

MSU Weed Science Research Program

Comparison of commercial programs in conventional tillage soybean

Trial ID: SOY04-10 Study Dir.: Sprague, Powell
 Conducted: T-10 Center Investigator: Christy Sprague

Date Planted: 5/28/2010 Row Spacing: 30 IN
 Variety: Pioneer 92M61 No. of Reps: 4
 Population: 157,000 Seeds/Acre % OM: 2.7
 Soil Type: Loam pH: 7.2
 Plot Size: 10 X 35 FT Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall chisel plowed and spring soil finished
 Fertilizer: None

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISIIFOLIA L.
2.	ANGR	mainly foxtail species	SETARIA SP.
3.	CHEAL	LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
4.	AMASS	POWELL AMARANTH, REDROOT PIGWEED	AMARANTHUS SP.
5.	BRAKA	MUSTARD, WILD	BRASSICA KABER (DC.) L.C. Wheeler
Crop	Code	Common Name	
1.	GLXMA	SOYBEAN	

Application Description

	A	B	C	D
Application Timing:	PRE	MPOS	POST	LPOST
Date Treated:	5/28/2010	6/21/2010	6/25/2010	7/12/2010
Time Treated:	2:30 pm	10:00 am	9:50 am	12:00 pm
% Cloud Cover:	0	0	5	75
Air Temp., Unit:	83 F	78 F	75 F	80 F
% Relative Humidity:	52	61	43	67
Wind Speed/Unit/Dir:	4 mph NE	3 mph SE	2 mph E	2 mph W
Soil Temp., Unit:	79 F	71 F	67 F	76 F
Soil/Leaf Surface M:	5 -	4 5	3 5	4 4
Soil Moist (1=w 5=d):	3	3	2	3

Crop Stage at Each Application

	A	B	C	D
Crop Name:	GLXMA	GLXMA	GLXMA	GLXMA
Height (In.):	-	4-6"	7-8"	18"
Stage (L):	-	V3	V3	V7-8

Weed Stage at Each Application

	A	B	C	D
Weed 1 Name:	AMBEL	AMBEL	AMBEL	AMBEL
Height (In.):	-	2"	3-5"	4-8"
Stage (L):	-	4-6	6	10-12
Weed 2 Name:	ANGR	ANGR	ANGR	ANGR
Height (In.):	-	4-6"	4-10"	2-3"
Stage (L):	-	4-5	5-6	5-6
Weed 3 Name:	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	-	6-8"	3"	2-3"
Stage (L):	-	2-4	12	10-15
Weed 4 Name:	AMASS	AMASS	AMASS	AMASS
Height (In.):	-	2-4"	3-6"	4"
Stage (L):	-	5-7	7-9	8
Weed 5 Name:	BRAKA	BRAKA	BRAKA	BRAKA
Height (In.):	-	2-4"	4"	-
Stage (L):	-	4-6	5	-

Weed Density (plants/sq. ft.)

	1	2	3	4	5
Weed Name:	ANGR	CHEAL	AMBEL	AMASS	BRAKA
Density:	10	3	4	11	<1

Application Equipment

Appl	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	GPA	Carrier	PSI
A	Cub	3.8	AirMix	11003	21"	20"	100"	19	water	28
B	Cub	3.8	AirMix	11003	26"	20"	100"	19	water	28
C	Cub	3.8	AirMix	11003	24"	20"	100"	19	water	28
D	Cub	3.8	AirMix	11003	29"	20"	100"	19	water	28

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Weed Code	Crop Code	GLXMA injury percent	GLXMA injury percent	ANGR control percent	CHEAL control percent	AMASS control percent	AMBEL control percent						
Rating Data Type	Rating Unit	6/16/2010	6/21/2010	6/21/2010	6/21/2010	6/21/2010	6/21/2010						
Rating Date	Trt-Eval Interval	19 DA-A	19 DA-A	19 DA-A	19 DA-A	19 DA-A	19 DA-A						
# Subsamples, Dec.		0	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code						
1	Canopy	75	WG	2.25	oz/a	PRE	A	18	21	99	99	99	99
1	Linex	4	L	1	pt/a	PRE	A						
1	Cinch	7.64	L	1	pt/a	PRE	A						
2	OpTill	68	WG	2	oz/a	PRE	A	15	15	98	99	99	92
2	Prowl H2O	3.8	L	2	pt/a	PRE	A						
2	Flexstar	1.88	L	10	fl oz/a	POST	C						
2	Herbimax (COC)		L	1	% v/v	POST	C						
2	AMS		WG	17	lb/100 gal	POST	C						
3	Prowl H2O	3.8	L	2	pt/a	PRE	A	14	7	80	99	60	3
3	Raptor	1	L	4	fl oz/a	MPOS	B						
3	Flexstar	1.88	L	10	fl oz/a	MPOS	B						
3	Herbimax (COC)		L	1	% v/v	MPOS	B						
3	AMS		WG	17	lb/100 gal	MPOS	B						
4	Authority MTZ	45	WG	10	oz/a	PRE	A	1	0	99	99	99	97
4	Command	3	L	2	pt/a	PRE	A						
4	Cadet	0.91	L	0.5	fl oz/a	LPOS	D						
4	Herbimax (COC)		L	1	% v/v	LPOS	D						
5	Authority XL (3.2 oz/A)	70	WG			PRE	A	2	6	99	99	99	97
5	Spartan	4	L	4	fl oz/a	PRE	A						
5	Classic	25	WG	1	oz/a	PRE	A						
5	Command	3	L	1.33	pt/a	PRE	A						
5	Cadet	0.91	L	0.5	fl oz/a	LPOS	D						
5	Fusilade DX	2	L	4	fl oz/a	LPOS	D						
5	Herbimax (COC)		L	1	% v/v	LPOS	D						
6	Untreated							0	0	0	0	0	0
7	Valor	51	WG	2	oz/a	PRE	A	11	6	81	99	98	91
7	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
7	AMS		WG	17	lb/100 gal	POST	C						
8	Valor XLT	40.3	WG	3	oz/a	PRE	A	15	16	92	99	99	99
8	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
8	AMS		WG	17	lb/100 gal	POST	C						
9	Envive (2.5 oz/A)	41.3	WG			PRE	A	9	11	93	99	99	99
9	Classic	25	WG	0.92	oz/a	PRE	A						
9	Harmony SG	50	WG	0.15	oz/a	PRE	A						
9	Valor		WG	1.5	oz/a	PRE	A						
9	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
9	AMS		WG	17	lb/100 gal	POST	C						
10	Synchrony (1.5 oz/A)	28.4	WG			PRE	A	3	5	83	98	99	87
10	Classic	25	WG	1.28	oz/a	PRE	A						
10	Harmony SG	50	WG	0.2	oz/a	PRE	A						
10	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
10	AMS		WG	17	lb/100 gal	POST	C						
11	Boundary	6.5	L	1.5	pt/a	PRE	A	18	9	99	99	99	78
11	Flexstar GT	3.27	L	3	pt/a	POST	C						
11	Activator 90		L	0.25	% v/v	POST	C						
11	AMS		WG	8.5	lb/100 gal	POST	C						

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Weed Code								ANGR	CHEAL	AMASS	AMBEL		
Crop Code							GLXMA	GLXMA					
Rating Data Type							injury	injury	control	control	control		
Rating Unit							percent	percent	percent	percent	percent		
Rating Date							6/16/2010	6/21/2010	6/21/2010	6/21/2010	6/21/2010		
Trt-Eval Interval							19 DA-A	19 DA-A	19 DA-A	19 DA-A	19 DA-A		
# Subsamples, Dec.							0	0	0	0	0		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
12	Prefix	5.29	L	2	pt/a	PRE	A	18	10	99	95	99	98
12	Touchdown Total	4.17	L	24	fl oz/a	POST	C						
12	AMS		WG	8.5	lb/100 gal	POST	C						
13	Sonic	70	WG	3	oz/a	PRE	A	0	0	91	99	99	91
13	Durango DMA	4	SL	24	fl oz/a	POST	C						
13	AMS		WG	17	lb/100 gal	POST	C						
14	Sonic	70	WG	4.5	oz/a	PRE	A	0	3	94	99	99	95
14	Durango DMA	4	SL	24	fl oz/a	POST	C						
14	AMS		WG	17	lb/100 gal	POST	C						
15	Authority XL (3.2 oz/A)	70	WG			PRE	A	2	6	90	99	99	90
15	Spartan	4	L	4	fl oz/a	PRE	A						
15	Classic	25	WG	1	oz/a	PRE	A						
15	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
15	Cadet	0.91	L	0.5	fl oz/a	POST	C						
15	AMS		WG	17	lb/100 gal	POST	C						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0	0	0	0	0	0
16	Warrant (MON 63410)	3	L	3	pt/a	MPOS	B						
16	AMS		WG	17	lb/100 gal	MPOS	B						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
16	AMS		WG	17	lb/100 gal	LPOS	D						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0	0	0	0	0	0
17	AMS		WG	17	lb/100 gal	MPOS	B						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
17	Warrant (MON 63410)	3	L	3	pt/a	LPOS	D						
17	AMS		WG	17	lb/100 gal	LPOS	D						
18	Durango DMA	4	SL	24	fl oz/a	MPOS	B	0	0	0	0	0	0
18	FirstRate	84	WG	0.3	oz/a	MPOS	B						
18	AMS		WG	17	lb/100 gal	MPOS	B						
18	Durango DMA	4	SL	24	fl oz/a	LPOS	D						
18	AMS		WG	17	lb/100 gal	LPOS	D						
19	Flexstar GT	3.27	L	3	pt/a	MPOS	B	0	0	0	0	0	0
19	Activator 90		L	0.25	% v/v	MPOS	B						
19	AMS		WG	8.5	lb/100 gal	MPOS	B						
19	Touchdown Total	4.17	L	24	fl oz/a	LPOS	D						
19	AMS		WG	8.5	lb/100 gal	LPOS	D						
20	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0	0	0	0	0	0
20	AMS		WG	17	lb/100 gal	MPOS	B						
20	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
20	AMS		WG	17	lb/100 gal	LPOS	D						
21	Weed-free							0	0	99	99	99	99
22	Fierce (V-10233)	76	WG	3	oz/a	PRE	A	25	15	99	99	99	99
22	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
22	AMS		WG	17	lb/100 gal	POST	C						
LSD (P=.05)								3.7	4.2	4.5	1.3	2.1	4.6
Standard Deviation								2.6	3.0	3.2	0.9	1.5	3.3
CV								38.39	51.45	4.67	1.3	2.16	5.11

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

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Weed Code								BRAKA		ANGR	CHEAL	AMASS	AMBEL
Crop Code									GLXMA				
Rating Data Type								control	injury	control	control	control	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								6/21/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010
Trt-Eval Interval								19 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code						
1	Canopy	75	WG	2.25	oz/a	PRE	A	99	7	98	99	99	98
1	Linex	4	L	1	pt/a	PRE	A						
1	Cinch	7.64	L	1	pt/a	PRE	A						
2	OpTill	68	WG	2	oz/a	PRE	A	99	6	94	99	99	98
2	Prowl H2O	3.8	L	2	pt/a	PRE	A						
2	Flexstar	1.88	L	10	fl oz/a	POST	C						
2	Herbimax (COC)		L	1	% v/v	POST	C						
2	AMS		WG	17	lb/100 gal	POST	C						
3	Prowl H2O	3.8	L	2	pt/a	PRE	A	38	11	92	99	99	96
3	Raptor	1	L	4	fl oz/a	MPOS	B						
3	Flexstar	1.88	L	10	fl oz/a	MPOS	B						
3	Herbimax (COC)		L	1	% v/v	MPOS	B						
3	AMS		WG	17	lb/100 gal	MPOS	B						
4	Authority MTZ	45	WG	10	oz/a	PRE	A	99	0	98	99	99	87
4	Command	3	L	2	pt/a	PRE	A						
4	Cadet	0.91	L	0.5	fl oz/a	LPOS	D						
4	Herbimax (COC)		L	1	% v/v	LPOS	D						
5	Authority XL (3.2 oz/A)	70	WG			PRE	A	99	5	97	99	99	88
5	Spartan	4	L	4	fl oz/a	PRE	A						
5	Classic	25	WG	1	oz/a	PRE	A						
5	Command	3	L	1.33	pt/a	PRE	A						
5	Cadet	0.91	L	0.5	fl oz/a	LPOS	D						
5	Fusilade DX	2	L	4	fl oz/a	LPOS	D						
5	Herbimax (COC)		L	1	% v/v	LPOS	D						
6	Untreated							0	0	0	0	0	0
7	Valor	51	WG	2	oz/a	PRE	A	99	0	94	99	99	98
7	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
7	AMS		WG	17	lb/100 gal	POST	C						
8	Valor XLT	40.3	WG	3	oz/a	PRE	A	99	6	96	99	99	99
8	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
8	AMS		WG	17	lb/100 gal	POST	C						
9	Envive (2.5 oz/A)	41.3	WG			PRE	A	99	3	96	99	99	99
9	Classic	25	WG	0.92	oz/a	PRE	A						
9	Harmony SG	50	WG	0.15	oz/a	PRE	A						
9	Valor		WG	1.5	oz/a	PRE	A						
9	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
9	AMS		WG	17	lb/100 gal	POST	C						
10	Synchrony (1.5 oz/A)	28.4	WG			PRE	A	99	2	96	99	99	99
10	Classic	25	WG	1.28	oz/a	PRE	A						
10	Harmony SG	50	WG	0.2	oz/a	PRE	A						
10	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
10	AMS		WG	17	lb/100 gal	POST	C						
11	Boundary	6.5	L	1.5	pt/a	PRE	A	99	6	99	99	99	99
11	Flexstar GT	3.27	L	3	pt/a	POST	C						
11	Activator 90		L	0.25	% v/v	POST	C						
11	AMS		WG	8.5	lb/100 gal	POST	C						

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Weed Code								BRAKA		ANGR	CHEAL	AMASS	AMBEL
Crop Code									GLXMA				
Rating Data Type								control	injury	control	control	control	control
Rating Unit								percent	percent	percent	percent	percent	percent
Rating Date								6/21/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010	7/8/2010
Trt-Eval Interval								19 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A	41 DA-A
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
12	Prefix	5.29	L	2	pt/a	PRE	A	99	0	99	99	99	99
12	Touchdown Total	4.17	L	24	fl oz/a	POST	C						
12	AMS		WG	8.5	lb/100 gal	POST	C						
13	Sonic	70	WG	3	oz/a	PRE	A	99	2	91	99	99	99
13	Durango DMA	4	SL	24	fl oz/a	POST	C						
13	AMS		WG	17	lb/100 gal	POST	C						
14	Sonic	70	WG	4.5	oz/a	PRE	A	99	2	95	99	99	99
14	Durango DMA	4	SL	24	fl oz/a	POST	C						
14	AMS		WG	17	lb/100 gal	POST	C						
15	Authority XL (3.2 oz/A)	70	WG			PRE	A	99	7	93	99	99	88
15	Spartan	4	L	4	fl oz/a	PRE	A						
15	Classic	25	WG	1	oz/a	PRE	A						
15	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
15	Cadet	0.91	L	0.5	fl oz/a	POST	C						
15	AMS		WG	17	lb/100 gal	POST	C						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0	0	95	79	98	96
16	Warrant (MON 63410)	3	L	3	pt/a	MPOS	B						
16	AMS		WG	17	lb/100 gal	MPOS	B						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
16	AMS		WG	17	lb/100 gal	LPOS	D						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0	0	88	94	97	98
17	AMS		WG	17	lb/100 gal	MPOS	B						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
17	Warrant (MON 63410)	3	L	3	pt/a	LPOS	D						
17	AMS		WG	17	lb/100 gal	LPOS	D						
18	Durango DMA	4	SL	24	fl oz/a	MPOS	B	0	1	92	95	99	99
18	FirstRate	84	WG	0.3	oz/a	MPOS	B						
18	AMS		WG	17	lb/100 gal	MPOS	B						
18	Durango DMA	4	SL	24	fl oz/a	LPOS	D						
18	AMS		WG	17	lb/100 gal	LPOS	D						
19	Flexstar GT	3.27	L	3	pt/a	MPOS	B	0	4	95	95	97	99
19	Activator 90		L	0.25	% v/v	MPOS	B						
19	AMS		WG	8.5	lb/100 gal	MPOS	B						
19	Touchdown Total	4.17	L	24	fl oz/a	LPOS	D						
19	AMS		WG	8.5	lb/100 gal	LPOS	D						
20	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0	0	87	93	95	98
20	AMS		WG	17	lb/100 gal	MPOS	B						
20	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
20	AMS		WG	17	lb/100 gal	LPOS	D						
21	Weed-free							99	0	99	99	99	99
22	Fierce (V-10233)	76	WG	3	oz/a	PRE	A	99	7	97	99	99	99
22	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
22	AMS		WG	17	lb/100 gal	POST	C						
LSD (P=.05)								1.5	4.6	3.4	3.6	1.5	3.6
Standard Deviation								1.1	3.3	2.4	2.5	1.1	2.6
CV								1.54	108.84	2.62	2.72	1.14	2.79

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

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Crop Code								control	injury	control	control	control	control
Rating Data Type								percent	percent	percent	percent	percent	percent
Rating Unit								7/8/2010	7/26/2010	7/26/2010	7/26/2010	7/26/2010	7/26/2010
Rating Date								41 DA-A	59 DA-A	59 DA-A	59 DA-A	59 DA-A	59 DA-A
Trt-Eval Interval								0	0	0	0	0	0
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code						
1	Canopy	75	WG	2.25	oz/a	PRE	A	99	3	95	99	99	95
1	Linex	4	L	1	pt/a	PRE	A						
1	Cinch	7.64	L	1	pt/a	PRE	A						
2	OpTill	68	WG	2	oz/a	PRE	A	99	0	90	99	99	98
2	Prowl H2O	3.8	L	2	pt/a	PRE	A						
2	Flexstar	1.88	L	10	fl oz/a	POST	C						
2	Herbimax (COC)		L	1	% v/v	POST	C						
2	AMS		WG	17	lb/100 gal	POST	C						
3	Prowl H2O	3.8	L	2	pt/a	PRE	A	99	3	80	99	99	94
3	Raptor	1	L	4	fl oz/a	MPOS	B						
3	Flexstar	1.88	L	10	fl oz/a	MPOS	B						
3	Herbimax (COC)		L	1	% v/v	MPOS	B						
3	AMS		WG	17	lb/100 gal	MPOS	B						
4	Authority MTZ	45	WG	10	oz/a	PRE	A	99	0	99	99	99	91
4	Command	3	L	2	pt/a	PRE	A						
4	Cadet	0.91	L	0.5	fl oz/a	LPOS	D						
4	Herbimax (COC)		L	1	% v/v	LPOS	D						
5	Authority XL (3.2 oz/A)	70	WG			PRE	A	99	1	99	99	99	92
5	Spartan	4	L	4	fl oz/a	PRE	A						
5	Classic	25	WG	1	oz/a	PRE	A						
5	Command	3	L	1.33	pt/a	PRE	A						
5	Cadet	0.91	L	0.5	fl oz/a	LPOS	D						
5	Fusilade DX	2	L	4	fl oz/a	LPOS	D						
5	Herbimax (COC)		L	1	% v/v	LPOS	D						
6	Untreated							0	0	0	0	0	0
7	Valor	51	WG	2	oz/a	PRE	A	99	0	87	99	98	99
7	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
7	AMS		WG	17	lb/100 gal	POST	C						
8	Valor XLT	40.3	WG	3	oz/a	PRE	A	99	3	81	99	99	99
8	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
8	AMS		WG	17	lb/100 gal	POST	C						
9	Envive (2.5 oz/A)	41.3	WG			PRE	A	99	1	85	99	98	99
9	Classic	25	WG	0.92	oz/a	PRE	A						
9	Harmony SG	50	WG	0.15	oz/a	PRE	A						
9	Valor		WG	1.5	oz/a	PRE	A						
9	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
9	AMS		WG	17	lb/100 gal	POST	C						
10	Synchrony (1.5 oz/A)	28.4	WG			PRE	A	99	3	86	99	99	99
10	Classic	25	WG	1.28	oz/a	PRE	A						
10	Harmony SG	50	WG	0.2	oz/a	PRE	A						
10	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
10	AMS		WG	17	lb/100 gal	POST	C						
11	Boundary	6.5	L	1.5	pt/a	PRE	A	99	0	99	99	99	99
11	Flexstar GT	3.27	L	3	pt/a	POST	C						
11	Activator 90		L	0.25	% v/v	POST	C						
11	AMS		WG	8.5	lb/100 gal	POST	C						

MSU Weed Science Research Program

Comparison of commercial programs in conventional tillage soybean

Trial ID: SOY04-10
 Conducted: T-10 Center

Study Dir.: Sprague, Powell
 Investigator: Christy Sprague

Weed Code								BRAKA	GLXMA	ANGR	CHEAL	AMASS	AMBEL
Crop Code								control	injury	control	control	control	control
Rating Data Type								percent	percent	percent	percent	percent	percent
Rating Unit								7/8/2010	7/26/2010	7/26/2010	7/26/2010	7/26/2010	7/26/2010
Rating Date								41 DA-A	59 DA-A	59 DA-A	59 DA-A	59 DA-A	59 DA-A
Trt-Eval Interval								0	0	0	0	0	0
# Subsamples, Dec.								0	0	0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code						
12	Prefix	5.29	L	2	pt/a	PRE	A	99	0	99	99	99	99
12	Touchdown Total	4.17	L	24	fl oz/a	POST	C						
12	AMS		WG	8.5	lb/100 gal	POST	C						
13	Sonic	70	WG	3	oz/a	PRE	A	99	0	74	99	99	99
13	Durango DMA	4	SL	24	fl oz/a	POST	C						
13	AMS		WG	17	lb/100 gal	POST	C						
14	Sonic	70	WG	4.5	oz/a	PRE	A	99	1	79	99	99	99
14	Durango DMA	4	SL	24	fl oz/a	POST	C						
14	AMS		WG	17	lb/100 gal	POST	C						
15	Authority XL (3.2 oz/A)	70	WG			PRE	A	99	4	76	99	99	90
15	Spartan	4	L	4	fl oz/a	PRE	A						
15	Classic	25	WG	1	oz/a	PRE	A						
15	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
15	Cadet	0.91	L	0.5	fl oz/a	POST	C						
15	AMS		WG	17	lb/100 gal	POST	C						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99	0	99	99	99	99
16	Warrant (MON 63410)	3	L	3	pt/a	MPOS	B						
16	AMS		WG	17	lb/100 gal	MPOS	B						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
16	AMS		WG	17	lb/100 gal	LPOS	D						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99	0	99	99	99	99
17	AMS		WG	17	lb/100 gal	MPOS	B						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
17	Warrant (MON 63410)	3	L	3	pt/a	LPOS	D						
17	AMS		WG	17	lb/100 gal	LPOS	D						
18	Durango DMA	4	SL	24	fl oz/a	MPOS	B	99	3	99	99	99	99
18	FirstRate	84	WG	0.3	oz/a	MPOS	B						
18	AMS		WG	17	lb/100 gal	MPOS	B						
18	Durango DMA	4	SL	24	fl oz/a	LPOS	D						
18	AMS		WG	17	lb/100 gal	LPOS	D						
19	Flexstar GT	3.27	L	3	pt/a	MPOS	B	99	1	99	99	99	99
19	Activator 90		L	0.25	% v/v	MPOS	B						
19	AMS		WG	8.5	lb/100 gal	MPOS	B						
19	Touchdown Total	4.17	L	24	fl oz/a	LPOS	D						
19	AMS		WG	8.5	lb/100 gal	LPOS	D						
20	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99	0	98	99	99	99
20	AMS		WG	17	lb/100 gal	MPOS	B						
20	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
20	AMS		WG	17	lb/100 gal	LPOS	D						
21	Weed-free							99	0	99	99	99	99
22	Fierce (V-10233)	76	WG	3	oz/a	PRE	A	99	0	96	99	99	99
22	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
22	AMS		WG	17	lb/100 gal	POST	C						
LSD (P=.05)								0.0	2.6	5.9	0.3	0.6	2.8
Standard Deviation								0.0	1.8	4.2	0.2	0.4	2.0
CV								0.0	189.5	4.79	0.19	0.42	2.12

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

MSU Weed Science Research Program

Comparison of commercial programs in conventional tillage soybean

Trial ID: SOY04-10
Conducted: T-10 CenterStudy Dir.: Sprague, Powell
Investigator: Christy Sprague

Weed Code								BRAKA		
Crop Code								control	GLXMA	GLXMA
Rating Data Type								percent	moisture	yield
Rating Unit								7/26/2010	10/11/2010	10/11/2010
Rating Date								59 DA-A	136 DA-A	at 13% M
Trt-Eval Interval								0	1	1
# Subsamples, Dec.										
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code			
1	Canopy	75	WG	2.25	oz/a	PRE	A	99	8.9	45.6
1	Linex	4	L	1	pt/a	PRE	A			
1	Cinch	7.64	L	1	pt/a	PRE	A			
2	OpTill	68	WG	2	oz/a	PRE	A	99	8.7	49.9
2	Prowl H2O	3.8	L	2	pt/a	PRE	A			
2	Flexstar	1.88	L	10	fl oz/a	POST	C			
2	Herbimax (COC)		L	1	% v/v	POST	C			
2	AMS		WG	17	lb/100 gal	POST	C			
3	Prowl H2O	3.8	L	2	pt/a	PRE	A	99	8.8	44.5
3	Raptor	1	L	4	fl oz/a	MPOS	B			
3	Flexstar	1.88	L	10	fl oz/a	MPOS	B			
3	Herbimax (COC)		L	1	% v/v	MPOS	B			
3	AMS		WG	17	lb/100 gal	MPOS	B			
4	Authority MTZ	45	WG	10	oz/a	PRE	A	99	8.7	51.0
4	Command	3	L	2	pt/a	PRE	A			
4	Cadet	0.91	L	0.5	fl oz/a	LPOS	D			
4	Herbimax (COC)		L	1	% v/v	LPOS	D			
5	Authority XL (3.2 oz/A)	70	WG			PRE	A	99	8.4	45.3
5	Spartan	4	L	4	fl oz/a	PRE	A			
5	Classic	25	WG	1	oz/a	PRE	A			
5	Command	3	L	1.33	pt/a	PRE	A			
5	Cadet	0.91	L	0.5	fl oz/a	LPOS	D			
5	Fusilade DX	2	L	4	fl oz/a	LPOS	D			
5	Herbimax (COC)		L	1	% v/v	LPOS	D			
6	Untreated							0	9.7	16.0
7	Valor	51	WG	2	oz/a	PRE	A	99	8.7	52.1
7	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C			
7	AMS		WG	17	lb/100 gal	POST	C			
8	Valor XLT	40.3	WG	3	oz/a	PRE	A	99	8.5	50.1
8	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C			
8	AMS		WG	17	lb/100 gal	POST	C			
9	Envive (2.5 oz/A)	41.3	WG			PRE	A	99	8.6	47.0
9	Classic	25	WG	0.92	oz/a	PRE	A			
9	Harmony SG	50	WG	0.15	oz/a	PRE	A			
9	Valor		WG	1.5	oz/a	PRE	A			
9	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C			
9	AMS		WG	17	lb/100 gal	POST	C			
10	Synchrony (1.5 oz/A)	28.4	WG			PRE	A	99	8.6	48.8
10	Classic	25	WG	1.28	oz/a	PRE	A			
10	Harmony SG	50	WG	0.2	oz/a	PRE	A			
10	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C			
10	AMS		WG	17	lb/100 gal	POST	C			
11	Boundary	6.5	L	1.5	pt/a	PRE	A	99	8.7	48.0
11	Flexstar GT	3.27	L	3	pt/a	POST	C			
11	Activator 90		L	0.25	% v/v	POST	C			
11	AMS		WG	8.5	lb/100 gal	POST	C			

MSU Weed Science Research Program

Comparison of commercial programs in conventional tillage soybean

Trial ID: SOY04-10
Conducted: T-10 CenterStudy Dir.: Sprague, Powell
Investigator: Christy Sprague

Weed Code								BRAKA		
Crop Code								control	GLXMA	GLXMA
Rating Data Type								percent	moisture	yield
Rating Unit								7/26/2010	10/11/2010	10/11/2010
Rating Date								59 DA-A	136 DA-A	at 13% M
Trt-Eval Interval								0	1	1
# Subsamples, Dec.										
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code			
12	Prefix	5.29	L	2	pt/a	PRE	A	99	8.8	52.1
12	Touchdown Total	4.17	L	24	fl oz/a	POST	C			
12	AMS		WG	8.5	lb/100 gal	POST	C			
13	Sonic	70	WG	3	oz/a	PRE	A	99	8.6	44.5
13	Durango DMA	4	SL	24	fl oz/a	POST	C			
13	AMS		WG	17	lb/100 gal	POST	C			
14	Sonic	70	WG	4.5	oz/a	PRE	A	99	8.6	49.2
14	Durango DMA	4	SL	24	fl oz/a	POST	C			
14	AMS		WG	17	lb/100 gal	POST	C			
15	Authority XL (3.2 oz/A)	70	WG			PRE	A	99	8.5	46.1
15	Spartan	4	L	4	fl oz/a	PRE	A			
15	Classic	25	WG	1	oz/a	PRE	A			
15	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C			
15	Cadet	0.91	L	0.5	fl oz/a	POST	C			
15	AMS		WG	17	lb/100 gal	POST	C			
16	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99	8.6	47.9
16	Warrant (MON 63410)	3	L	3	pt/a	MPOS	B			
16	AMS		WG	17	lb/100 gal	MPOS	B			
16	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D			
16	AMS		WG	17	lb/100 gal	LPOS	D			
17	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99	8.8	47.4
17	AMS		WG	17	lb/100 gal	MPOS	B			
17	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D			
17	Warrant (MON 63410)	3	L	3	pt/a	LPOS	D			
17	AMS		WG	17	lb/100 gal	LPOS	D			
18	Durango DMA	4	SL	24	fl oz/a	MPOS	B	99	8.7	45.4
18	FirstRate	84	WG	0.3	oz/a	MPOS	B			
18	AMS		WG	17	lb/100 gal	MPOS	B			
18	Durango DMA	4	SL	24	fl oz/a	LPOS	D			
18	AMS		WG	17	lb/100 gal	LPOS	D			
19	Flexstar GT	3.27	L	3	pt/a	MPOS	B	99	8.6	47.3
19	Activator 90		L	0.25	% v/v	MPOS	B			
19	AMS		WG	8.5	lb/100 gal	MPOS	B			
19	Touchdown Total	4.17	L	24	fl oz/a	LPOS	D			
19	AMS		WG	8.5	lb/100 gal	LPOS	D			
20	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99	8.9	42.8
20	AMS		WG	17	lb/100 gal	MPOS	B			
20	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D			
20	AMS		WG	17	lb/100 gal	LPOS	D			
21	Weed-free							99	8.7	48.6
22	Fierce (V-10233)	76	WG	3	oz/a	PRE	A	99	8.9	47.2
22	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C			
22	AMS		WG	17	lb/100 gal	POST	C			
LSD (P=.05)								0.0	0.39	6.22
Standard Deviation								0.0	0.28	4.39
CV								0.0	3.2	9.51

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