

MSU Weed Science Research Program

Weed control programs in Liberty Link soybean

Trial ID: SOY03-12 Study Dir.: Sprague, Powell  
 Conducted: T-10 Campus Investigator: Christy Sprague

Date Planted: May/17/2012 Row Spacing: 30 IN  
 Variety: DF 9231 LL No. of Reps: 4  
 Population: 150,000 seeds/acre % OM: 2.5  
 Soil Type: Loam pH: 7.1  
 Plot Size: 10 X 35 FT Design: RANDOMIZED COMPLETE BLOCK

Tillage: Fall chisel plow, spring soil finish  
 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.	AMAPO	AMARANTH, POWELL	AMARANTHUS POWELLII S. WATS.
4.	AMBEL	RAGWEED, COMMON	AMBROSIA ARTEMISII FOLIA L.
5.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
Crop	Code	Common Name	
1.	GLXMA	SOYBEAN	

Application Description

	A	B	C	D	E
Application Timing:	PRE	3-inch	POST	12-inch	+3-inch
Date Treated:	May/17/2012	Jun/11/2012	Jun/14/2012	Jun/22/2012	Jul/10/2012
Time Treated:	4:45 PM	2:45 PM	12:00 PM	11:00 AM	10:20 AM
% Cloud Cover:	10	75	0	5	5
Air Temp., Unit:	72 F	85 F	79 F	88 F	76 F
% Relative Humidity:	26	53	34	34	45
Wind Speed/Unit/Dir:	1 mph W	9 mph S	3 mph S	1 mph NE	1 mph N
Soil Temp., Unit:	69 F	78 F	69 F	73 F	75 F
Soil/Leaf Surface M:	3 5	5 5	5 5	5 5	5 5
Soil Moist (1=w 5=d):	3	4	5	5	5

Crop Stage at Each Application

	A	B	C	D	E
Crop Name:	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Height (In.):	-	7"	7"	11"	18"
Stage (L):	-	V2	V2	V4	R1

Weed Stage at Each Application

	A	B	C	D	E
Weed 1 Name:	ANGR	ANGR	ANGR	ANGR	ANGR
Height (In.):	-	8"	8.5"	11"	8"
Stage (L):	-	3-4	3-4	4	5
Weed 2 Name:	CHEAL	CHEAL	CHEAL	CHEAL	CHEAL
Height (In.):	-	3"	3.5"	12"	6"
Stage (L):	-	13	13	20	20
Weed 3 Name:	AMAPO	AMAPO	AMAPO	AMAPO	AMAPO
Height (In.):	-	5.5"	5"	10"	4"
Stage (L):	-	9	9	12	8
Weed 4 Name:	AMBEL	AMBEL	AMBEL	AMBEL	AMBEL
Height (In.):	-	3"	3.5"	11"	-
Stage (L):	-	7	7	10	-
Weed 5 Name:	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
Height (In.):	-	1.5"	2"	-	-
Stage (L):	-	3	3	-	-

Weed Density (plants/sq. ft.)

	1
Date:	Jul/09/2012
Weed Name:	ANGR
Density:	29
Date:	Jul/09/2012
Weed Name:	CHEAL
Density:	10
Date:	Jul/09/2012
Weed Name:	AMAPO
Density:	17
Date:	Jul/09/2012
Weed Name:	AMBEL
Density:	3
Date:	Jul/09/2012
Weed Name:	ABUTH
Density:	<1

## MSU Weed Science Research Program

Appl	Sprayer	Speed	Application Equipment							
			Nozzle	Nozzle	Nozzle	Boom	GPA	Carrier	PSI	
	Type	MPH	Type	Size	Height	Spacing	Width			
<b>A</b>	Cub	3.8	AI XR	11003	22"	20"	100"	19	Water	28
<b>B</b>	Cub	3.8	AI XR	11003	22"	20"	100"	19	Water	28
<b>C</b>	Cub	3.8	AI XR	11003	25"	20"	100"	19	Water	28
<b>D</b>	Cub	3.8	AI XR	11003	29"	20"	100"	19	Water	28
<b>E</b>	Cub	3.8	AI XR	11003	35"	20"	100"	19	Water	28

## MSU Weed Science Research Program

Weed control programs in Liberty Link soybean

Trial ID: SOY03-12                      Study Dir.: Sprague, Powell  
 Conducted: T-10 Campus                Investigator: Christy Sprague

Weed Code		ANGR	CHEAL	AMAPO	AMBEL
Crop Code	GLXMA				
Rating Data Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	Jun/11/2012	Jun/11/2012	Jun/11/2012	Jun/11/2012	Jun/11/2012
Trt-Eval Interval	25 DA-A	25 DA-A	25 DA-A	25 DA-A	25 DA-A
ARM Action Codes					
# Subsamples, Dec.	0	0	0	0	0

Trt	Treatment	Form	Form	Rate	Grow	Appl						
No.	Name	Conc	Type	Rate	Stg	Code						
1	Fierce	76	WG	3	oz/a	PRE	A	5	53	56	75	50
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
2	Fierce	76	WG	3	oz/a	PRE	A	3	53	54	75	56
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
3	Fierce	76	WG	3	oz/a	PRE	A	4	54	54	75	46
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
	Warrant	3	L	3	pt/a	+3-inch	E					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
4	Fierce	76	WG	3	oz/a	PRE	A	4	53	54	76	53
	Prefix	5.29	L	2	pt/a	V3	C					
	Liberty	2.34	L	29	fl oz/a	V3	C					
	AMS		WG	8.5	lb/100 gal	V3	C					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
5	Authority MTZ	45	WG	16	oz/a	PRE	A	2	39	99	85	60
	Zidua	85	WG	2.5	oz/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
6	Untreated							0	0	0	0	0
7	Liberty	2.34	L	43	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	43	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
8	Liberty	2.34	L	36	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
9	Liberty	2.34	L	87	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
10	Fierce	76	WG	3	oz/a	PRE	A	3	58	56	79	46
	Liberty	2.34	L	22	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
LSD (P=.05)								2.1	5.4	4.7	7.1	10.7
CV								51.32	8.33	5.89	7.24	16.15

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

## MSU Weed Science Research Program

Weed Code	ANGR	CHEAL	AMAPO	AMBEL
Crop Code	GLXMA			
Rating Data Type	injury	control	control	control
Rating Unit	percent	percent	percent	percent
Rating Date	Jun/18/2012	Jun/18/2012	Jun/18/2012	Jun/18/2012
Trt-Eval Interval	7 DA-B	7 DA-B	7 DA-B	7 DA-B
ARM Action Codes				
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code					
1	Fierce	76	WG	3	oz/a	PRE	A	4	97	99	99	99
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
2	Fierce	76	WG	3	oz/a	PRE	A	23	93	99	99	99
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
3	Fierce	76	WG	3	oz/a	PRE	A	25	94	99	99	99
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
	Warrant	3	L	3	pt/a	+3-inch	E					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
4	Fierce	76	WG	3	oz/a	PRE	A	20	77	98	97	99
	Prefix	5.29	L	2	pt/a	V3	C					
	Liberty	2.34	L	29	fl oz/a	V3	C					
	AMS		WG	8.5	lb/100 gal	V3	C					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
5	Authority MTZ	45	WG	16	oz/a	PRE	A	6	97	99	99	99
	Zidua	85	WG	2.5	oz/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
6	Untreated							0	0	0	0	0
7	Liberty	2.34	L	43	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	43	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
8	Liberty	2.34	L	36	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
9	Liberty	2.34	L	87	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
10	Fierce	76	WG	3	oz/a	PRE	A	3	95	99	99	99
	Liberty	2.34	L	22	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
LSD (P=.05)								3.6	4.1	1.1	1.3	0.0
CV								21.11	3.47	0.89	1.03	0.0

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

## MSU Weed Science Research Program

Weed Code									ANGR	CHEAL	AMAPO	AMBEL
Crop Code									GLXMA			
Rating Data Type									injury	control	control	control
Rating Unit									percent	percent	percent	percent
Rating Date									Jun/25/2012	Jun/25/2012	Jun/25/2012	Jun/25/2012
Trt-Eval Interval									14 DA-B	14 DA-B	14 DA-B	14 DA-B
ARM Action Codes												
# Subsamples, Dec.									0	0	0	0
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Fierce Liberty	76	WG	3	oz/a	PRE	A	3	99	99	99	99
	AMS	2.34	L	29	fl oz/a	3-inch	B					
			WG	8.5	lb/100 gal	3-inch	B					
2	Fierce Prefix	76	WG	3	oz/a	PRE	A	18	97	99	99	99
	Liberty	5.29	L	2	pt/a	3-inch	B					
		2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
3	Fierce Prefix	76	WG	3	oz/a	PRE	A	15	99	99	99	99
	Liberty	5.29	L	2	pt/a	3-inch	B					
		2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
	Warrant	3	L	3	pt/a	+3-inch	E					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
4	Fierce Prefix	76	WG	3	oz/a	PRE	A	16	97	99	99	99
	Liberty	5.29	L	2	pt/a	V3	C					
		2.34	L	29	fl oz/a	V3	C					
	AMS		WG	8.5	lb/100 gal	V3	C					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
5	Authority MTZ	45	WG	16	oz/a	PRE	A	10	99	99	99	99
	Zidua	85	WG	2.5	oz/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
6	Untreated							0	0	0	0	0
7	Liberty	2.34	L	43	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	43	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
8	Liberty	2.34	L	36	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
9	Liberty	2.34	L	87	fl oz/a	12-inch	D					
	AMS		WG	8.5	lb/100 gal	12-inch	D					
10	Fierce Liberty	76	WG	3	oz/a	PRE	A	1	96	98	99	99
	AMS	2.34	L	22	fl oz/a	3-inch	B					
			WG	8.5	lb/100 gal	3-inch	B					
LSD (P=.05)								4.7	2.2	1.3	0.0	0.0
CV								35.96	1.79	1.04	0.0	0.0

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

## MSU Weed Science Research Program

Weed Code	ABUTH		ANGR	CHEAL	AMAPO
Crop Code		GLXMA			
Rating Data Type	control	injury	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Rating Date	Jun/25/2012	Jun/29/2012	Jun/29/2012	Jun/29/2012	Jun/29/2012
Trt-Eval Interval	14 DA-B	7 DA-D	7 DA-D	7 DA-D	7 DA-D
ARM Action Codes					
# Subsamples, Dec.	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Fierce	76	WG	3	oz/a	PRE	A	99	0	99	99	99
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
2	Fierce	76	WG	3	oz/a	PRE	A	99	12	97	99	99
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
3	Fierce	76	WG	3	oz/a	PRE	A	99	12	99	99	99
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
	Warrant	3	L	3	pt/a	+3-inch	E					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
4	Fierce	76	WG	3	oz/a	PRE	A	99	10	96	98	99
	Prefix	5.29	L	2	pt/a	V3	C					
	Liberty	2.34	L	29	fl oz/a	V3	C					
	AMS		WG	8.5	lb/100 gal	V3	C					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
5	Authority	45	WG	16	oz/a	PRE	A	99	4	99	99	99
	Zidua	85	WG	2.5	oz/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
6	Untreated							0	0	0	0	0
7	Liberty	2.34	L	43	fl oz/a	12-inch	D		0	79	97	98
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	43	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
8	Liberty	2.34	L	36	fl oz/a	12-inch	D		0	79	96	99
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
9	Liberty	2.34	L	87	fl oz/a	12-inch	D		6	89	99	99
	AMS		WG	8.5	lb/100 gal	12-inch	D					
10	Fierce	76	WG	3	oz/a	PRE	A	99	0	97	99	99
	Liberty	2.34	L	22	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
LSD (P=.05)								0.0	3.2	3.3	2.4	1.0
CV								0.0	50.3	2.77	1.86	0.76

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

## MSU Weed Science Research Program

Weed Code		AMBEL	ABUTH	GLXMA	ANGR	CHEAL						
Crop Code												
Rating Data Type		control	control	injury	control	control						
Rating Unit		percent	percent	percent	percent	percent						
Rating Date		Jun/29/2012	Jun/29/2012	Jul/09/2012	Jul/09/2012	Jul/09/2012						
Trt-Eval Interval		7 DA-D	7 DA-D	17 DA-D	17 DA-D	17 DA-D						
ARM Action Codes												
# Subsamples, Dec.		0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Fierce	76	WG	3	oz/a	PRE	A	99	99	0	98	98
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
2	Fierce	76	WG	3	oz/a	PRE	A	99	99	3	97	99
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
3	Fierce	76	WG	3	oz/a	PRE	A	99	99	2	97	99
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
	Warrant	3	L	3	pt/a	+3-inch	E					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
4	Fierce	76	WG	3	oz/a	PRE	A	99	99	3	93	96
	Prefix	5.29	L	2	pt/a	V3	C					
	Liberty	2.34	L	29	fl oz/a	V3	C					
	AMS		WG	8.5	lb/100 gal	V3	C					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
5	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	0	98	99
	Zidua	85	WG	2.5	oz/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
6	Untreated							0	0	0	0	0
7	Liberty	2.34	L	43	fl oz/a	12-inch	D	99	99	0	90	98
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	43	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
8	Liberty	2.34	L	36	fl oz/a	12-inch	D	99	99	0	92	99
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
9	Liberty	2.34	L	87	fl oz/a	12-inch	D	99	99	9	97	99
	AMS		WG	8.5	lb/100 gal	12-inch	D					
10	Fierce	76	WG	3	oz/a	PRE	A	99	99	1	93	97
	Liberty	2.34	L	22	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
LSD (P=.05)								0.5	0.0	2.1	4.7	2.8
CV								0.36	0.0	81.26	3.82	2.19

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

## MSU Weed Science Research Program

Weed Code		AMAPO	AMBEL	ABUTH	GLXMA	ANGR						
Crop Code												
Rating Data Type		control	control	control	injury	control						
Rating Unit		percent	percent	percent	percent	percent						
Rating Date		Jul/09/2012	Jul/09/2012	Jul/09/2012	Jul/26/2012	Jul/26/2012						
Trt-Eval Interval		17 DA-D	17 DA-D	17 DA-D	34 DA-D	34 DA-D						
ARM Action Codes												
# Subsamples, Dec.		0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Fierce	76	WG	3	oz/a	PRE	A	99	99	99	0	95
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
2	Fierce	76	WG	3	oz/a	PRE	A	99	99	99	0	95
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
3	Fierce	76	WG	3	oz/a	PRE	A	99	99	99	0	99
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
	Warrant	3	L	3	pt/a	+3-inch	E					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
4	Fierce	76	WG	3	oz/a	PRE	A	98	99	99	0	94
	Prefix	5.29	L	2	pt/a	V3	C					
	Liberty	2.34	L	29	fl oz/a	V3	C					
	AMS		WG	8.5	lb/100 gal	V3	C					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
5	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	99	0	98
	Zidua	85	WG	2.5	oz/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
6	Untreated							0	0	0	0	0
7	Liberty	2.34	L	43	fl oz/a	12-inch	D	99	99	99	0	67
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	43	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
8	Liberty	2.34	L	36	fl oz/a	12-inch	D	98	99	99	0	71
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
9	Liberty	2.34	L	87	fl oz/a	12-inch	D	99	99	99	0	75
	AMS		WG	8.5	lb/100 gal	12-inch	D					
10	Fierce	76	WG	3	oz/a	PRE	A	99	99	99	0	95
	Liberty	2.34	L	22	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
LSD (P=.05)								1.3	0.2	0.0	0.0	6.3
CV								1.02	0.18	0.0	0.0	5.48

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



## MSU Weed Science Research Program

Weed Code	CHEAL	AMAPO	AMBEL	ABUTH	GLXMA							
Crop Code					moisture							
Rating Data Type	control	control	control	control	percent							
Rating Unit	percent	percent	percent	percent	percent							
Rating Date	Jul/26/2012	Jul/26/2012	Jul/26/2012	Jul/26/2012	Oct/11/2012							
Trt-Eval Interval	34 DA-D	34 DA-D	34 DA-D	34 DA-D	111 DA-D							
ARM Action Codes												
# Subsamples, Dec.	0	0	0	0	1							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	CHEAL	AMAPO	AMBEL	ABUTH	GLXMA
1	Fierce	76	WG	3	oz/a	PRE	A	98	99	98	99	11.4
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
2	Fierce	76	WG	3	oz/a	PRE	A	99	99	99	99	11.2
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
3	Fierce	76	WG	3	oz/a	PRE	A	99	99	99	99	11.4
	Prefix	5.29	L	2	pt/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
	Warrant	3	L	3	pt/a	+3-inch	E					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
4	Fierce	76	WG	3	oz/a	PRE	A	99	99	99	99	11.2
	Prefix	5.29	L	2	pt/a	V3	C					
	Liberty	2.34	L	29	fl oz/a	V3	C					
	AMS		WG	8.5	lb/100 gal	V3	C					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
5	Authority MTZ	45	WG	16	oz/a	PRE	A	99	99	99	99	11.4
	Zidua	85	WG	2.5	oz/a	3-inch	B					
	Liberty	2.34	L	29	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
6	Untreated							0	0	0	0	8.1
7	Liberty	2.34	L	43	fl oz/a	12-inch	D	96	96	99	99	11.2
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	43	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
8	Liberty	2.34	L	36	fl oz/a	12-inch	D	91	91	98	99	11.2
	AMS		WG	8.5	lb/100 gal	12-inch	D					
	Liberty	2.34	L	29	fl oz/a	+3-inch	E					
	AMS		WG	8.5	lb/100 gal	+3-inch	E					
9	Liberty	2.34	L	87	fl oz/a	12-inch	D	94	89	99	99	11.3
	AMS		WG	8.5	lb/100 gal	12-inch	D					
10	Fierce	76	WG	3	oz/a	PRE	A	96	99	99	99	11.4
	Liberty	2.34	L	22	fl oz/a	3-inch	B					
	AMS		WG	8.5	lb/100 gal	3-inch	B					
LSD (P=.05)								5.1	4.6	1.1	0.0	1.95
CV								4.04	3.65	0.84	0.0	12.27

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

## MSU Weed Science Research Program

Weed Code  
 Crop Code  
 Rating Data Type  
 Rating Unit  
 Rating Date  
 Trt-Eval Interval  
 ARM Action Codes  
 # Subsamples, Dec.

GLXMA  
 yield  
 bu/acre  
 Oct/11/2012  
 at 13% M  
 TY1  
 1

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Grow Stg	Appl Code	
1	Fierce	76	WG	3	oz/a	PRE	A	46.5
	Liberty	2.34	L	29	fl oz/a	3-inch	B	
	AMS		WG	8.5	lb/100 gal	3-inch	B	
2	Fierce	76	WG	3	oz/a	PRE	A	53.3
	Prefix	5.29	L	2	pt/a	3-inch	B	
	Liberty	2.34	L	29	fl oz/a	3-inch	B	
	AMS		WG	8.5	lb/100 gal	3-inch	B	
3	Fierce	76	WG	3	oz/a	PRE	A	43.1
	Prefix	5.29	L	2	pt/a	3-inch	B	
	Liberty	2.34	L	29	fl oz/a	3-inch	B	
	AMS		WG	8.5	lb/100 gal	3-inch	B	
	Warrant	3	L	3	pt/a	+3-inch	E	
	Liberty	2.34	L	29	fl oz/a	+3-inch	E	
	AMS		WG	8.5	lb/100 gal	+3-inch	E	
4	Fierce	76	WG	3	oz/a	PRE	A	50.0
	Prefix	5.29	L	2	pt/a	V3	C	
	Liberty	2.34	L	29	fl oz/a	V3	C	
	AMS		WG	8.5	lb/100 gal	V3	C	
	Liberty	2.34	L	29	fl oz/a	+3-inch	E	
	AMS		WG	8.5	lb/100 gal	+3-inch	E	
5	Authority MTZ	45	WG	16	oz/a	PRE	A	45.4
	Zidua	85	WG	2.5	oz/a	3-inch	B	
	Liberty	2.34	L	29	fl oz/a	3-inch	B	
	AMS		WG	8.5	lb/100 gal	3-inch	B	
6	Untreated							9.1
7	Liberty	2.34	L	43	fl oz/a	12-inch	D	35.3
	AMS		WG	8.5	lb/100 gal	12-inch	D	
	Liberty	2.34	L	43	fl oz/a	+3-inch	E	
	AMS		WG	8.5	lb/100 gal	+3-inch	E	
8	Liberty	2.34	L	36	fl oz/a	12-inch	D	30.9
	AMS		WG	8.5	lb/100 gal	12-inch	D	
	Liberty	2.34	L	29	fl oz/a	+3-inch	E	
	AMS		WG	8.5	lb/100 gal	+3-inch	E	
9	Liberty	2.34	L	87	fl oz/a	12-inch	D	31.6
	AMS		WG	8.5	lb/100 gal	12-inch	D	
10	Fierce	76	WG	3	oz/a	PRE	A	44.4
	Liberty	2.34	L	22	fl oz/a	3-inch	B	
	AMS		WG	8.5	lb/100 gal	3-inch	B	
LSD (P=.05)								6.61
CV								11.69

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