gal	POST	B					
17	Authority MTZ	45	WG	16	oz/a	PRE	A	8	0	82	99	46
17	Flexstar	1.88	L	1	pt/a	POST	B					
17	SelectMax	0.97	L	9	fl oz/a	POST	B					
17	Crop oil concentrate		L	1	% v/v	POST	B					
17	AMS		WG	2.5	lb/100 gal	POST	B					
18	Authority MTZ	45	WG	16	oz/a	PRE	A	10	1	80	99	53
18	Cadet	0.91	L	0.5	fl oz/a	POST	B					
18	Basagran	4	L	10	fl oz/a	POST	B					
18	SelectMax	0.97	L	9	fl oz/a	POST	B					
18	Crop oil concentrate		L	1	% v/v	POST	B					
18	AMS		WG	2.5	lb/100 gal	POST	B					
19	Authority MTZ	45	WG	13	oz/a	PRE	A	11	0	99	99	82
19	Command	3	L	21	fl oz/a	PRE	A					
19	Marvel	3	L	7.25	fl oz/a	POST	B					
19	Crop oil concentrate		L	1	% v/v	POST	B					
20	Authority MTZ	45	WG	13	oz/a	PRE	A	18	10	98	99	79
20	Anthem MAXX	4.3	L	3	fl oz/a	PRE	A					
20	Marvel	3	L	7.25	fl oz/a	POST	B					
20	Crop oil concentrate		L	1	% v/v	POST	B					
21	Authority MTZ	45	WG	13	oz/a	PRE	A	19	2	99	99	54
21	Dual II Magnum	7.64	L	1	pt/a	PRE	A					
21	Marvel	3	L	7.25	fl oz/a	POST	B					
21	SelectMax	0.97	L	9	fl oz/a	POST	B					
21	Crop oil concentrate		L	1	% v/v	POST	B					
LSD (P=.05)								9.5	8.2	8.7	0.0	17.1
CV								32.93	63.04	7.27	0.0	16.96

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

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Weed Code								ABUTH	SINAR	GLXMA	GLXMA	ANGR
Crop Code								control	control	injury	injury	control
Rating Data Type								percent	percent	percent	percent	percent
Rating Unit								Jun/19/2015	Jun/19/2015	Jun/26/2015	Jul/02/2015	Jul/02/2015
Rating Date								0 DA-B	0 DA-B	7 DA-B	13 DA-B	13 DA-B
Trt-Eval Interval								0	0	0	0	0
# Subsamples, Dec.												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Valor	51	WG	2.5	oz/a	PRE	A	96	98	31	25	97
1	Prowl H2O	3.8	L	2	pt/a	PRE	A					
1	Cobra	2	L	8	fl oz/a	POST	B					
1	SelectMax	0.97	L	12	fl oz/a	POST	B					
1	Crop oil concentrate		L	1	% v/v	POST	B					
1	AMS		WG	2.5	lb/a	POST	B					
2	Fierce	76	WG	3.75	oz/a	PRE	A	99	99	41	34	98
2	Cobra	2	L	8	fl oz/a	POST	B					
2	Crop oil concentrate		L	1	% v/v	POST	B					
2	AMS		WG	2.5	lb/a	POST	B					
3	Valor XLT	40.3	WG	4	oz/a	PRE	A	99	99	21	15	93
3	Zidua	85	WG	2.5	oz/a	PRE	A					
4	Trivence	61.3	WG	8	oz/a	PRE	A	99	99	18	18	95
4	Zidua	85	WG	2.5	oz/a	PRE	A					
5	Trivence	61.3	WG	10	oz/a	PRE	A	99	99	33	23	99
5	Flexstar	1.88	L	12	fl oz/a	POST	B					
5	Assure II	0.88	L	7	fl oz/a	POST	B					
5	Crop oil concentrate		L	1	% v/v	POST	B					
5	AMS		WG	2.5	lb/a	POST	B					
6	Untreated							0	0	0	0	0
7	Boundary	6.5	L	2.4	pt/a	PRE	A	98	99	25	11	99
7	Flexstar	1.88	L	1	pt/a	POST	B					
7	Crop oil concentrate		L	1	% v/v	POST	B					
7	AMS		WG	2.5	lb/a	POST	B					
8	Python	80	WG	0.8	oz/a	PRE	A	99	99	31	19	99
8	Boundary	6.5	L	2	pt/a	PRE	A					
8	Flexstar	1.88	L	1	pt/a	POST	B					
8	Crop oil concentrate		L	1	% v/v	POST	B					
8	AMS		WG	2.5	lb/a	POST	B					
9	Authority MAXX	66	WG	6	oz/a	PRE	A	99	99	40	35	99
9	Boundary	6.5	L	2	pt/a	PRE	A					
9	Ultra Blazer	2	L	1	pt/a	POST	B					
9	Surfactant		L	0.25	% v/v	POST	B					
9	AMS		WG	2.5	lb/a	POST	B					
10	Canopy	75	WG	2.25	oz/a	PRE	A	99	99	29	16	99
10	Prefix	5.29	L	2	pt/a	PRE	A					
10	Flexstar	1.88	L	12	fl oz/a	POST	B					
10	Crop oil concentrate		L	1	% v/v	POST	B					
10	AMS		WG	2.5	lb/a	POST	B					
11	Optill Pro - Optill	68	WG	2	oz/a	PRE	A	99	99	39	30	95
11	Optill Pro - Outlook	6	L	10	fl oz/a	PRE	A					
11	Outlook	6	L	8	fl oz/a	PRE	A					
11	Metribuzin	75	WG	5	oz/a	PRE	A					
11	Cobra	2	L	8	fl oz/a	POST	B					
11	Crop oil concentrate		L	1	% v/v	POST	B					
11	AMS		WG	2.5	lb/a	POST	B					

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Weed Code								ABUTH	SINAR	GLXMA	GLXMA	ANGR
Crop Code												
Rating Data Type								control	control	injury	injury	control
Rating Unit								percent	percent	percent	percent	percent
Rating Date								Jun/19/2015	Jun/19/2015	Jun/26/2015	Jul/02/2015	Jul/02/2015
Trt-Eval Interval								0 DA-B	0 DA-B	7 DA-B	13 DA-B	13 DA-B
# Subsamples, Dec.								0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
12	Metribuzin	75	WG	5	oz/a	PRE	A	95	99	33	18	98
12	Dual II Magnum	7.64	L	1.33	pt/a	PRE	A					
12	Linex	4	L	1	pt/a	PRE	A					
12	Marvel	3	L	7.25	fl oz/a	POST	B					
12	Crop oil concentrate		L	1	% v/v	POST	B					
12	AMS		WG	2.5	lb/100 gal	POST	B					
13	Sonic	70	WG	6.4	oz/a	PRE	A	99	99	34	20	94
13	Warrant	3	L	3	pt/a	PRE	A					
13	Flexstar	1.88	L	1	pt/a	POST	B					
13	Crop oil concentrate		L	1	% v/v	POST	B					
13	AMS		WG	2.5	lb/a	POST	B					
14	Tricor	75	WG	8	oz/a	PRE	A	99	98	24	18	81
14	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
14	Ultra Blazer	2	L	1.5	pt/a	POST	B					
14	SelectMax	0.97	L	9	fl oz/a	POST	B					
14	Surfactant		L	0.25	% v/v	POST	B					
15	Tricor	75	WG	8	oz/a	PRE	A	96	98	20	15	75
15	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
15	Storm	2	L	1.5	pt/a	POST	B					
15	SelectMax	0.97	L	9	fl oz/a	POST	B					
15	Surfactant		L	0.25	% v/v	POST	B					
16	Authority MTZ	45	WG	16	oz/a	PRE	A	99	98	38	33	92
16	Marvel	3	L	7.25	fl oz/a	POST	B					
16	SelectMax	0.97	L	9	fl oz/a	POST	B					
16	Crop oil concentrate		L	1	% v/v	POST	B					
16	AMS		WG	2.5	lb/100 gal	POST	B					
17	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	25	15	94
17	Flexstar	1.88	L	1	pt/a	POST	B					
17	SelectMax	0.97	L	9	fl oz/a	POST	B					
17	Crop oil concentrate		L	1	% v/v	POST	B					
17	AMS		WG	2.5	lb/100 gal	POST	B					
18	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	39	34	91
18	Cadet	0.91	L	0.5	fl oz/a	POST	B					
18	Basagran	4	L	10	fl oz/a	POST	B					
18	SelectMax	0.97	L	9	fl oz/a	POST	B					
18	Crop oil concentrate		L	1	% v/v	POST	B					
18	AMS		WG	2.5	lb/100 gal	POST	B					
19	Authority MTZ	45	WG	13	oz/a	PRE	A	99	99	24	13	99
19	Command	3	L	21	fl oz/a	PRE	A					
19	Marvel	3	L	7.25	fl oz/a	POST	B					
19	Crop oil concentrate		L	1	% v/v	POST	B					
20	Authority MTZ	45	WG	13	oz/a	PRE	A	99	99	26	20	96
20	Anthem MAXX	4.3	L	3	fl oz/a	PRE	A					
20	Marvel	3	L	7.25	fl oz/a	POST	B					
20	Crop oil concentrate		L	1	% v/v	POST	B					
21	Authority MTZ	45	WG	13	oz/a	PRE	A	99	98	30	19	99
21	Dual II Magnum	7.64	L	1	pt/a	PRE	A					
21	Marvel	3	L	7.25	fl oz/a	POST	B					
21	SelectMax	0.97	L	9	fl oz/a	POST	B					
21	Crop oil concentrate		L	1	% v/v	POST	B					
LSD (P=.05)								2.6	1.6	5.0	6.2	6.7
CV								1.98	1.21	12.35	21.48	5.23

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

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Weed Code								CHEAL	AMBEL	ABUTH	SINAR	GLXMA
Crop Code								control	control	control	control	injury
Rating Data Type								percent	percent	percent	percent	percent
Rating Unit								Jul/02/2015	Jul/02/2015	Jul/02/2015	Jul/02/2015	Jul/17/2015
Rating Date								13 DA-B	13 DA-B	13 DA-B	13 DA-B	28 DA-B
Trt-Eval Interval								0	0	0	0	0
# Subsamples, Dec.												
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Valor	51	WG	2.5	oz/a	PRE	A	99	97	99	99	1
1	Prowl H2O	3.8	L	2	pt/a	PRE	A					
1	Cobra	2	L	8	fl oz/a	POST	B					
1	SelectMax	0.97	L	12	fl oz/a	POST	B					
1	Crop oil concentrate		L	1	% v/v	POST	B					
1	AMS		WG	2.5	lb/a	POST	B					
2	Fierce	76	WG	3.75	oz/a	PRE	A	99	99	99	99	9
2	Cobra	2	L	8	fl oz/a	POST	B					
2	Crop oil concentrate		L	1	% v/v	POST	B					
2	AMS		WG	2.5	lb/a	POST	B					
3	Valor XLT	40.3	WG	4	oz/a	PRE	A	99	88	99	99	0
3	Zidua	85	WG	2.5	oz/a	PRE	A					
4	Trivence	61.3	WG	8	oz/a	PRE	A	99	95	99	99	2
4	Zidua	85	WG	2.5	oz/a	PRE	A					
5	Trivence	61.3	WG	10	oz/a	PRE	A	99	99	99	99	0
5	Flexstar	1.88	L	12	fl oz/a	POST	B					
5	Assure II	0.88	L	7	fl oz/a	POST	B					
5	Crop oil concentrate		L	1	% v/v	POST	B					
5	AMS		WG	2.5	lb/a	POST	B					
6	Untreated							0	0	0	0	0
7	Boundary	6.5	L	2.4	pt/a	PRE	A	99	99	99	99	0
7	Flexstar	1.88	L	1	pt/a	POST	B					
7	Crop oil concentrate		L	1	% v/v	POST	B					
7	AMS		WG	2.5	lb/a	POST	B					
8	Python	80	WG	0.8	oz/a	PRE	A	99	99	99	99	0
8	Boundary	6.5	L	2	pt/a	PRE	A					
8	Flexstar	1.88	L	1	pt/a	POST	B					
8	Crop oil concentrate		L	1	% v/v	POST	B					
8	AMS		WG	2.5	lb/a	POST	B					
9	Authority MAXX	66	WG	6	oz/a	PRE	A	99	99	99	99	7
9	Boundary	6.5	L	2	pt/a	PRE	A					
9	Ultra Blazer	2	L	1	pt/a	POST	B					
9	Surfactant		L	0.25	% v/v	POST	B					
9	AMS		WG	2.5	lb/a	POST	B					
10	Canopy	75	WG	2.25	oz/a	PRE	A	99	99	99	99	0
10	Prefix	5.29	L	2	pt/a	PRE	A					
10	Flexstar	1.88	L	12	fl oz/a	POST	B					
10	Crop oil concentrate		L	1	% v/v	POST	B					
10	AMS		WG	2.5	lb/a	POST	B					
11	Optill Pro - Optill	68	WG	2	oz/a	PRE	A	99	99	99	99	11
11	Optill Pro - Outlook	6	L	10	fl oz/a	PRE	A					
11	Outlook	6	L	8	fl oz/a	PRE	A					
11	Metribuzin	75	WG	5	oz/a	PRE	A					
11	Cobra	2	L	8	fl oz/a	POST	B					
11	Crop oil concentrate		L	1	% v/v	POST	B					
11	AMS		WG	2.5	lb/a	POST	B					

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
 Conducted: Campus C-16 Investigator: Christy Sprague

Weed Code								CHEAL	AMBEL	ABUTH	SINAR	GLXMA
Crop Code												
Rating Data Type								control	control	control	control	injury
Rating Unit								percent	percent	percent	percent	percent
Rating Date								Jul/02/2015	Jul/02/2015	Jul/02/2015	Jul/02/2015	Jul/17/2015
Trt-Eval Interval								13 DA-B	13 DA-B	13 DA-B	13 DA-B	28 DA-B
# Subsamples, Dec.								0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
12	Metribuzin	75	WG	5	oz/a	PRE	A	99	99	99	99	1
12	Dual II Magnum	7.64	L	1.33	pt/a	PRE	A					
12	Linex	4	L	1	pt/a	PRE	A					
12	Marvel	3	L	7.25	fl oz/a	POST	B					
12	Crop oil concentrate		L	1	% v/v	POST	B					
12	AMS		WG	2.5	lb/100 gal	POST	B					
13	Sonic	70	WG	6.4	oz/a	PRE	A	99	99	99	99	0
13	Warrant	3	L	3	pt/a	PRE	A					
13	Flexstar	1.88	L	1	pt/a	POST	B					
13	Crop oil concentrate		L	1	% v/v	POST	B					
13	AMS		WG	2.5	lb/a	POST	B					
14	Tricor	75	WG	8	oz/a	PRE	A	99	90	99	99	0
14	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
14	Ultra Blazer	2	L	1.5	pt/a	POST	B					
14	SelectMax	0.97	L	9	fl oz/a	POST	B					
14	Surfactant		L	0.25	% v/v	POST	B					
15	Tricor	75	WG	8	oz/a	PRE	A	99	83	99	99	0
15	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
15	Storm	2	L	1.5	pt/a	POST	B					
15	SelectMax	0.97	L	9	fl oz/a	POST	B					
15	Surfactant		L	0.25	% v/v	POST	B					
16	Authority MTZ	45	WG	16	oz/a	PRE	A	99	92	99	99	5
16	Marvel	3	L	7.25	fl oz/a	POST	B					
16	SelectMax	0.97	L	9	fl oz/a	POST	B					
16	Crop oil concentrate		L	1	% v/v	POST	B					
16	AMS		WG	2.5	lb/100 gal	POST	B					
17	Authority MTZ	45	WG	16	oz/a	PRE	A	99	98	99	99	0
17	Flexstar	1.88	L	1	pt/a	POST	B					
17	SelectMax	0.97	L	9	fl oz/a	POST	B					
17	Crop oil concentrate		L	1	% v/v	POST	B					
17	AMS		WG	2.5	lb/100 gal	POST	B					
18	Authority MTZ	45	WG	16	oz/a	PRE	A	99	65	99	99	9
18	Cadet	0.91	L	0.5	fl oz/a	POST	B					
18	Basagran	4	L	10	fl oz/a	POST	B					
18	SelectMax	0.97	L	9	fl oz/a	POST	B					
18	Crop oil concentrate		L	1	% v/v	POST	B					
18	AMS		WG	2.5	lb/100 gal	POST	B					
19	Authority MTZ	45	WG	13	oz/a	PRE	A	99	99	99	99	0
19	Command	3	L	21	fl oz/a	PRE	A					
19	Marvel	3	L	7.25	fl oz/a	POST	B					
19	Crop oil concentrate		L	1	% v/v	POST	B					
20	Authority MTZ	45	WG	13	oz/a	PRE	A	99	94	99	99	0
20	Anthem MAXX	4.3	L	3	fl oz/a	PRE	A					
20	Marvel	3	L	7.25	fl oz/a	POST	B					
20	Crop oil concentrate		L	1	% v/v	POST	B					
21	Authority MTZ	45	WG	13	oz/a	PRE	A	99	87	99	99	0
21	Dual II Magnum	7.64	L	1	pt/a	PRE	A					
21	Marvel	3	L	7.25	fl oz/a	POST	B					
21	SelectMax	0.97	L	9	fl oz/a	POST	B					
21	Crop oil concentrate		L	1	% v/v	POST	B					
LSD (P=.05)								0.0	7.2	0.0	0.0	2.0
CV								0.0	5.67	0.0	0.0	67.94

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

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
 Conducted: Campus C-16 Investigator: Christy Sprague

Weed Code	ANGR	CHEAL	AMBEL	ABUTH	SINAR							
Crop Code												
Rating Data Type	control	control	control	control	control							
Rating Unit	percent	percent	percent	percent	percent							
Rating Date	Jul/17/2015	Jul/17/2015	Jul/17/2015	Jul/17/2015	Jul/17/2015							
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B							
# Subsamples, Dec.	0	0	0	0	0							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Valor	51	WG	2.5	oz/a	PRE	A	83	98	96	96	99
1	Prowl H2O	3.8	L	2	pt/a	PRE	A					
1	Cobra	2	L	8	fl oz/a	POST	B					
1	SelectMax	0.97	L	12	fl oz/a	POST	B					
1	Crop oil concentrate		L	1	% v/v	POST	B					
1	AMS		WG	2.5	lb/a	POST	B					
2	Fierce	76	WG	3.75	oz/a	PRE	A	83	96	94	99	99
2	Cobra	2	L	8	fl oz/a	POST	B					
2	Crop oil concentrate		L	1	% v/v	POST	B					
2	AMS		WG	2.5	lb/a	POST	B					
3	Valor XLT	40.3	WG	4	oz/a	PRE	A	87	99	81	99	99
3	Zidua	85	WG	2.5	oz/a	PRE	A					
4	Trivence	61.3	WG	8	oz/a	PRE	A	91	99	81	99	99
4	Zidua	85	WG	2.5	oz/a	PRE	A					
5	Trivence	61.3	WG	10	oz/a	PRE	A	98	99	99	99	99
5	Flexstar	1.88	L	12	fl oz/a	POST	B					
5	Assure II	0.88	L	7	fl oz/a	POST	B					
5	Crop oil concentrate		L	1	% v/v	POST	B					
5	AMS		WG	2.5	lb/a	POST	B					
6	Untreated							0	0	0	0	0
7	Boundary	6.5	L	2.4	pt/a	PRE	A	98	99	99	99	99
7	Flexstar	1.88	L	1	pt/a	POST	B					
7	Crop oil concentrate		L	1	% v/v	POST	B					
7	AMS		WG	2.5	lb/a	POST	B					
8	Python	80	WG	0.8	oz/a	PRE	A	97	99	99	99	99
8	Boundary	6.5	L	2	pt/a	PRE	A					
8	Flexstar	1.88	L	1	pt/a	POST	B					
8	Crop oil concentrate		L	1	% v/v	POST	B					
8	AMS		WG	2.5	lb/a	POST	B					
9	Authority MAXX	66	WG	6	oz/a	PRE	A	99	99	94	98	99
9	Boundary	6.5	L	2	pt/a	PRE	A					
9	Ultra Blazer	2	L	1	pt/a	POST	B					
9	Surfactant		L	0.25	% v/v	POST	B					
9	AMS		WG	2.5	lb/a	POST	B					
10	Canopy	75	WG	2.25	oz/a	PRE	A	98	99	99	99	99
10	Prefix	5.29	L	2	pt/a	PRE	A					
10	Flexstar	1.88	L	12	fl oz/a	POST	B					
10	Crop oil concentrate		L	1	% v/v	POST	B					
10	AMS		WG	2.5	lb/a	POST	B					
11	Optill Pro - Optill	68	WG	2	oz/a	PRE	A	83	99	93	99	99
11	Optill Pro - Outlook	6	L	10	fl oz/a	PRE	A					
11	Outlook	6	L	8	fl oz/a	PRE	A					
11	Metribuzin	75	WG	5	oz/a	PRE	A					
11	Cobra	2	L	8	fl oz/a	POST	B					
11	Crop oil concentrate		L	1	% v/v	POST	B					
11	AMS		WG	2.5	lb/a	POST	B					

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
 Conducted: Campus C-16 Investigator: Christy Sprague

Weed Code	ANGR	CHEAL	AMBEL	ABUTH	SINAR
Crop Code					
Rating Data Type	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	Jul/17/2015	Jul/17/2015	Jul/17/2015	Jul/17/2015	Jul/17/2015
Trt-Eval Interval	28 DA-B	28 DA-B	28 DA-B	28 DA-B	28 DA-B
# Subsamples, Dec.	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	ANGR	CHEAL	AMBEL	ABUTH	SINAR
12	Metribuzin	75	WG	5	oz/a	PRE	A	97	99	99	98	99
12	Dual II Magnum	7.64	L	1.33	pt/a	PRE	A					
12	Linex	4	L	1	pt/a	PRE	A					
12	Marvel	3	L	7.25	fl oz/a	POST	B					
12	Crop oil concentrate		L	1	% v/v	POST	B					
12	AMS		WG	2.5	lb/100 gal	POST	B					
13	Sonic	70	WG	6.4	oz/a	PRE	A	93	99	99	99	99
13	Warrant	3	L	3	pt/a	PRE	A					
13	Flexstar	1.88	L	1	pt/a	POST	B					
13	Crop oil concentrate		L	1	% v/v	POST	B					
13	AMS		WG	2.5	lb/a	POST	B					
14	Tricor	75	WG	8	oz/a	PRE	A	91	99	82	97	99
14	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
14	Ultra Blazer	2	L	1.5	pt/a	POST	B					
14	SelectMax	0.97	L	9	fl oz/a	POST	B					
14	Surfactant		L	0.25	% v/v	POST	B					
15	Tricor	75	WG	8	oz/a	PRE	A	81	99	81	99	99
15	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A					
15	Storm	2	L	1.5	pt/a	POST	B					
15	SelectMax	0.97	L	9	fl oz/a	POST	B					
15	Surfactant		L	0.25	% v/v	POST	B					
16	Authority MTZ	45	WG	16	oz/a	PRE	A	87	99	94	99	99
16	Marvel	3	L	7.25	fl oz/a	POST	B					
16	SelectMax	0.97	L	9	fl oz/a	POST	B					
16	Crop oil concentrate		L	1	% v/v	POST	B					
16	AMS		WG	2.5	lb/100 gal	POST	B					
17	Authority MTZ	45	WG	16	oz/a	PRE	A	91	99	97	99	99
17	Flexstar	1.88	L	1	pt/a	POST	B					
17	SelectMax	0.97	L	9	fl oz/a	POST	B					
17	Crop oil concentrate		L	1	% v/v	POST	B					
17	AMS		WG	2.5	lb/100 gal	POST	B					
18	Authority MTZ	45	WG	16	oz/a	PRE	A	81	99	53	99	99
18	Cadet	0.91	L	0.5	fl oz/a	POST	B					
18	Basagran	4	L	10	fl oz/a	POST	B					
18	SelectMax	0.97	L	9	fl oz/a	POST	B					
18	Crop oil concentrate		L	1	% v/v	POST	B					
18	AMS		WG	2.5	lb/100 gal	POST	B					
19	Authority MTZ	45	WG	13	oz/a	PRE	A	98	99	99	99	99
19	Command	3	L	21	fl oz/a	PRE	A					
19	Marvel	3	L	7.25	fl oz/a	POST	B					
19	Crop oil concentrate		L	1	% v/v	POST	B					
20	Authority MTZ	45	WG	13	oz/a	PRE	A	95	99	93	99	99
20	Anthem MAXX	4.3	L	3	fl oz/a	PRE	A					
20	Marvel	3	L	7.25	fl oz/a	POST	B					
20	Crop oil concentrate		L	1	% v/v	POST	B					
21	Authority MTZ	45	WG	13	oz/a	PRE	A	96	99	83	99	99
21	Dual II Magnum	7.64	L	1	pt/a	PRE	A					
21	Marvel	3	L	7.25	fl oz/a	POST	B					
21	SelectMax	0.97	L	9	fl oz/a	POST	B					
21	Crop oil concentrate		L	1	% v/v	POST	B					
LSD (P=.05)								6.2	2.3	8.6	1.7	0.0
CV								5.01	1.72	7.05	1.28	0.0

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

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
 Conducted: Campus C-16 Investigator: Christy Sprague

Weed Code								GLXMA	ANGR	CHEAL	AMBEL
Crop Code								injury	control	control	control
Rating Data Type								percent	percent	percent	percent
Rating Unit								Aug/14/2015	Aug/14/2015	Aug/14/2015	Aug/14/2015
Rating Date								56 DA-B	56 DA-B	56 DA-B	56 DA-B
Trt-Eval Interval								0	0	0	0
# Subsamples, Dec.											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
1	Valor	51	WG	2.5	oz/a	PRE	A	0	89	96	93
1	Prowl H2O	3.8	L	2	pt/a	PRE	A				
1	Cobra	2	L	8	fl oz/a	POST	B				
1	SelectMax	0.97	L	12	fl oz/a	POST	B				
1	Crop oil concentrate		L	1	% v/v	POST	B				
1	AMS		WG	2.5	lb/a	POST	B				
2	Fierce	76	WG	3.75	oz/a	PRE	A	3	77	98	91
2	Cobra	2	L	8	fl oz/a	POST	B				
2	Crop oil concentrate		L	1	% v/v	POST	B				
2	AMS		WG	2.5	lb/a	POST	B				
3	Valor XLT	40.3	WG	4	oz/a	PRE	A	0	87	99	76
3	Zidua	85	WG	2.5	oz/a	PRE	A				
4	Trivence	61.3	WG	8	oz/a	PRE	A	1	89	99	77
4	Zidua	85	WG	2.5	oz/a	PRE	A				
5	Trivence	61.3	WG	10	oz/a	PRE	A	0	98	99	98
5	Flexstar	1.88	L	12	fl oz/a	POST	B				
5	Assure II	0.88	L	7	fl oz/a	POST	B				
5	Crop oil concentrate		L	1	% v/v	POST	B				
5	AMS		WG	2.5	lb/a	POST	B				
6	Untreated							0	0	0	0
7	Boundary	6.5	L	2.4	pt/a	PRE	A	0	98	98	98
7	Flexstar	1.88	L	1	pt/a	POST	B				
7	Crop oil concentrate		L	1	% v/v	POST	B				
7	AMS		WG	2.5	lb/a	POST	B				
8	Python	80	WG	0.8	oz/a	PRE	A	0	99	99	99
8	Boundary	6.5	L	2	pt/a	PRE	A				
8	Flexstar	1.88	L	1	pt/a	POST	B				
8	Crop oil concentrate		L	1	% v/v	POST	B				
8	AMS		WG	2.5	lb/a	POST	B				
9	Authority MAXX	66	WG	6	oz/a	PRE	A	3	98	99	94
9	Boundary	6.5	L	2	pt/a	PRE	A				
9	Ultra Blazer	2	L	1	pt/a	POST	B				
9	Surfactant		L	0.25	% v/v	POST	B				
9	AMS		WG	2.5	lb/a	POST	B				
10	Canopy	75	WG	2.25	oz/a	PRE	A	0	99	99	99
10	Prefix	5.29	L	2	pt/a	PRE	A				
10	Flexstar	1.88	L	12	fl oz/a	POST	B				
10	Crop oil concentrate		L	1	% v/v	POST	B				
10	AMS		WG	2.5	lb/a	POST	B				
11	Optill Pro - Optill	68	WG	2	oz/a	PRE	A	0	88	99	91
11	Optill Pro - Outlook	6	L	10	fl oz/a	PRE	A				
11	Outlook	6	L	8	fl oz/a	PRE	A				
11	Metribuzin	75	WG	5	oz/a	PRE	A				
11	Cobra	2	L	8	fl oz/a	POST	B				
11	Crop oil concentrate		L	1	% v/v	POST	B				
11	AMS		WG	2.5	lb/a	POST	B				

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
 Conducted: Campus C-16 Investigator: Christy Sprague

								GLXMA	ANGR	CHEAL	AMBEL
								injury	control	control	control
								percent	percent	percent	percent
								Aug/14/2015	Aug/14/2015	Aug/14/2015	Aug/14/2015
								56 DA-B	56 DA-B	56 DA-B	56 DA-B
								0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code				
12	Metribuzin	75	WG	5	oz/a	PRE	A	0	96	99	96
12	Dual II Magnum	7.64	L	1.33	pt/a	PRE	A				
12	Linex	4	L	1	pt/a	PRE	A				
12	Marvel	3	L	7.25	fl oz/a	POST	B				
12	Crop oil concentrate		L	1	% v/v	POST	B				
12	AMS		WG	2.5	lb/100 gal	POST	B				
13	Sonic	70	WG	6.4	oz/a	PRE	A	0	97	99	98
13	Warrant	3	L	3	pt/a	PRE	A				
13	Flexstar	1.88	L	1	pt/a	POST	B				
13	Crop oil concentrate		L	1	% v/v	POST	B				
13	AMS		WG	2.5	lb/a	POST	B				
14	Tricor	75	WG	8	oz/a	PRE	A	0	99	99	94
14	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A				
14	Ultra Blazer	2	L	1.5	pt/a	POST	B				
14	SelectMax	0.97	L	9	fl oz/a	POST	B				
14	Surfactant		L	0.25	% v/v	POST	B				
15	Tricor	75	WG	8	oz/a	PRE	A	0	93	99	81
15	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A				
15	Storm	2	L	1.5	pt/a	POST	B				
15	SelectMax	0.97	L	9	fl oz/a	POST	B				
15	Surfactant		L	0.25	% v/v	POST	B				
16	Authority MTZ	45	WG	16	oz/a	PRE	A	2	95	99	84
16	Marvel	3	L	7.25	fl oz/a	POST	B				
16	SelectMax	0.97	L	9	fl oz/a	POST	B				
16	Crop oil concentrate		L	1	% v/v	POST	B				
16	AMS		WG	2.5	lb/100 gal	POST	B				
17	Authority MTZ	45	WG	16	oz/a	PRE	A	0	96	99	97
17	Flexstar	1.88	L	1	pt/a	POST	B				
17	SelectMax	0.97	L	9	fl oz/a	POST	B				
17	Crop oil concentrate		L	1	% v/v	POST	B				
17	AMS		WG	2.5	lb/100 gal	POST	B				
18	Authority MTZ	45	WG	16	oz/a	PRE	A	0	90	99	63
18	Cadet	0.91	L	0.5	fl oz/a	POST	B				
18	Basagran	4	L	10	fl oz/a	POST	B				
18	SelectMax	0.97	L	9	fl oz/a	POST	B				
18	Crop oil concentrate		L	1	% v/v	POST	B				
18	AMS		WG	2.5	lb/100 gal	POST	B				
19	Authority MTZ	45	WG	13	oz/a	PRE	A	0	98	99	99
19	Command	3	L	21	fl oz/a	PRE	A				
19	Marvel	3	L	7.25	fl oz/a	POST	B				
19	Crop oil concentrate		L	1	% v/v	POST	B				
20	Authority MTZ	45	WG	13	oz/a	PRE	A	0	92	99	89
20	Anthem MAXX	4.3	L	3	fl oz/a	PRE	A				
20	Marvel	3	L	7.25	fl oz/a	POST	B				
20	Crop oil concentrate		L	1	% v/v	POST	B				
21	Authority MTZ	45	WG	13	oz/a	PRE	A	0	96	99	83
21	Dual II Magnum	7.64	L	1	pt/a	PRE	A				
21	Marvel	3	L	7.25	fl oz/a	POST	B				
21	SelectMax	0.97	L	9	fl oz/a	POST	B				
21	Crop oil concentrate		L	1	% v/v	POST	B				
LSD (P=.05)								1.8	6.9	1.7	7.9
CV								315.32	5.46	1.24	6.54

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

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
 Conducted: Campus C-16 Investigator: Christy Sprague

Weed Code								ABUTH	SINAR	GLXMA	GLXMA
Crop Code								control	control	moisture	yield
Rating Data Type								percent	percent	percent	bu/acre
Rating Unit								Aug/14/2015	Aug/14/2015	Oct/12/2015	Oct/12/2015
Rating Date								56 DA-B	56 DA-B	115 DA-B	at 13% M
Trt-Eval Interval								0	0	1	1
# Subsamples, Dec.											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
1	Valor	51	WG	2.5	oz/a	PRE	A	98	99	13.4	59.6
1	Prowl H2O	3.8	L	2	pt/a	PRE	A				
1	Cobra	2	L	8	fl oz/a	POST	B				
1	SelectMax	0.97	L	12	fl oz/a	POST	B				
1	Crop oil concentrate		L	1	% v/v	POST	B				
1	AMS		WG	2.5	lb/a	POST	B				
2	Fierce	76	WG	3.75	oz/a	PRE	A	99	99	13.6	50.5
2	Cobra	2	L	8	fl oz/a	POST	B				
2	Crop oil concentrate		L	1	% v/v	POST	B				
2	AMS		WG	2.5	lb/a	POST	B				
3	Valor XLT	40.3	WG	4	oz/a	PRE	A	99	99	14.1	51.1
3	Zidua	85	WG	2.5	oz/a	PRE	A				
4	Trivence	61.3	WG	8	oz/a	PRE	A	99	99	13.7	49.0
4	Zidua	85	WG	2.5	oz/a	PRE	A				
5	Trivence	61.3	WG	10	oz/a	PRE	A	99	99	13.2	61.3
5	Flexstar	1.88	L	12	fl oz/a	POST	B				
5	Assure II	0.88	L	7	fl oz/a	POST	B				
5	Crop oil concentrate		L	1	% v/v	POST	B				
5	AMS		WG	2.5	lb/a	POST	B				
6	Untreated							0	0	15.1	24.4
7	Boundary	6.5	L	2.4	pt/a	PRE	A	99	99	13.2	66.6
7	Flexstar	1.88	L	1	pt/a	POST	B				
7	Crop oil concentrate		L	1	% v/v	POST	B				
7	AMS		WG	2.5	lb/a	POST	B				
8	Python	80	WG	0.8	oz/a	PRE	A	99	99	13.3	65.1
8	Boundary	6.5	L	2	pt/a	PRE	A				
8	Flexstar	1.88	L	1	pt/a	POST	B				
8	Crop oil concentrate		L	1	% v/v	POST	B				
8	AMS		WG	2.5	lb/a	POST	B				
9	Authority MAXX	66	WG	6	oz/a	PRE	A	99	99	13.7	54.0
9	Boundary	6.5	L	2	pt/a	PRE	A				
9	Ultra Blazer	2	L	1	pt/a	POST	B				
9	Surfactant		L	0.25	% v/v	POST	B				
9	AMS		WG	2.5	lb/a	POST	B				
10	Canopy	75	WG	2.25	oz/a	PRE	A	99	99	13.2	63.8
10	Prefix	5.29	L	2	pt/a	PRE	A				
10	Flexstar	1.88	L	12	fl oz/a	POST	B				
10	Crop oil concentrate		L	1	% v/v	POST	B				
10	AMS		WG	2.5	lb/a	POST	B				
11	Optill Pro - Optill	68	WG	2	oz/a	PRE	A	99	99	13.5	59.0
11	Optill Pro - Outlook	6	L	10	fl oz/a	PRE	A				
11	Outlook	6	L	8	fl oz/a	PRE	A				
11	Metribuzin	75	WG	5	oz/a	PRE	A				
11	Cobra	2	L	8	fl oz/a	POST	B				
11	Crop oil concentrate		L	1	% v/v	POST	B				
11	AMS		WG	2.5	lb/a	POST	B				

MSU Weed Science Research Program

Weed control in non-GMO soybean

Trial ID: SOY08-15 Study Dir.: Sprague and Powell
Conducted: Campus C-16 Investigator: Christy Sprague

Weed Code								ABUTH	SINAR	GLXMA	GLXMA
Crop Code								control	control	moisture	yield
Rating Data Type								percent	percent	percent	bu/acre
Rating Unit								Aug/14/2015	Aug/14/2015	Oct/12/2015	Oct/12/2015
Rating Date								56 DA-B	56 DA-B	115 DA-B	at 13% M
Trt-Eval Interval								0	0	1	1
# Subsamples, Dec.											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
12	Metribuzin	75	WG	5	oz/a	PRE	A	99	99	12.8	63.2
12	Dual II Magnum	7.64	L	1.33	pt/a	PRE	A				
12	Linex	4	L	1	pt/a	PRE	A				
12	Marvel	3	L	7.25	fl oz/a	POST	B				
12	Crop oil concentrate		L	1	% v/v	POST	B				
12	AMS		WG	2.5	lb/100 gal	POST	B				
13	Sonic	70	WG	6.4	oz/a	PRE	A	99	99	13.5	59.2
13	Warrant	3	L	3	pt/a	PRE	A				
13	Flexstar	1.88	L	1	pt/a	POST	B				
13	Crop oil concentrate		L	1	% v/v	POST	B				
13	AMS		WG	2.5	lb/a	POST	B				
14	Tricor	75	WG	8	oz/a	PRE	A	99	99	13.2	64.9
14	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A				
14	Ultra Blazer	2	L	1.5	pt/a	POST	B				
14	SelectMax	0.97	L	9	fl oz/a	POST	B				
14	Surfactant		L	0.25	% v/v	POST	B				
15	Tricor	75	WG	8	oz/a	PRE	A	99	99	13.8	67.9
15	Satellite Hydrocap	3.8	L	2	pt/a	PRE	A				
15	Storm	2	L	1.5	pt/a	POST	B				
15	SelectMax	0.97	L	9	fl oz/a	POST	B				
15	Surfactant		L	0.25	% v/v	POST	B				
16	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	13.4	62.1
16	Marvel	3	L	7.25	fl oz/a	POST	B				
16	SelectMax	0.97	L	9	fl oz/a	POST	B				
16	Crop oil concentrate		L	1	% v/v	POST	B				
16	AMS		WG	2.5	lb/100 gal	POST	B				
17	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	13.2	67.2
17	Flexstar	1.88	L	1	pt/a	POST	B				
17	SelectMax	0.97	L	9	fl oz/a	POST	B				
17	Crop oil concentrate		L	1	% v/v	POST	B				
17	AMS		WG	2.5	lb/100 gal	POST	B				
18	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	14.1	39.6
18	Cadet	0.91	L	0.5	fl oz/a	POST	B				
18	Basagran	4	L	10	fl oz/a	POST	B				
18	SelectMax	0.97	L	9	fl oz/a	POST	B				
18	Crop oil concentrate		L	1	% v/v	POST	B				
18	AMS		WG	2.5	lb/100 gal	POST	B				
19	Authority MTZ	45	WG	13	oz/a	PRE	A	99	99	13.0	63.7
19	Command	3	L	21	fl oz/a	PRE	A				
19	Marvel	3	L	7.25	fl oz/a	POST	B				
19	Crop oil concentrate		L	1	% v/v	POST	B				
20	Authority MTZ	45	WG	13	oz/a	PRE	A	99	99	13.2	63.0
20	Anthem MAXX	4.3	L	3	fl oz/a	PRE	A				
20	Marvel	3	L	7.25	fl oz/a	POST	B				
20	Crop oil concentrate		L	1	% v/v	POST	B				
21	Authority MTZ	45	WG	13	oz/a	PRE	A	99	99	13.5	64.2
21	Dual II Magnum	7.64	L	1	pt/a	PRE	A				
21	Marvel	3	L	7.25	fl oz/a	POST	B				
21	SelectMax	0.97	L	9	fl oz/a	POST	B				
21	Crop oil concentrate		L	1	% v/v	POST	B				
LSD (P=.05)								0.6	0.0	0.70	6.05
CV								0.47	0.0	3.68	7.37

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