

MSU Weed Science Research Program

Comparison of commercial herbicide programs in soybean

Trial ID: SOY09-11 Study Dir.: Sprague, Powell
Conducted: C-16 Crops Investigator: Christy Sprague

Date Planted: 5/10/2011 Row Spacing: 30 IN
Variety: See comments No. of Reps: 4
Population: 155,000/ 152,000 % OM: 2.5
Soil Type: Silt Loam pH: 6.8
Plot Size: 10 X 30 FT Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fallow 2010- Installed tile drainage, spring soil finish.
Fertilizer: None at planting.

Crop and Weed Description

Table with 4 columns: Weed, Code, Common Name, Scientific Name. Lists weeds 1-6 and crop 1 (GLXMA SOYBEAN).

Application Description

Table with 5 columns: Application Timing, Date Treated, Time Treated, % Cloud Cover, Air Temp., Unit, % Relative Humidity, Wind Speed/Unit/Dir, Soil Temp., Unit, Soil/Leaf Surface M, Soil Moist (1=w 5=d). Lists treatments A, B, C, D.

Crop Stage at Each Application

Table with 5 columns: Crop Name, Height (In.), Stage (L). Lists crop stages for treatments A, B, C, D.

Weed Stage at Each Application

Table with 5 columns: Weed Name, Height (In.), Stage (L). Lists weed stages for treatments A, B, C, D across weeds 1-6.

Weed Density (plants/sq. ft.)

Table with 7 columns: Weed Name, Density. Lists weed densities for treatments 1-6.

Application Equipment

Table with 11 columns: Appl, Sprayer Type, Speed MPH, Nozzle Type, Nozzle Size, Nozzle Height, Nozzle Spacing, Boom Width, GPA, Carrier, PSI. Lists equipment for treatments A, B, C, D.

Comments: Pioneer 92M61 RR was planted for the Roundup Ready plots (TRTS 1-26). Stine 23LA02 was planted for the Liberty Link plots (TRTS 27-30).

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Weed Code ANGR CHEAL AMBEL ABUTH SINAR
Crop Code GLXMA
Rating Data Type injury control control control control control
Rating Unit percent percent percent percent percent percent
Rating Date 6/8/2011 6/8/2011 6/8/2011 6/8/2011 6/8/2011 6/8/2011
Trt-Eval Interval 29 DA-A 29 DA-A 29 DA-A 29 DA-A 29 DA-A 29 DA-A
# Subsamples, Dec.

Table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, and control percentages for ANGR, CHEAL, AMBEL, ABUTH, SINAR. Rows include treatments like Envive, Valor, Metribuzin, Prowl H2O, OpTill, Flexstar, Herbimax (COC), AMS, Sharpen, Roundup PowerMax, Fierce, Canopy, Sonic, Durango DMA, Authority First.

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Weed Code	ANGR	CHEAL	AMBEL	ABUTH	SINAR
Crop Code	GLXMA				
Rating Data Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Trt-Eval Interval	29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A
# Subsamples, Dec.					

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
14	Python	80	WG	0.8	oz/a	PRE	A	11.3	80.8	99.0	75.8	99.0	99.0
14	Durango DMA	4	SL	24	fl oz/a	POST	C						
14	AMS		WG	17	lb/100 gal	POST	C						
15	Boundary	6.5	L	1.5	pt/a	PRE	A	16.3	99.0	99.0	81.3	99.0	99.0
15	Flexstar GT 3.5	3.5	L	3.5	pt/a	POST	C						
15	Activator 90		L	0.25	% v/v	POST	C						
15	AMS		WG	8.5	lb/100 gal	POST	C						
16	Command 3ME	3	L	1.3	pt/a	PRE	A	13.8	99.0	99.0	96.0	99.0	99.0
16	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
16	Metribuzin	75	WG	5	oz/a	PRE	A						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
16	Cadet	0.91	L	0.6	fl oz/a	POST	C						
16	AMS		WG	17	lb/100 gal	POST	C						
17	Authority First	70	WG	6.45	oz/a	PRE	A	25.0	99.0	99.0	94.5	99.0	99.0
17	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
17	Cadet	0.91	L	0.6	fl oz/a	POST	C						
17	AMS		WG	17	lb/100 gal	POST	C						
18	Linex	4	L	1.5	pt/a	PRE	A	11.3	75.5	99.0	74.5	89.8	86.0
18	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
18	AMS		WG	17	lb/100 gal	POST	C						
19	Linex	4	L	0.75	pt/a	PRE	A	7.5	89.3	99.0	92.3	99.0	99.0
19	Metribuzin	75	WG	5.33	oz/a	PRE	A						
19	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
19	AMS		WG	17	lb/100 gal	POST	C						
20	Flexstar GT 3.5	3.5	L	3.5	pt/a	MPOS	B	0.0	0.0	0.0	0.0	0.0	0.0
20	Activator 90		L	0.25	% v/v	MPOS	B						
20	AMS		WG	8.5	lb/100 gal	MPOS	B						
20	Touchdown Total	4	SL	24	fl oz/a	LPOS	D						
20	AMS		WG	8.5	lb/100 gal	LPOS	D						
21	NO TRT												
22	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0.0	0.0	0.0	0.0	0.0	0.0
22	Warrant	3	L	3	pt/a	MPOS	B						
22	AMS		WG	17	lb/100 gal	MPOS	B						
22	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
22	AMS		WG	17	lb/100 gal	LPOS	D						
23	Roundup PowerMax	4.5	SL	44	fl oz/a	LPOS	D	0.0	0.0	0.0	0.0	0.0	0.0
23	AMS		WG	17	lb/100 gal	LPOS	D						
24	Dual 8E	8	L	1	pt/a	PRE	A	15.0	99.0	99.0	75.8	99.0	99.0
24	Metribuzin	75	WG	3	oz/a	PRE	A						
24	Pursuit	2	L	2	fl oz/a	PRE	A						
24	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
24	AMS		WG	17	lb/100 gal	POST	C						
25	Weed-free							0.0	99.0	99.0	99.0	99.0	99.0
26	Untreated							0.0	0.0	0.0	0.0	0.0	0.0

MSU Weed Science Research Program

Comparison of commercial herbicide programs in soybean

Trial ID: SOY09-11 Study Dir.: Sprague, Powell
Conducted: C-16 Crops Investigator: Christy Sprague

Table with 7 columns: Weed Code, Crop Code, Rating Data Type, Rating Unit, Rating Date, Trt-Eval Interval, # Subsamples, Dec. and 6 treatment columns (ANGR, CHEAL, AMBEL, ABUTH, SINAR, GLXMA).

Main data table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, and 6 treatment columns (ANGR, CHEAL, AMBEL, ABUTH, SINAR, GLXMA).

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Comparison of commercial herbicide programs in soybean

Trial ID: SOY09-11 Study Dir.: Sprague, Powell
Conducted: C-16 Crops Investigator: Christy Sprague

Weed Code ANGR CHEAL AMAPO AMBEL ABUTH
Crop Code GLXMA
Rating Data Type injury
Rating Unit control
Rating Date percent
Trt-Eval Interval 6/21/2011
# Subsamples, Dec. 12 DA-B

Table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, and control percent for various herbicide treatments (1-13).

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Weed Code								ANGR	CHEAL	AMAPO	AMBEL	ABUTH	
Crop Code							GLXMA						
Rating Data Type							injury	control	control	control	control	control	
Rating Unit							percent	percent	percent	percent	percent	percent	
Rating Date							6/21/2011	6/21/2011	6/21/2011	6/21/2011	6/21/2011	6/21/2011	
Trt-Eval Interval							12 DA-B	12 DA-B	12 DA-B	12 DA-B	12 DA-B	12 DA-B	
# Subsamples, Dec.													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
14	Python	80	WG	0.8	oz/a	PRE	A	0.0	66.3	99.0	99.0	57.5	99.0
14	Durango DMA	4	SL	24	fl oz/a	POST	C						
14	AMS		WG	17	lb/100 gal	POST	C						
15	Boundary	6.5	L	1.5	pt/a	PRE	A	3.8	98.3	98.5	99.0	78.8	99.0
15	Flexstar GT 3.5	3.5	L	3.5	pt/a	POST	C						
15	Activator 90		L	0.25	% v/v	POST	C						
15	AMS		WG	8.5	lb/100 gal	POST	C						
16	Command 3ME	3	L	1.3	pt/a	PRE	A	0.0	99.0	99.0	99.0	92.5	99.0
16	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
16	Metribuzin	75	WG	5	oz/a	PRE	A						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
16	Cadet	0.91	L	0.6	fl oz/a	POST	C						
16	AMS		WG	17	lb/100 gal	POST	C						
17	Authority First	70	WG	6.45	oz/a	PRE	A	13.8	99.0	99.0	99.0	87.5	99.0
17	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
17	Cadet	0.91	L	0.6	fl oz/a	POST	C						
17	AMS		WG	17	lb/100 gal	POST	C						
18	Linex	4	L	1.5	pt/a	PRE	A	1.3	68.8	98.5	99.0	53.8	69.8
18	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
18	AMS		WG	17	lb/100 gal	POST	C						
19	Linex	4	L	0.75	pt/a	PRE	A	0.8	78.5	99.0	99.0	80.8	99.0
19	Metribuzin	75	WG	5.33	oz/a	PRE	A						
19	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
19	AMS		WG	17	lb/100 gal	POST	C						
20	Flexstar GT 3.5	3.5	L	3.5	pt/a	MPOS	B	9.3	99.0	98.0	74.3	98.0	98.8
20	Activator 90		L	0.25	% v/v	MPOS	B						
20	AMS		WG	8.5	lb/100 gal	MPOS	B						
20	Touchdown Total	4	SL	24	fl oz/a	LPOS	D						
20	AMS		WG	8.5	lb/100 gal	LPOS	D						
21	NO TRT												
22	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	0.0	98.8	94.8	99.0	98.3	98.3
22	Warrant	3	L	3	pt/a	MPOS	B						
22	AMS		WG	17	lb/100 gal	MPOS	B						
22	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
22	AMS		WG	17	lb/100 gal	LPOS	D						
23	Roundup PowerMax	4.5	SL	44	fl oz/a	LPOS	D	0.0	0.0	0.0	0.0	0.0	0.0
23	AMS		WG	17	lb/100 gal	LPOS	D						
24	Dual 8E	8	L	1	pt/a	PRE	A	5.0	98.8	99.0	99.0	70.3	99.0
24	Metribuzin	75	WG	3	oz/a	PRE	A						
24	Pursuit	2	L	2	fl oz/a	PRE	A						
24	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
24	AMS		WG	17	lb/100 gal	POST	C						
25	Weed-free							0.0	99.0	99.0	99.0	99.0	99.0
26	Untreated							0.0	0.0	0.0	0.0	0.0	0.0

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Table with 7 columns: Weed Code, Crop Code, Rating Data Type, Rating Unit, Rating Date, Trt-Eval Interval, # Subsamples, Dec. and 6 treatment columns: ANGR, CHEAL, AMAPO, AMBEL, ABUTH, GLXMA.

Main data table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, and 6 treatment columns (ANGR, CHEAL, AMAPO, AMBEL, ABUTH, GLXMA).

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Table with columns: Weed Code, Crop Code, Rating Data Type, Rating Unit, Rating Date, Trt-Eval Interval, # Subsamples, Dec., SINAR, GLXMA, ANGR, CHEAL, AMAPO, AMBEL. It lists control and injury percentages for various treatments.

Main data table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, SINAR, GLXMA, ANGR, CHEAL, AMAPO, AMBEL. It details 13 different herbicide treatments and their results.



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Weed Code	SINAR	ANGR	CHEAL	AMAPO	AMBEL								
Crop Code	GLXMA												
Rating Data Type	control	control	control	control	control								
Rating Unit	percent	percent	percent	percent	percent								
Rating Date	6/21/2011	7/18/2011	7/18/2011	7/18/2011	7/18/2011								
Trt-Eval Interval	12 DA-B	27 DA-C	27 DA-C	27 DA-C	27 DA-C								
# Subsamples, Dec.													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
14	Python	80	WG	0.8	oz/a	PRE	A	99.0	0.0	97.0	99.0	99.0	98.0
14	Durango DMA	4	SL	24	fl oz/a	POST	C						
14	AMS		WG	17	lb/100 gal	POST	C						
15	Boundary	6.5	L	1.5	pt/a	PRE	A	98.0	0.0	99.0	99.0	99.0	99.0
15	Flexstar GT 3.5	3.5	L	3.5	pt/a	POST	C						
15	Activator 90		L	0.25	% v/v	POST	C						
15	AMS		WG	8.5	lb/100 gal	POST	C						
16	Command 3ME	3	L	1.3	pt/a	PRE	A	98.0	0.0	99.0	99.0	99.0	99.0
16	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
16	Metribuzin	75	WG	5	oz/a	PRE	A						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
16	Cadet	0.91	L	0.6	fl oz/a	POST	C						
16	AMS		WG	17	lb/100 gal	POST	C						
17	Authority First	70	WG	6.45	oz/a	PRE	A	99.0	7.0	99.0	99.0	99.0	97.5
17	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
17	Cadet	0.91	L	0.6	fl oz/a	POST	C						
17	AMS		WG	17	lb/100 gal	POST	C						
18	Linex	4	L	1.5	pt/a	PRE	A	89.8	1.5	96.3	99.0	99.0	99.0
18	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
18	AMS		WG	17	lb/100 gal	POST	C						
19	Linex	4	L	0.75	pt/a	PRE	A	99.0	0.0	96.5	99.0	99.0	99.0
19	Metribuzin	75	WG	5.33	oz/a	PRE	A						
19	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
19	AMS		WG	17	lb/100 gal	POST	C						
20	Flexstar GT 3.5	3.5	L	3.5	pt/a	MPOS	B	99.0	1.3	99.0	99.0	99.0	99.0
20	Activator 90		L	0.25	% v/v	MPOS	B						
20	AMS		WG	8.5	lb/100 gal	MPOS	B						
20	Touchdown Total	4	SL	24	fl oz/a	LPOS	D						
20	AMS		WG	8.5	lb/100 gal	LPOS	D						
21	NO TRT												
22	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99.0	2.0	99.0	98.5	99.0	99.0
22	Warrant	3	L	3	pt/a	MPOS	B						
22	AMS		WG	17	lb/100 gal	MPOS	B						
22	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
22	AMS		WG	17	lb/100 gal	LPOS	D						
23	Roundup PowerMax	4.5	SL	44	fl oz/a	LPOS	D	0.0	0.0	99.0	99.0	99.0	85.8
23	AMS		WG	17	lb/100 gal	LPOS	D						
24	Dual 8E	8	L	1	pt/a	PRE	A	99.0	0.8	98.8	99.0	99.0	99.0
24	Metribuzin	75	WG	3	oz/a	PRE	A						
24	Pursuit	2	L	2	fl oz/a	PRE	A						
24	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
24	AMS		WG	17	lb/100 gal	POST	C						
25	Weed-free							99.0	0.0	99.0	99.0	99.0	99.0
26	Untreated							0.0	0.0	0.0	0.0	0.0	0.0

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Main data table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, and six columns of control/injury percentages. Includes LSD, Standard Deviation, and CV values at the bottom.

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Table with columns: Weed Code, Crop Code, Rating Data Type, Rating Unit, Rating Date, Trt-Eval Interval, # Subsamples, Dec., Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, ABUTH, SINAR, ANGR, CHEAL, AMAPO, AMBEL. Rows include treatments like Envive, Valor, Metribuzin, Prowl H2O, OpTill, Flexstar, Herbimax (COC), AMS, Raptor, Sharpen, Roundup PowerMax, Valor XLT, Prefix, Touchdown Total, Fierce, Canopy, Sonic, Durango DMA, Authority First.

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Weed Code	ABUTH	SINAR	ANGR	CHEAL	AMAPO	AMBEL							
Crop Code													
Rating Data Type	control	control	control	control	control	control							
Rating Unit	percent	percent	percent	percent	percent	percent							
Rating Date	7/18/2011	7/18/2011	8/16/2011	8/16/2011	8/16/2011	8/16/2011							
Trt-Eval Interval	27 DA-C	27 DA-C	56 DA-C	56 DA-C	56 DA-C	56 DA-C							
# Subsamples, Dec.													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code						
14	Python	80	WG	0.8	oz/a	PRE	A	99.0	99.0	91.8	99.0	99.0	98.0
14	Durango DMA	4	SL	24	fl oz/a	POST	C						
14	AMS		WG	17	lb/100 gal	POST	C						
15	Boundary	6.5	L	1.5	pt/a	PRE	A	99.0	99.0	99.0	99.0	99.0	99.0
15	Flexstar GT 3.5	3.5	L	3.5	pt/a	POST	C						
15	Activator 90		L	0.25	% v/v	POST	C						
15	AMS		WG	8.5	lb/100 gal	POST	C						
16	Command 3ME	3	L	1.3	pt/a	PRE	A	99.0	99.0	98.5	99.0	99.0	99.0
16	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
16	Metribuzin	75	WG	5	oz/a	PRE	A						
16	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
16	Cadet	0.91	L	0.6	fl oz/a	POST	C						
16	AMS		WG	17	lb/100 gal	POST	C						
17	Authority First	70	WG	6.45	oz/a	PRE	A	99.0	99.0	96.8	99.0	99.0	99.0
17	Dual II Magnum	7.64	L	1	pt/a	PRE	A						
17	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
17	Cadet	0.91	L	0.6	fl oz/a	POST	C						
17	AMS		WG	17	lb/100 gal	POST	C						
18	Linex	4	L	1.5	pt/a	PRE	A	99.0	99.0	92.0	99.0	99.0	99.0
18	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
18	AMS		WG	17	lb/100 gal	POST	C						
19	Linex	4	L	0.75	pt/a	PRE	A	99.0	99.0	96.3	99.0	99.0	99.0
19	Metribuzin	75	WG	5.33	oz/a	PRE	A						
19	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
19	AMS		WG	17	lb/100 gal	POST	C						
20	Flexstar GT 3.5	3.5	L	3.5	pt/a	MPOS	B	99.0	99.0	99.0	99.0	99.0	99.0
20	Activator 90		L	0.25	% v/v	MPOS	B						
20	AMS		WG	8.5	lb/100 gal	MPOS	B						
20	Touchdown Total	4	SL	24	fl oz/a	LPOS	D						
20	AMS		WG	8.5	lb/100 gal	LPOS	D						
21	NO TRT												
22	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99.0	99.0	96.0	99.0	99.0	99.0
22	Warrant	3	L	3	pt/a	MPOS	B						
22	AMS		WG	17	lb/100 gal	MPOS	B						
22	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D						
22	AMS		WG	17	lb/100 gal	LPOS	D						
23	Roundup PowerMax	4.5	SL	44	fl oz/a	LPOS	D	99.0	99.0	77.8	94.5	99.0	77.5
23	AMS		WG	17	lb/100 gal	LPOS	D						
24	Dual 8E	8	L	1	pt/a	PRE	A	99.0	99.0	95.8	99.0	99.0	97.5
24	Metribuzin	75	WG	3	oz/a	PRE	A						
24	Pursuit	2	L	2	fl oz/a	PRE	A						
24	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C						
24	AMS		WG	17	lb/100 gal	POST	C						
25	Weed-free							99.0	99.0	97.0	99.0	99.0	99.0
26	Untreated							0.0	0.0	0.0	0.0	0.0	0.0

MSU Weed Science Research Program

Comparison of commercial herbicide programs in soybean

Trial ID: SOY09-11 Study Dir.: Sprague, Powell
Conducted: C-16 Crops Investigator: Christy Sprague

Table with 7 columns: Weed Code, Crop Code, Rating Data Type, Rating Unit, Rating Date, Trt-Eval Interval, # Subsamples, Dec. and 6 treatment columns (ABUTH, SINAR, ANGR, CHEAL, AMAPO, AMBEL) with control percent and dates.

Main data table with columns: Trt No., Treatment Name, Form Conc, Form Type, Rate, Rate Unit, Grow Stg, Appl Code, and 6 treatment columns (ABUTH, SINAR, ANGR, CHEAL, AMAPO, AMBEL) showing results for various herbicide treatments.

Summary statistics table with columns: LSD (P=.05), Standard Deviation, CV, and 6 treatment columns (ABUTH, SINAR, ANGR, CHEAL, AMAPO, AMBEL).

Means followed by same letter do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

MSU Weed Science Research Program

Comparison of commercial herbicide programs in soybean

Trial ID: SOY09-11 Study Dir.: Sprague, Powell
Conducted: C-16 Crops Investigator: Christy Sprague

Table with columns: Weed Code, Crop Code, Rating Data Type, Rating Unit, Rating Date, Trt-Eval Interval, # Subsamples, Dec., ABUTH, SINAR, GLXMA moisture percent, GLXMA yield bu/acre. Rows include treatments like Envive, Valor, Metribuzin, Prowl H2O, OpTill, Flexstar, Herbimax (COC), AMS, Sharpen, Roundup PowerMax, Fierce, Canopy, Sonic, Durango DMA, Authority First.

## MSU Weed Science Research Program

Comparison of commercial herbicide programs in soybean

Trial ID: SOY09-11 Study Dir.: Sprague, Powell  
 Conducted: C-16 Crops 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	8/16/2011	8/16/2011	10/8/2011	10/8/2011							
Rating Date	56 DA-C	56 DA-C	109 DA-C	at 13% M							
Trt-Eval Interval			1	1							
# Subsamples, Dec.											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
14	Python	80	WG	0.8	oz/a	PRE	A	99.0	99.0	8.3	67.3
14	Durango DMA	4	SL	24	fl oz/a	POST	C				
14	AMS		WG	17	lb/100 gal	POST	C				
15	Boundary	6.5	L	1.5	pt/a	PRE	A	97.5	99.0	8.2	71.2
15	Flexstar GT 3.5	3.5	L	3.5	pt/a	POST	C				
15	Activator 90		L	0.25	% v/v	POST	C				
15	AMS		WG	8.5	lb/100 gal	POST	C				
16	Command 3ME	3	L	1.3	pt/a	PRE	A	99.0	99.0	8.2	71.3
16	Dual II Magnum	7.64	L	1	pt/a	PRE	A				
16	Metribuzin	75	WG	5	oz/a	PRE	A				
16	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C				
16	Cadet	0.91	L	0.6	fl oz/a	POST	C				
16	AMS		WG	17	lb/100 gal	POST	C				
17	Authority First	70	WG	6.45	oz/a	PRE	A	99.0	99.0	8.1	57.0
17	Dual II Magnum	7.64	L	1	pt/a	PRE	A				
17	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C				
17	Cadet	0.91	L	0.6	fl oz/a	POST	C				
17	AMS		WG	17	lb/100 gal	POST	C				
18	Linex	4	L	1.5	pt/a	PRE	A	99.0	99.0	8.1	66.9
18	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C				
18	AMS		WG	17	lb/100 gal	POST	C				
19	Linex	4	L	0.75	pt/a	PRE	A	99.0	99.0	8.2	71.9
19	Metribuzin	75	WG	5.33	oz/a	PRE	A				
19	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C				
19	AMS		WG	17	lb/100 gal	POST	C				
20	Flexstar GT 3.5	3.5	L	3.5	pt/a	MPOS	B	99.0	99.0	8.3	65.5
20	Activator 90		L	0.25	% v/v	MPOS	B				
20	AMS		WG	8.5	lb/100 gal	MPOS	B				
20	Touchdown Total	4	SL	24	fl oz/a	LPOS	D				
20	AMS		WG	8.5	lb/100 gal	LPOS	D				
21	NO TRT										
22	Roundup PowerMax	4.5	SL	22	fl oz/a	MPOS	B	99.0	99.0	8.1	61.0
22	Warrant	3	L	3	pt/a	MPOS	B				
22	AMS		WG	17	lb/100 gal	MPOS	B				
22	Roundup PowerMax	4.5	SL	22	fl oz/a	LPOS	D				
22	AMS		WG	17	lb/100 gal	LPOS	D				
23	Roundup PowerMax	4.5	SL	44	fl oz/a	LPOS	D	99.0	99.0	8.5	31.2
23	AMS		WG	17	lb/100 gal	LPOS	D				
24	Dual 8E	8	L	1	pt/a	PRE	A	99.0	99.0	8.2	66.4
24	Metribuzin	75	WG	3	oz/a	PRE	A				
24	Pursuit	2	L	2	fl oz/a	PRE	A				
24	Roundup PowerMax	4.5	SL	22	fl oz/a	POST	C				
24	AMS		WG	17	lb/100 gal	POST	C				
25	Weed-free							99.0	99.0	8.1	61.8
26	Untreated							0.0	0.0	8.8	9.3

## MSU Weed Science Research Program

Comparison of commercial herbicide programs in soybean

Trial ID: SOY09-11 Study Dir.: Sprague, Powell  
 Conducted: C-16 Crops Investigator: Christy Sprague

Weed Code	ABUTH	SINAR	GLXMA	GLXMA							
Crop Code			moisture	yield							
Rating Data Type	control	control	percent	bu/acre							
Rating Unit	percent	percent	percent	percent							
Rating Date	8/16/2011	8/16/2011	10/8/2011	10/8/2011							
Trt-Eval Interval	56 DA-C	56 DA-C	109 DA-C	at 13% M							
# Subsamples, Dec.			1	1							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	ABUTH	SINAR	GLXMA	GLXMA
27	Liberty Link soybean							99.0	99.0	8.5	60.1
27	Valor XLT	40.3	WG	2	oz/a	PRE	A				
27	Ignite	2.34	L	24	fl oz/a	POST	C				
27	AMS		WG	8.5	lb/100 gal	POST	C				
28	Liberty Link soybean							99.0	99.0	8.8	55.6
28	Prowl H2O	3.8	L	2	pt/a	PRE	A				
28	Ignite	2.34	L	24	fl oz/a	POST	C				
28	AMS		WG	8.5	lb/100 gal	POST	C				
29	Liberty Link soybean							99.0	99.0	9.1	43.7
29	Pursuit	2	L	3	fl oz/a	MPOS	B				
29	Ignite	2.34	L	28	fl oz/a	MPOS	B				
29	AMS		WG	8.5	lb/100 gal	MPOS	B				
30	Liberty Link soybean							99.0	99.0	8.5	66.1
30	Ignite	2.34	L	28	fl oz/a	MPOS	B				
30	AMS		WG	8.5	lb/100 gal	MPOS	B				
30	Ignite	2.34	L	22	fl oz/a	LPOS	D				
30	AMS		WG	8.5	lb/100 gal	LPOS	D				
LSD (P=.05)								1.97	0.00	0.50	11.52
Standard Deviation								1.39	0.00	0.35	8.15
CV								1.46	0.0	4.21	13.85

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.