



# Ohio State University Horticulture and Crop Science

	Application Description			
	A	B	C	D
Application Date:	May-21-2012	Jun-20-2012	Jul-2-2012	Jul-17-2012
Time of Day:	1:00PM	8:00AM	8:30 AM	8:15 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	POST	LPO	VLPO
Application Placement:	BROSOL	BROFOL	BROFOL	BROFOL
Applied By:			REEB	
Air Temperature, Unit:	88 F	76 F	74 F	80.3 F
% Relative Humidity:	42.8	79	85	77.8
Wind Velocity, Unit:	3.3 MPH	2 MPH	2 MPH	1.1 MPH
Wind Direction:	W	N	W	NW
Dew Presence (Y/N):	N no	Y yes	Y yes	Y yes
Soil Temperature, Unit:	70 F	72 F	70 F	76 F
Soil Moisture:	GOOD	MOIST	WET	WET
% Cloud Cover:	5	0	10	0
Next Rain Occurred On:	May-31-2012	Jun-29-2012	Jul-15-2012	Jul-19-2012

	Crop Stage At Each Application							
	A		B		C		D	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:			BBCH		BBCH		BBCH	
Stage Majority, Percent:			15	100	51	100	69	100
Height, Unit:			6	IN	13	IN	21	IN
Height Minimum, Maximum:			6	6	11	14	20	22

	Pest Stage At Each Application							
	A		B		C		D	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:			22	100	25	100	14	100
Height, Unit:			6	IN	15	IN	4	IN
Height Minimum, Maximum:			6	7	12	18	3	5
Density, Unit:			20	M2				
Pest 2 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W	AMARE	W
Stage Majority, Percent:			15	100	19	100	15	100
Height, Unit:			3	IN	15	IN	2	IN
Height Minimum, Maximum:			1	5	12	15	1	3
Density, Unit:			100	M2				
Pest 3 Code, Type, Scale:	HIBTR	W	HIBTR	W	HIBTR	W	HIBTR	W
Stage Majority, Percent:			19	100	19	100	16	100
Height, Unit:			3	IN	7	IN	2	IN
Height Minimum, Maximum:			3	3	4	7	1	3
Density, Unit:			1.3	M2				
Pest 4 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			18	100	19	100	18	100
Height, Unit:			3	IN	7	IN	4	IN
Height Minimum, Maximum:			1	5	4	7	2	4
Density, Unit:			14.3	M2				
Pest 5 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:			19	100	19	100	16	100
Height, Unit:			9.5	IN	17	IN	6	IN
Height Minimum, Maximum:			9	10	15	18	4	7
Density, Unit:			2.6	M2				
Pest 6 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			16	100	19	100	16	100
Height, Unit:			3	IN	14	IN	4	IN
Height Minimum, Maximum:			1	5	12	15	3	5
Density, Unit:			2.6	M2				
Pest 7 Code, Type, Scale:	IPOHE	W	IPOHE	W	IPOHE	W	IPOHE	W

	Application Equipment			
	A	B	C	D
Appl. Equipment:	Backpack	Backpack	Backpack	Backpack
Equipment Type:	SPRBAC	SPRBAC	SPRBAC	SPRBAC
Operation Pressure, Unit:	44 PSI	44 PSI	44 PSI	44 PSI
Nozzle Type:	AIXR	AIXR	AIXR	AIXR
Nozzle Size:	110015	110015	110015	110015
Nozzle Spacing, Unit:	18 IN	18 IN	18 IN	18 IN
Boom Length, Unit:	6 FT	6 FT	6 FT	6 FT
Boom Height, Unit:	18 IN	18 IN	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	15 gal/ac	15 gal/ac	15 gal/ac	15 gal/ac
Mix Size, Unit:	2 Liters	2 Liters	2 Liters	2 Liters
Propellant:	COMCO2	COMCO2	COMCO2	COMCO2

# Ohio State University Horticulture and Crop Science

## Glufosinate soybean efficacy

Title No. 2:  
 Trial ID: 12 LLSOY                      Protocol ID: 12 LLSOY  
 Location: Western Branch              Study Director: Bryan Reeb  
 Project ID: HP12NARMRA              Investigator: Dr. Mark M. Loux  
 Sponsor Contact: Dave Lamore, Bayer

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMARE	CHEAL	ABUTH
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Amaranthus retrofractus	Chenopodium album	Abutilon theophrasti
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Common lambsquarters	velvetleaf
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jun-21-2012	Jun-21-2012	Jun-21-2012	Jun-21-2012	Jun-21-2012
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Rating Timing	AT POST	AT POST	AT POST	AT POST	AT POST
Days After First/Last Applic.	31 1	31 1	31 1	31 1	31 1
Trt-Eval Interval	1 DA-B	1 DA-B	1 DA-B	1 DA-B	1 DA-B
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	31 DP-1
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1	25 DE-1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Other Unit	Other Rate	Appl Unit	Code	1	2	3	4	5
1	UTC						0 c	0 c	0 c	0 c	0 c
2	Fierce	0.143 lb ai/a		3 oz/a	A		97 a	53 ab	93 ab	95 ab	82 ab
	Liberty	0.53 lb ai/a		29 oz/a	B						
	Prefix	0.99 lb ai/a		1.5 pt/a	B						
	N-pak ams	2.5 % v/v		1.5 qt/a	B						
3	Fierce	0.143 lb ai/a		3 oz/a	A		88 b	62 ab	82 b	93 ab	88 a
	Liberty	0.53 lb ai/a		29 oz/a	B						
	Prefix	0.99 lb ai/a		1.5 pt/a	B						
	N-pak ams	2.5 % v/v		1.5 qt/a	B						
	Liberty	0.53 lb ai/a		29 oz/a	D						
	Warrant	1.13 lb ai/a		3 pt/a	D						
	N-pak ams	2.5 % v/v		1.5 qt/a	D						
4	Fierce	0.143 lb ai/a		3 oz/a	A		93 ab	43 b	88 ab	95 ab	63 b
	Liberty	0.53 lb ai/a		29 oz/a	B						
	Prefix	0.99 lb ai/a		1.5 pt/a	B						
	N-pak ams	2.5 % v/v		1.5 qt/a	B						
	Liberty	0.53 lb ai/a		29 oz/a	D						
	N-pak ams	2.5 % v/v		1.5 qt/a	D						
5	Fierce	0.143 lb ai/a		3 oz/a	A		90 b	62 ab	82 b	92 b	88 a
	Liberty	0.53 lb ai/a		29 oz/a	B						
	Zidua	0.133 lb ai/a		2.5 oz/a	B						
	N-pak ams	2.5 % v/v		1.5 qt/a	B						
6	Liberty	0.79 lb ai/a		43 oz/a	C		0 c	0 c	0 c	0 c	0 c
	N-pak ams	2.5 % v/v		1.5 qt/a	C						
	Liberty	0.79 lb ai/a		43 oz/a	D						
	N-pak ams	2.5 % v/v		1.5 qt/a	D						
7	Liberty	0.66 lb ai/a		36 oz/a	C		0 c	0 c	0 c	0 c	0 c
	N-pak ams	2.5 % v/v		1.5 qt/a	C						
	Liberty	0.53 lb ai/a		29 oz/a	D						
	N-pak ams	2.5 % v/v		1.5 qt/a	D						
8	Liberty	1.59 lb ai/a		87 oz/a	C		0 c	0 c	0 c	0 c	0 c
	N-pak ams	2.5 % v/v		1.5 qt/a	C						

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.

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	AMARE	CHEAL	ABUTH
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Amaranthus retrofractus	Chenopodium album	Abutilon theophrasti
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Common lambsquarters	velvetleaf
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	Jun-21-2012	Jun-21-2012	Jun-21-2012	Jun-21-2012	Jun-21-2012
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Rating Timing	AT POST	AT POST	AT POST	AT POST	AT POST
Days After First/Last Applic.	31 1	31 1	31 1	31 1	31 1
Trt-Eval Interval	1 DA-B	1 DA-B	1 DA-B	1 DA-B	1 DA-B
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	31 DP-1
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1	25 DE-1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
9	Valor XLT 3.5oz					92 ab	75 a	100 a	100 a	98 a
	9 Valor SX	0.0653 lb ai/a	2.05 oz/a		A					
	9 Classic	0.0227 lb ai/a	1.45 oz/a		A					
	9 N-pak ams	2.5 % v/v	1.5 qt/a		B					
10	Fierce XLT 4oz					92 ab	80 a	100 a	97 ab	100 a
	10 Valor SX	0.063 lb ai/a	1.98 oz/a		A					
	10 Classic	0.021 lb ai/a	1.34 oz/a		A					
	10 V-10206	0.057 lb ai/a	1.07 oz/a		A					
	10 Liberty	0.53 lb ai/a	29 oz/a		B					
	10 N-pak ams	2.5 % v/v	1.5 qt/a		B					
	LSD (P=.05)					6.2	28.7	12.3	7.3	22.1
	Standard Deviation					3.6	16.7	7.2	4.2	12.9
	CV					6.5	44.58	13.17	7.41	24.74
	Bartlett's X2					4.124	8.538	2.807	2.98	9.142
	P(Bartlett's X2)					0.389	0.129	0.422	0.395	0.058
	Replicate F					2.007	0.063	1.360	0.742	3.188
	Replicate Prob(F)					0.1633	0.9395	0.2819	0.4901	0.0653
	Treatment F					526.540	12.271	130.469	405.057	38.106
	Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed							
Pest Code	SETFA	AMBTR	CHEAL	AMARE							
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>							
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed							
Crop Code	GLXMA										
BBCH Scale	BSOY										
Crop Scientific Name	Glycine max										
Crop Name	Soybean										
Rating Date	Jul-2-2012	Jul-2-2012	Jul-2-2012	Jul-2-2012							
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO							
Rating Unit	%	%	%	%							
Number of Subsamples	1	1	1	1							
Rating Timing											
Days After First/Last Applic.	42 12	42 12	42 12	42 12							
Trt-Eval Interval	12 DA-B	12 DA-B	12 DA-B	12 DA-B							
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1							
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1							
Number of Decimals	0	0	0	0							
Trt Treatment	Rate	Other	Other	Appl	6	7	8	9	10		
No. Name	Rate	Unit	Rate	Rate	Unit	Code					
1 UTC							0 c	0 c	0 c	0 b	0 c
2 Fierce	0.143 lb ai/a		3 oz/a			A	8 ab	100 a	90 b	100 a	97 b
2 Liberty	0.53 lb ai/a		29 oz/a			B					
2 Prefix	0.99 lb ai/a		1.5 pt/a			B					
2 N-pak ams	2.5 % v/v		1.5 qt/a			B					
3 Fierce	0.143 lb ai/a		3 oz/a			A	8 ab	100 a	100 a	93 a	100 a
3 Liberty	0.53 lb ai/a		29 oz/a			B					
3 Prefix	0.99 lb ai/a		1.5 pt/a			B					
3 N-pak ams	2.5 % v/v		1.5 qt/a			B					
3 Liberty	0.53 lb ai/a		29 oz/a			D					
3 Warrant	1.13 lb ai/a		3 pt/a			D					
3 N-pak ams	2.5 % v/v		1.5 qt/a			D					
4 Fierce	0.143 lb ai/a		3 oz/a			A	8 a	100 a	100 a	100 a	100 a
4 Liberty	0.53 lb ai/a		29 oz/a			B					
4 Prefix	0.99 lb ai/a		1.5 pt/a			B					
4 N-pak ams	2.5 % v/v		1.5 qt/a			B					
4 Liberty	0.53 lb ai/a		29 oz/a			D					
4 N-pak ams	2.5 % v/v		1.5 qt/a			D					
5 Fierce	0.143 lb ai/a		3 oz/a			A	6 ab	99 b	100 a	97 a	100 a
5 Liberty	0.53 lb ai/a		29 oz/a			B					
5 Zidua	0.133 lb ai/a		2.5 oz/a			B					
5 N-pak ams	2.5 % v/v		1.5 qt/a			B					
6 Liberty	0.79 lb ai/a		43 oz/a			C	0 c	0 c	0 c	0 b	0 c
6 N-pak ams	2.5 % v/v		1.5 qt/a			C					
6 Liberty	0.79 lb ai/a		43 oz/a			D					
6 N-pak ams	2.5 % v/v		1.5 qt/a			D					
7 Liberty	0.66 lb ai/a		36 oz/a			C	0 c	0 c	0 c	0 b	0 c
7 N-pak ams	2.5 % v/v		1.5 qt/a			C					
7 Liberty	0.53 lb ai/a		29 oz/a			D					
7 N-pak ams	2.5 % v/v		1.5 qt/a			D					
8 Liberty	1.59 lb ai/a		87 oz/a			C	0 c	0 c	0 c	0 b	0 c
8 N-pak ams	2.5 % v/v		1.5 qt/a			C					

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	AMARE
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed
Crop Code	GLXMA			
BBCH Scale	BSOY			
Crop Scientific Name	Glycine max			
Crop Name	Soybean			
Rating Date	Jul-2-2012	Jul-2-2012	Jul-2-2012	Jul-2-2012
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Rating Timing				
Days After First/Last Applic.	42 12	42 12	42 12	42 12
Trt-Eval Interval	12 DA-B	12 DA-B	12 DA-B	12 DA-B
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	42 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	36 DE-1
Number of Decimals	0	0	0	0

  

Trt Treatment	Rate	Rate	Other	Other	Appl	6	7	8	9	10
No. Name	Unit	Unit	Rate	Rate	Unit Code					
9 Valor XLT 3.5oz						4 abc	100 a	100 a	100 a	100 a
9 Valor SX	0.0653 lb ai/a		2.05 oz/a		A					
9 Classic	0.0227 lb ai/a		1.45 oz/a		A					
9 N-pak ams	2.5 % v/v		1.5 qt/a		B					
10 Fierce XLT 4oz						3 bc	100 a	100 a	100 a	100 a
10 Valor SX	0.063 lb ai/a		1.98 oz/a		A					
10 Classic	0.021 lb ai/a		1.34 oz/a		A					
10 V-10206	0.057 lb ai/a		1.07 oz/a		A					
10 Liberty	0.53 lb ai/a		29 oz/a		B					
10 N-pak ams	2.5 % v/v		1.5 qt/a		B					
LSD (P=.05)						4.6	0.6	5.4	6.7	3.1
Standard Deviation						2.7	0.4	3.2	3.9	1.8
CV						73.04	0.61	5.36	6.6	3.06
Bartlett's X2						3.973	0.0	0.0	0.871	0.0
P(Bartlett's X2)						0.553	.	.	0.351	.
Replicate F						2.684	1.000	1.000	1.976	1.000
Replicate Prob(F)						0.0955	0.3874	0.3874	0.1676	0.3874
Treatment F						5.167	59867.674	776.333	510.268	2374.333
Treatment Prob(F)						0.0015	0.0001	0.0001	0.0001	0.0001

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	ABUTH	SETFA	AMBTR	AMARE	CHEAL				
Pest Scientific Name	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>				
Pest Name	velvetleaf	Giant foxtail	Giant Redroot	pigweed	Common lambsqu>				
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	Jul-2-2012	Jul-20-2012	Jul-20-2012	Jul-20-2012	Jul-20-2012				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
Rating Timing									
Days After First/Last Applic.	42 12	60 3	60 3	60 3	60 3				
Trt-Eval Interval	12 DA-B	30 DA-B	30 DA-B	30 DA-B	30 DA-B				
Plant-Eval Interval	42 DP-1	60 DP-1	60 DP-1	60 DP-1	60 DP-1				
Days After Emergence	36 DE-1	54 DE-1	54 DE-1	54 DE-1	54 DE-1				
Number of Decimals	0	0	0	0	0				
Trt Treatment	Rate	Other	Other	Appl					
No. Name	Rate	Unit	Rate	Unit Code					
					11				
					12				
					13				
					14				
					15				
1 UTC					0 b	0 b	0 c	0 d	0 c
2 Fierce	0.143 lb ai/a		3 oz/a	A	93 a	100 a	90 b	98 ab	100 a
2 Liberty	0.53 lb ai/a		29 oz/a	B					
2 Prefix	0.99 lb ai/a		1.5 pt/a	B					
2 N-pak ams	2.5 % v/v		1.5 qt/a	B					
3 Fierce	0.143 lb ai/a		3 oz/a	A	100 a	100 a	100 a	97 abc	100 a
3 Liberty	0.53 lb ai/a		29 oz/a	B					
3 Prefix	0.99 lb ai/a		1.5 pt/a	B					
3 N-pak ams	2.5 % v/v		1.5 qt/a	B					
3 Liberty	0.53 lb ai/a		29 oz/a	D					
3 Warrant	1.13 lb ai/a		3 pt/a	D					
3 N-pak ams	2.5 % v/v		1.5 qt/a	D					
4 Fierce	0.143 lb ai/a		3 oz/a	A	100 a	100 a	100 a	100 a	100 a
4 Liberty	0.53 lb ai/a		29 oz/a	B					
4 Prefix	0.99 lb ai/a		1.5 pt/a	B					
4 N-pak ams	2.5 % v/v		1.5 qt/a	B					
4 Liberty	0.53 lb ai/a		29 oz/a	D					
4 N-pak ams	2.5 % v/v		1.5 qt/a	D					
5 Fierce	0.143 lb ai/a		3 oz/a	A	93 a	100 a	98 a	97 abc	100 a
5 Liberty	0.53 lb ai/a		29 oz/a	B					
5 Zidua	0.133 lb ai/a		2.5 oz/a	B					
5 N-pak ams	2.5 % v/v		1.5 qt/a	B					
6 Liberty	0.79 lb ai/a		43 oz/a	C	0 b	100 a	100 a	92 c	98 b
6 N-pak ams	2.5 % v/v		1.5 qt/a	C					
6 Liberty	0.79 lb ai/a		43 oz/a	D					
6 N-pak ams	2.5 % v/v		1.5 qt/a	D					
7 Liberty	0.66 lb ai/a		36 oz/a	C	0 b	100 a	100 a	93 bc	100 a
7 N-pak ams	2.5 % v/v		1.5 qt/a	C					
7 Liberty	0.53 lb ai/a		29 oz/a	D					
7 N-pak ams	2.5 % v/v		1.5 qt/a	D					
8 Liberty	1.59 lb ai/a		87 oz/a	C	0 b	100 a	100 a	100 a	100 a
8 N-pak ams	2.5 % v/v		1.5 qt/a	C					

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	ABUTH	SETFA	AMBTR	AMARE	CHEAL					
Pest Scientific Name	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>					
Pest Name	velvetleaf	Giant foxtail	Giant Redroot pigweed	Common lambsqu>	ragweed					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jul-2-2012	Jul-20-2012	Jul-20-2012	Jul-20-2012	Jul-20-2012					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Rating Timing										
Days After First/Last Applic.	42 12	60 3	60 3	60 3	60 3					
Trt-Eval Interval	12 DA-B	30 DA-B	30 DA-B	30 DA-B	30 DA-B					
Plant-Eval Interval	42 DP-1	60 DP-1	60 DP-1	60 DP-1	60 DP-1					
Days After Emergence	36 DE-1	54 DE-1	54 DE-1	54 DE-1	54 DE-1					
Number of Decimals	0	0	0	0	0					
Trt Treatment	Rate	Rate	Other	Other	Appl	11	12	13	14	15
No. Name	Unit	Unit	Rate	Rate	Unit Code					
9 Valor XLT 3.5oz						100 a	100 a	98 a	100 a	100 a
9 Valor SX	0.0653 lb ai/a		2.05 oz/a		A					
9 Classic	0.0227 lb ai/a		1.45 oz/a		A					
9 N-pak ams	2.5 % v/v		1.5 qt/a		B					
10 Fierce XLT 4oz						100 a	100 a	100 a	100 a	100 a
10 Valor SX	0.063 lb ai/a		1.98 oz/a		A					
10 Classic	0.021 lb ai/a		1.34 oz/a		A					
10 V-10206	0.057 lb ai/a		1.07 oz/a		A					
10 Liberty	0.53 lb ai/a		29 oz/a		B					
10 N-pak ams	2.5 % v/v		1.5 qt/a		B					
LSD (P=.05)						9.1	0.0	3.7	6.2	1.6
Standard Deviation						5.3	0.0	2.1	3.6	0.9
CV						9.04	0.0	2.4	4.09	1.02
Bartlett's X2						0.0	0.0	0.831	3.363	0.0
P(Bartlett's X2)						.	.	0.66	0.499	.
Replicate F						0.474	0.000	0.184	0.065	1.000
Replicate Prob(F)						0.6302	1.0000	0.8337	0.9375	0.3874
Treatment F						272.421	0.000	648.082	223.194	3587.667
Treatment Prob(F)						0.0001	1.0000	0.0001	0.0001	0.0001



# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	ABUTH	SETFA	AMBTR	CHEAL	AMARE				
Pest Scientific Name	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>				
Pest Name	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed				
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	Jul-20-2012	Jul-25-2012	Jul-25-2012	Jul-25-2012	Jul-25-2012				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
Rating Timing									
Days After First/Last Applic.	60 3	65 8	65 8	65 8	65 8				
Trt-Eval Interval	30 DA-B	23 DA-C	23 DA-C	23 DA-C	23 DA-C				
Plant-Eval Interval	60 DP-1	65 DP-1	65 DP-1	65 DP-1	65 DP-1				
Days After Emergence	54 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1				
Number of Decimals	0	0	0	0	0				
Trt Treatment	Rate	Other	Other	Appl					
No. Name	Rate	Unit	Rate	Unit Code	16				
					17				
					18				
					19				
					20				
1 UTC					0 c	0 b	0 c	0 b	0 b
2 Fierce	0.143 lb ai/a		3 oz/a	A	98 a	100 a	90 b	100 a	95 a
2 Liberty	0.53 lb ai/a		29 oz/a	B					
2 Prefix	0.99 lb ai/a		1.5 pt/a	B					
2 N-pak ams	2.5 % v/v		1.5 qt/a	B					
3 Fierce	0.143 lb ai/a		3 oz/a	A	100 a	100 a	100 a	100 a	100 a
3 Liberty	0.53 lb ai/a		29 oz/a	B					
3 Prefix	0.99 lb ai/a		1.5 pt/a	B					
3 N-pak ams	2.5 % v/v		1.5 qt/a	B					
3 Liberty	0.53 lb ai/a		29 oz/a	D					
3 Warrant	1.13 lb ai/a		3 pt/a	D					
3 N-pak ams	2.5 % v/v		1.5 qt/a	D					
4 Fierce	0.143 lb ai/a		3 oz/a	A	100 a	100 a	100 a	100 a	100 a
4 Liberty	0.53 lb ai/a		29 oz/a	B					
4 Prefix	0.99 lb ai/a		1.5 pt/a	B					
4 N-pak ams	2.5 % v/v		1.5 qt/a	B					
4 Liberty	0.53 lb ai/a		29 oz/a	D					
4 N-pak ams	2.5 % v/v		1.5 qt/a	D					
5 Fierce	0.143 lb ai/a		3 oz/a	A	95 b	100 a	100 a	100 a	95 a
5 Liberty	0.53 lb ai/a		29 oz/a	B					
5 Zidua	0.133 lb ai/a		2.5 oz/a	B					
5 N-pak ams	2.5 % v/v		1.5 qt/a	B					
6 Liberty	0.79 lb ai/a		43 oz/a	C	100 a	100 a	100 a	100 a	100 a
6 N-pak ams	2.5 % v/v		1.5 qt/a	C					
6 Liberty	0.79 lb ai/a		43 oz/a	D					
6 N-pak ams	2.5 % v/v		1.5 qt/a	D					
7 Liberty	0.66 lb ai/a		36 oz/a	C	100 a	100 a	100 a	100 a	100 a
7 N-pak ams	2.5 % v/v		1.5 qt/a	C					
7 Liberty	0.53 lb ai/a		29 oz/a	D					
7 N-pak ams	2.5 % v/v		1.5 qt/a	D					
8 Liberty	1.59 lb ai/a		87 oz/a	C	100 a	100 a	100 a	100 a	100 a
8 N-pak ams	2.5 % v/v		1.5 qt/a	C					

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	ABUTH	SETFA	AMBTR	CHEAL	AMARE					
Pest Scientific Name	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>					
Pest Name	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jul-20-2012	Jul-25-2012	Jul-25-2012	Jul-25-2012	Jul-25-2012					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Rating Timing										
Days After First/Last Applic.	60 3	65 8	65 8	65 8	65 8					
Trt-Eval Interval	30 DA-B	23 DA-C	23 DA-C	23 DA-C	23 DA-C					
Plant-Eval Interval	60 DP-1	65 DP-1	65 DP-1	65 DP-1	65 DP-1					
Days After Emergence	54 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1					
Number of Decimals	0	0	0	0	0					
Trt Treatment	Rate	Rate	Other	Other	Appl	16	17	18	19	20
No. Name	Unit	Unit	Rate	Rate	Unit Code					
9 Valor XLT 3.5oz						100 a	100 a	95 ab	100 a	100 a
9 Valor SX	0.0653 lb ai/a		2.05 oz/a		A					
9 Classic	0.0227 lb ai/a		1.45 oz/a		A					
9 N-pak ams	2.5 % v/v		1.5 qt/a		B					
10 Fierce XLT 4oz						100 a	100 a	100 a	100 a	100 a
10 Valor SX	0.063 lb ai/a		1.98 oz/a		A					
10 Classic	0.021 lb ai/a		1.34 oz/a		A					
10 V-10206	0.057 lb ai/a		1.07 oz/a		A					
10 Liberty	0.53 lb ai/a		29 oz/a		B					
10 N-pak ams	2.5 % v/v		1.5 qt/a		B					
LSD (P=.05)						3.0	0.0	7.1	0.0	6.8
Standard Deviation						1.7	0.0	4.2	0.0	4.0
CV						1.96	0.0	4.7	0.0	4.47
Bartlett's X2						0.561	0.0	0.002	0.0	0.0
P(Bartlett's X2)						0.454	.	0.962	.	.
Replicate F						1.909	0.000	0.002	0.000	0.474
Replicate Prob(F)						0.1770	1.0000	0.9981	1.0000	0.6302
Treatment F						969.818	0.000	170.024	0.000	186.105
Treatment Prob(F)						0.0001	1.0000	0.0001	1.0000	0.0001

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	ABUTH	SETFA	AMBTR	CHEAL	AMARE				
Pest Scientific Name	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>				
Pest Name	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed				
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Rating Date	Jul-25-2012	Aug-1-2012	Aug-1-2012	Aug-1-2012	Aug-1-2012				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
Rating Timing									
Days After First/Last Applic.	65 8	72 15	72 15	72 15	72 15				
Trt-Eval Interval	23 DA-C	30 DA-C	30 DA-C	30 DA-C	30 DA-C				
Plant-Eval Interval	65 DP-1	72 DP-1	72 DP-1	72 DP-1	72 DP-1				
Days After Emergence	59 DE-1	66 DE-1	66 DE-1	66 DE-1	66 DE-1				
Number of Decimals	0	0	0	0	0				
Trt Treatment	Rate	Other	Other	Appl					
No. Name	Rate	Unit	Rate	Unit Code					
					21				
					22				
					23				
					24				
					25				
1 UTC					0 b	0 b	0 c	0 b	0 b
2 Fierce	0.143 lb ai/a		3 oz/a	A	90 a	100 a	93 b	100 a	97 a
2 Liberty	0.53 lb ai/a		29 oz/a	B					
2 Prefix	0.99 lb ai/a		1.5 pt/a	B					
2 N-pak ams	2.5 % v/v		1.5 qt/a	B					
3 Fierce	0.143 lb ai/a		3 oz/a	A	97 a	100 a	100 a	100 a	100 a
3 Liberty	0.53 lb ai/a		29 oz/a	B					
3 Prefix	0.99 lb ai/a		1.5 pt/a	B					
3 N-pak ams	2.5 % v/v		1.5 qt/a	B					
3 Liberty	0.53 lb ai/a		29 oz/a	D					
3 Warrant	1.13 lb ai/a		3 pt/a	D					
3 N-pak ams	2.5 % v/v		1.5 qt/a	D					
4 Fierce	0.143 lb ai/a		3 oz/a	A	100 a	100 a	97 ab	100 a	100 a
4 Liberty	0.53 lb ai/a		29 oz/a	B					
4 Prefix	0.99 lb ai/a		1.5 pt/a	B					
4 N-pak ams	2.5 % v/v		1.5 qt/a	B					
4 Liberty	0.53 lb ai/a		29 oz/a	D					
4 N-pak ams	2.5 % v/v		1.5 qt/a	D					
5 Fierce	0.143 lb ai/a		3 oz/a	A	93 a	100 a	98 ab	100 a	97 a
5 Liberty	0.53 lb ai/a		29 oz/a	B					
5 Zidua	0.133 lb ai/a		2.5 oz/a	B					
5 N-pak ams	2.5 % v/v		1.5 qt/a	B					
6 Liberty	0.79 lb ai/a		43 oz/a	C	100 a	100 a	100 a	100 a	99 a
6 N-pak ams	2.5 % v/v		1.5 qt/a	C					
6 Liberty	0.79 lb ai/a		43 oz/a	D					
6 N-pak ams	2.5 % v/v		1.5 qt/a	D					
7 Liberty	0.66 lb ai/a		36 oz/a	C	100 a	100 a	100 a	100 a	100 a
7 N-pak ams	2.5 % v/v		1.5 qt/a	C					
7 Liberty	0.53 lb ai/a		29 oz/a	D					
7 N-pak ams	2.5 % v/v		1.5 qt/a	D					
8 Liberty	1.59 lb ai/a		87 oz/a	C	100 a	100 a	98 ab	100 a	99 a
8 N-pak ams	2.5 % v/v		1.5 qt/a	C					

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	ABUTH	SETFA	AMBTR	CHEAL	AMARE					
Pest Scientific Name	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>					
Pest Name	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jul-25-2012	Aug-1-2012	Aug-1-2012	Aug-1-2012	Aug-1-2012					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Rating Timing										
Days After First/Last Applic.	65 8	72 15	72 15	72 15	72 15					
Trt-Eval Interval	23 DA-C	30 DA-C	30 DA-C	30 DA-C	30 DA-C					
Plant-Eval Interval	65 DP-1	72 DP-1	72 DP-1	72 DP-1	72 DP-1					
Days After Emergence	59 DE-1	66 DE-1	66 DE-1	66 DE-1	66 DE-1					
Number of Decimals	0	0	0	0	0					
Trt Treatment	Rate	Rate	Other	Other	Appl	21	22	23	24	25
No. Name	Unit	Unit	Rate	Rate	Unit Code					
9 Valor XLT 3.5oz						100 a	100 a	95 ab	100 a	100 a
9 Valor SX	0.0653 lb ai/a		2.05 oz/a		A					
9 Classic	0.0227 lb ai/a		1.45 oz/a		A					
9 N-pak ams	2.5 % v/v		1.5 qt/a		B					
10 Fierce XLT 4oz						100 a	100 a	98 ab	100 a	100 a
10 Valor SX	0.063 lb ai/a		1.98 oz/a		A					
10 Classic	0.021 lb ai/a		1.34 oz/a		A					
10 V-10206	0.057 lb ai/a		1.07 oz/a		A					
10 Liberty	0.53 lb ai/a		29 oz/a		B					
10 N-pak ams	2.5 % v/v		1.5 qt/a		B					
LSD (P=.05)						11.8	0.0	5.2	0.0	4.6
Standard Deviation						6.9	0.0	3.1	0.0	2.7
CV						7.82	0.0	3.48	0.0	3.04
Bartlett's X2						1.987	0.0	2.1	0.0	7.194
P(Bartlett's X2)						0.37	.	0.835	.	0.066
Replicate F						0.844	0.000	0.802	0.000	0.455
Replicate Prob(F)						0.4464	1.0000	0.4638	1.0000	0.6418
Treatment F						61.281	0.000	308.277	0.000	401.982
Treatment Prob(F)						0.0001	1.0000	0.0001	1.0000	0.0001

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed
Pest Code	ABUTH
Pest Scientific Name	Abutilon theop>
Pest Name	velvetleaf
Crop Code	
BBCH Scale	
Crop Scientific Name	
Crop Name	
Rating Date	Aug-1-2012
Rating Type	CONTRO
Rating Unit	%
Number of Subsamples	1
Rating Timing	
Days After First/Last Applic.	72 15
Trt-Eval Interval	30 DA-C
Plant-Eval Interval	72 DP-1
Days After Emergence	66 DE-1
Number of Decimals	0

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Appl Code	26
1	UTC						0 c
2	Fierce	0.143 lb ai/a		3 oz/a		A	92 b
2	Liberty	0.53 lb ai/a		29 oz/a		B	
2	Prefix	0.99 lb ai/a		1.5 pt/a		B	
2	N-pak ams	2.5 % v/v		1.5 qt/a		B	
3	Fierce	0.143 lb ai/a		3 oz/a		A	100 a
3	Liberty	0.53 lb ai/a		29 oz/a		B	
3	Prefix	0.99 lb ai/a		1.5 pt/a		B	
3	N-pak ams	2.5 % v/v		1.5 qt/a		B	
3	Liberty	0.53 lb ai/a		29 oz/a		D	
3	Warrant	1.13 lb ai/a		3 pt/a		D	
3	N-pak ams	2.5 % v/v		1.5 qt/a		D	
4	Fierce	0.143 lb ai/a		3 oz/a		A	100 a
4	Liberty	0.53 lb ai/a		29 oz/a		B	
4	Prefix	0.99 lb ai/a		1.5 pt/a		B	
4	N-pak ams	2.5 % v/v		1.5 qt/a		B	
4	Liberty	0.53 lb ai/a		29 oz/a		D	
4	N-pak ams	2.5 % v/v		1.5 qt/a		D	
5	Fierce	0.143 lb ai/a		3 oz/a		A	92 b
5	Liberty	0.53 lb ai/a		29 oz/a		B	
5	Zidua	0.133 lb ai/a		2.5 oz/a		B	
5	N-pak ams	2.5 % v/v		1.5 qt/a		B	
6	Liberty	0.79 lb ai/a		43 oz/a		C	100 a
6	N-pak ams	2.5 % v/v		1.5 qt/a		C	
6	Liberty	0.79 lb ai/a		43 oz/a		D	
6	N-pak ams	2.5 % v/v		1.5 qt/a		D	
7	Liberty	0.66 lb ai/a		36 oz/a		C	100 a
7	N-pak ams	2.5 % v/v		1.5 qt/a		C	
7	Liberty	0.53 lb ai/a		29 oz/a		D	
7	N-pak ams	2.5 % v/v		1.5 qt/a		D	
8	Liberty	1.59 lb ai/a		87 oz/a		C	100 a
8	N-pak ams	2.5 % v/v		1.5 qt/a		C	

# Ohio State University Horticulture and Crop Science

Pest Type	W Weed					
Pest Code	ABUTH					
Pest Scientific Name	Abutilon theop>					
Pest Name	velvetleaf					
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	Aug-1-2012					
Rating Type	CONTRO					
Rating Unit	%					
Number of Subsamples	1					
Rating Timing						
Days After First/Last Applic.	72 15					
Trt-Eval Interval	30 DA-C					
Plant-Eval Interval	72 DP-1					
Days After Emergence	66 DE-1					
Number of Decimals	0					

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Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate	Unit	Appl Code	
	9 Valor XLT 3.5oz							26
	9 Valor SX	0.0653 lb ai/a		2.05 oz/a			A	100 a
	9 Classic	0.0227 lb ai/a		1.45 oz/a			A	
	9 N-pak ams	2.5 % v/v		1.5 qt/a			B	
	10 Fierce XLT 4oz							100 a
	10 Valor SX	0.063 lb ai/a		1.98 oz/a			A	
	10 Classic	0.021 lb ai/a		1.34 oz/a			A	
	10 V-10206	0.057 lb ai/a		1.07 oz/a			A	
	10 Liberty	0.53 lb ai/a		29 oz/a			B	
	10 N-pak ams	2.5 % v/v		1.5 qt/a			B	

  

LSD (P=.05)	6.8
Standard Deviation	4.0
CV	4.48
Bartlett's X2	0.184
P(Bartlett's X2)	0.668

  

Replicate F	1.651
Replicate Prob(F)	0.2196
Treatment F	186.982
Treatment Prob(F)	0.0001