

Ohio State University  
Horticulture and Crop Science

TO DETERMINE HERBICIDAL EFFICACY AND SELECTIVITY OF CHA-044 WHEN APPLIED POST TO SOYBEAN COBRA EFFICACY

Title No. 2:

Trial ID: 12 POS1 Protocol ID: 12 POS1  
 Location: Western Branch Study Director: Bryan Reeb  
 Project ID: HGLXMAFOMME1204, MD 64.03 Investigator: Dr. Mark M. Loux  
 Sponsor Contact: Brent Jacobson, Chemin; Eric Ott, Val

General Trial Information

Study Director: Bryan Reeb Title: Research Technician  
 Investigator: Dr. Mark M. Loux Title: Professor

Trial Location

City: South Charleston Latitude of LL Corner °: 39.85938 N  
 State/Prov.: Ohio Longitude of LL Corner °: 83.6739 W  
 Postal Code: 45368  
 Country: USA

Keywords: CHA-044 , METOLACHLOR, FOMESAFEN, PREMIX , POST, SOYBEAN, GLYPHOSATE RESISTANT PALMER AMARANTH, ANNUAL GRASS WEEDS, MORNINGGLORY, WATERHEMP, RAGWEED

Objectives:

COMPARE THE ACTIVITY OF CHA-044 TO PREFIX WHEN APPLIED POSTTO SOYBEAN

Crop Description

Crop 1: GLXMA Glycine max Soybean  
 Variety: Pioneer 93Y51 Description: Round Up Ready  
 BBCH Scale: BSOY Planting Date: May-18-2012  
 Planting Method: PLANTD planted Rate, Unit: 155000 S/A  
 Depth, Unit: 0.75 IN  
 Row Spacing, Unit: 15 IN  
 Seed Bed: COARSE coarse  
 Soil Moisture: DRY dry Emergence Date: May-27-2012

Pest Description

Pest 1 Type: W Code: SETFA Setaria faberi  
 Common Name: Giant foxtail  
 Pest 2 Type: W Code: AMBTR Ambrosia trifida  
 Common Name: Giant ragweed  
 Pest 3 Type: W Code: AMARE Amaranthus retroflexus  
 Common Name: Redroot pigweed  
 Pest 4 Type: W Code: CHEAL Chenopodium album  
 Common Name: Common lambsquarters  
 Pest 5 Type: W Code: ABUTH Abutilon theophrasti  
 Common Name: velvetleaf

Site and Design

Plot Width, Unit: 6.67 FT Site Type: FIELD field  
 Plot Length, Unit: 40 FT Experimental Unit: 1 PLOT plot  
 Plot Area, Unit: 266.8 FT2 Tillage Type: CONTIL conventional-till  
 Replications: 4 Study Design: RACOB L Randomized Complete Block (RCB)  
 Untreated Arrangement: INCLUDED single control randomized in each block

No. Previous Crop Year

1. CORN 2011

Maintenance

No.	Date	Maintenance Treatment Name	Rate	Unit
1.	Jul-12-2012	SELECT MAX	12	OZ
2.	Jul-12-2012	COC	1	%

Comment: TRT 8,9,10,11,12 WERE SPRAYED

Field Prep./Maintenance:

BEANS AT R2/SETFA FLOWERING

Soil Description

Description Name: G-6  
 % OM: 2.2 Texture: SIL silt loam  
 pH: 6.3 Soil Name: Crosby Silt Loam  
 CEC: 13.6 Fert. Level: G good  
 Soil Drainage: G good

Ohio State University  
Horticulture and Crop Science

Application Description

	A	B
Application Date:	Jun-20-2012	Jun-26-2012
Time of Day:	8:00AM	8:30AM
Application Method:	SPRAY	SPRAY
Application Timing:	EPO	EPO
Application Placement:	BROFOL	BROFOL
Air Temperature, Unit:	79 F	63.7 F
% Relative Humidity:	79	58.4
Wind Velocity, Unit:	2 MPH	5 MPH
Wind Direction:	N	NE
Dew Presence (Y/N):	Y yes	N no
Soil Temperature, Unit:	72 F	68 F
Soil Moisture:	MOIST	DRY
% Cloud Cover:	0	0
Next Rain Occurred On:	Jun-29-2012	Jun-29-2012

Crop Stage At Each Application

	A		B	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:	BBCH		BBCH	
Stage Majority, Percent:	17	100		
Height, Unit:	7	IN	9	IN
Height Minimum, Maximum:	6	8	8	10

Pest Stage At Each Application

	A		B	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W
Stage Majority, Percent:	23	100	24	100
Height, Unit:	10	IN	11	IN
Height Minimum, Maximum:	10	11	6	16
Density, Unit:	18	M2	18	M2
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR	W
Stage Majority, Percent:	19	100	19	100
Height, Unit:	10.5	IN	12	IN
Height Minimum, Maximum:	7	11	6	18
Density, Unit:	8	M2	8	M2
Pest 3 Code, Type, Scale:	AMARE	W	AMARE	W
Stage Majority, Percent:	14	100	16	100
Height, Unit:	1.5	IN	5	IN
Height Minimum, Maximum:	1	2.5	2	8
Density, Unit:	34	M2	34	M2
Pest 4 Code, Type, Scale:	CHEAL	W	CHEAL	W
Stage Majority, Percent:	14	100	18	100
Height, Unit:	1	IN	3	IN
Height Minimum, Maximum:	1	1.5	2	4
Density, Unit:	2	M2	2	M2
Pest 5 Code, Type, Scale:	ABUTH	W	ABUTH	W
Stage Majority, Percent:	14	100	16	100
Height, Unit:	2	IN	5	IN
Height Minimum, Maximum:	2	3	4	6
Density, Unit:	3	M2	3	M2

Application Equipment

	A	B
Appl. Equipment:	Backpack	Backpack
Equipment Type:	SPRBAC	SPRBAC
Operation Pressure, Unit:	44 PSI	44 PSI
Nozzle Type:	AIXR	AIXR
Nozzle Size:	110015	110015
Nozzle Spacing, Unit:	18 IN	18 IN
Boom Length, Unit:	6 FT	6 FT
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 gal/ac	20 gal/ac
Mix Size, Unit:	2 Liters	2 Liters
Propellant:	COMCO2	COMCO2

Ohio State University  
Horticulture and Crop Science

## TO DETERMINE HERBICIDAL EFFICACY AND SELECTIVITY OF CHA-044 WHEN APPLIED POST TO SOYBEAN COBRA EFFICACY

Title No. 2:

Trial ID: 12 POS1

Location: Western Branch

Project ID: HGLXMAFOMME1204, MD 64.03

Protocol ID: 12 POS1

Study Director: Bryan Reeb

Investigator: Dr. Mark M. Loux

Sponsor Contact: Brent Jacobson, Chemin; Eric Ott, Val

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max		
Crop Name	Soybean	Soybean		
Rating Date	Jul-2-2012	Jul-12-2012	Jul-12-2012	Jul-12-2012
Rating Type	PHYNEC	PHYNEC	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	12 6	22 16		
Trt-Eval Interval	12 DA-A	12 DA-A	12 DA-A	12 DA-A
Plant-Eval Interval	45 DP-1	55 DP-1	55 DP-1	55 DP-1
Days After Emergence	36 DE-1	46 DE-1		
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage	Appl Code	1	2	3	4	5
1	CHA-044	1.31 lb ai/a	32 fl oz/a		POS	B	1 fg	1 fg	100 a	81 abc	100 a
	1 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
	1 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
2	CHA-044	1.64 lb ai/a	40 fl oz/a		POS	B	4 cde	2 c-f	100 a	81 abc	96 ab
	2 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
	2 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
3	Rhythm	0.375 lb ai/a	25.5 fl oz/a		POS	B	2 ef	1 fg	100 a	73 abc	100 a
	3 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
	3 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
4	Dawn	0.375 lb ai/a	24 fl oz/a		EPO	A	0 g	0 g	100 a	96 a	100 a
	4 Glyphos X-tra	0.75 lb ae/a	32 oz/a		EPO	A					
	4 N-pak ams	2.5 % v/v	2 qt/a		EPO	A					
5	Prefix	1.32 lb ai/a	32 fl oz/a		POS	B	3 de	2 d-g	100 a	89 ab	100 a
	5 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
	5 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
6	Prefix	1.65 lb ai/a	40 fl oz/a		POS	B	5 c	3 c	100 a	90 ab	100 a
	6 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
	6 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
7	Roundup Power Max	0.77 lb ae/a	22 oz/a		POS	B	4 cde	2 c-f	100 a	90 ab	99 a
	7 COC	0.83 % v/v	1.33 pt/a		POS	B					
	7 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
8	Cobra	0.125 lb ai/a	8 oz/a		POS	B	3 def	1 d-g	0 b	68 bc	59 c
	8 COC	0.83 % v/v	1.33 pt/a		POS	B					
	8 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
9	Cobra	0.156 lb ai/a	10 oz/a		POS	B	7 b	5 b	0 b	63 c	83 abc
	9 COC	0.83 % v/v	1.33 pt/a		POS	B					
	9 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
10	Cobra	0.188 lb ai/a	12 oz/a		POS	B	5 c	3 cd	0 b	83 abc	80 abc
	10 COC	0.83 % v/v	1.33 pt/a		POS	B					
	10 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
11	Cobra	0.156 lb ai/a	10 oz/a		POS	B	4 cd	2 cde	0 b	91 ab	81 abc
	11 Resource	0.027 lb ai/a	4 oz/a		POS	B					
	11 COC	0.83 % v/v	1.33 pt/a		POS	B					
	11 N-pak ams	2.5 % v/v	2 qt/a		POS	B					

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	AMARE	ABUTH	SETFA	AMBTR	CHEAL					
Pest Scientific Name	Amaranthus ret>	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name	Redroot pigweed	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jul-12-2012	Jul-12-2012	Jul-23-2012	Jul-23-2012	Jul-23-2012					
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Days After First/Last Applic.										
Trt-Eval Interval	12 DA-A	12 DA-A	33 DA-A	33 DA-A	33 DA-A					
Plant-Eval Interval	55 DP-1	55 DP-1	66 DP-1	66 DP-1	66 DP-1					
Days After Emergence										
Number of Decimals	0	0	0	0	0					
Trt Treatment	Rate	Other	Other	Growth	Appl	6	7	8	9	10
No. Name	Rate Unit	Rate	Rate Unit	Stage	Code					
1 CHA-044	1.31 lb ai/a	32 fl oz/a		POS	B	100 a	100 a	100 a	85 ab	100 a
1 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
1 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
2 CHA-044	1.64 lb ai/a	40 fl oz/a		POS	B	95 a	95 a	100 a	100 a	100 a
2 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
2 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
3 Rhythm	0.375 lb ai/a	25.5 fl oz/a		POS	B	100 a	98 a	100 a	93 a	95 ab
3 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
3 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
4 Dawn	0.375 lb ai/a	24 fl oz/a		EPO	A	100 a	100 a	100 a	100 a	100 a
4 Glyphos X-tra	0.75 lb ae/a	32 oz/a		EPO	A					
4 N-pak ams	2.5 % v/v	2 qt/a		EPO	A					
5 Prefix	1.32 lb ai/a	32 fl oz/a		POS	B	100 a	100 a	100 a	95 a	100 a
5 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
5 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
6 Prefix	1.65 lb ai/a	40 fl oz/a		POS	B	100 a	100 a	100 a	100 a	100 a
6 Glyphos X-tra	0.75 lb ae/a	32 oz/a		POS	B					
6 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
7 Roundup Power Max	0.77 lb ae/a	22 oz/a		POS	B	100 a	100 a	100 a	93 a	100 a
7 COC	0.83 % v/v	1.33 pt/a		POS	B					
7 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
8 Cobra	0.125 lb ai/a	8 oz/a		POS	B	58 c	68 b	53 b	68 b	46 d
8 COC	0.83 % v/v	1.33 pt/a		POS	B					
8 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
9 Cobra	0.156 lb ai/a	10 oz/a		POS	B	55 c	95 a	53 b	91 a	73 c
9 COC	0.83 % v/v	1.33 pt/a		POS	B					
9 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
10 Cobra	0.188 lb ai/a	12 oz/a		POS	B	53 c	100 a	58 b	93 a	73 c
10 COC	0.83 % v/v	1.33 pt/a		POS	B					
10 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
11 Cobra	0.156 lb ai/a	10 oz/a		POS	B	76 b	90 a	55 b	86 ab	80 abc
11 Resource	0.027 lb ai/a	4 oz/a		POS	B					
11 COC	0.83 % v/v	1.33 pt/a		POS	B					
11 N-pak ams	2.5 % v/v	2 qt/a		POS	B					

Ohio State University  
Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed						
Pest Code	AMARE	ABUTH	SETFA	AMBTR	CHEAL						
Pest Scientific Name	Amaranthus ret->	Abutilon theop->	Setaria faberi	Ambrosia trifidi->	Chenopodium al->						
Pest Name	Redroot pigweed	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu->						
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Rating Date	Jul-12-2012	Jul-12-2012	Jul-23-2012	Jul-23-2012	Jul-23-2012						
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO						
Rating Unit	%	%	%	%	%						
Number of Subsamples	1	1	1	1	1						
Days After First/Last Applic.											
Trt-Eval Interval	12 DA-A	12 DA-A	33 DA-A	33 DA-A	33 DA-A						
Plant-Eval Interval	55 DP-1	55 DP-1	66 DP-1	66 DP-1	66 DP-1						
Days After Emergence											
Number of Decimals	0	0	0	0	0						
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage	Appl Code	6	7	8	9	10
12	Flexstar	0.352 lb ai/a	1.5 pt/a		POS	B	76 b	85 a	55 b	83 ab	78 bc
12	COC	0.83 % v/v	1.33 pt/a		POS	B					
12	N-pak ams	2.5 % v/v	2 qt/a		POS	B					
13	Roundup Power Max	0.77 lb ae/a	22 oz/a		POS	B	100 a	100 a	100 a	81 ab	100 a
13	Cobra	0.156 lb ai/a	10 oz/a		POS	B					
13	COC	0.83 % v/v	1.33 pt/a		POS	B					
13	N-pak ams	2.5 % v/v	2 qt/a		POS	B					
14	UTC						0 d	0 c	0 c	0 c	0 e
	LSD (P=.05)						14.8	17.0	6.9	19.0	21.6
	Standard Deviation						10.4	11.9	4.8	13.3	15.1
	CV						13.05	13.51	6.29	15.93	18.49
	Replicate F						1.831	0.845	4.590	2.396	1.072
	Replicate Prob(F)						0.1575	0.4775	0.0076	0.0828	0.3726
	Treatment F						32.418	20.477	168.432	14.849	14.375
	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	W Weed							
Pest Code	AMARE	ABUTH	SETFA	AMBTR	CHEAL							
Pest Scientific Name	Amaranthus ret>	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>							
Pest Name	Redroot pigweed	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>							
Crop Code												
BBCH Scale												
Crop Scientific Name												
Crop Name												
Rating Date	Jul-23-2012	Jul-23-2012	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							
Days After First/Last Applic.												
Trt-Eval Interval	33 DA-A	33 DA-A	36 DA-B	36 DA-B	36 DA-B							
Plant-Eval Interval	66 DP-1	66 DP-1	75 DP-1	75 DP-1	75 DP-1							
Days After Emergence												
Number of Decimals	0	0	0	0	0							
Trt Treatment	Rate	Other	Other	Growth	Appl	11	12	13	14	15		
No. Name	Rate	Unit	Rate	Rate	Unit	Stage	Code					
1 CHA-044	1.31 lb ai/a		32 fl oz/a			POS	B	100 a	100 a	100 a	90 a	100 a
1 Glyphos X-tra	0.75 lb ae/a		32 oz/a			POS	B					
1 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
2 CHA-044	1.64 lb ai/a		40 fl oz/a			POS	B	100 a	100 a	100 a	92 a	100 a
2 Glyphos X-tra	0.75 lb ae/a		32 oz/a			POS	B					
2 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
3 Rhythm	0.375 lb ai/a		25.5 fl oz/a			POS	B	100 a	95 a	100 a	96 a	100 a
3 Glyphos X-tra	0.75 lb ae/a		32 oz/a			POS	B					
3 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
4 Dawn	0.375 lb ai/a		24 fl oz/a			EPO	A	95 a	100 a	100 ab	100 a	100 a
4 Glyphos X-tra	0.75 lb ae/a		32 oz/a			EPO	A					
4 N-pak ams	2.5 % v/v		2 qt/a			EPO	A					
5 Prefix	1.32 lb ai/a		32 fl oz/a			POS	B	100 a	100 a	100 a	100 a	100 a
5 Glyphos X-tra	0.75 lb ae/a		32 oz/a			POS	B					
5 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
6 Prefix	1.65 lb ai/a		40 fl oz/a			POS	B	100 a	100 a	100 a	99 a	100 a
6 Glyphos X-tra	0.75 lb ae/a		32 oz/a			POS	B					
6 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
7 Roundup Power Max	0.77 lb ae/a		22 oz/a			POS	B	100 a	100 a	100 a	96 a	100 a
7 COC	0.83 % v/v		1.33 pt/a			POS	B					
7 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
8 Cobra	0.125 lb ai/a		8 oz/a			POS	B	48 d	63 b	93 d	74 b	73 d
8 COC	0.83 % v/v		1.33 pt/a			POS	B					
8 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
9 Cobra	0.156 lb ai/a		10 oz/a			POS	B	53 cd	90 a	96 bc	94 a	91 abc
9 COC	0.83 % v/v		1.33 pt/a			POS	B					
9 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
10 Cobra	0.188 lb ai/a		12 oz/a			POS	B	53 cd	95 a	95 cd	98 a	86 c
10 COC	0.83 % v/v		1.33 pt/a			POS	B					
10 N-pak ams	2.5 % v/v		2 qt/a			POS	B					
11 Cobra	0.156 lb ai/a		10 oz/a			POS	B	65 bc	93 a	95 cd	91 a	96 ab
11 Resource	0.027 lb ai/a		4 oz/a			POS	B					
11 COC	0.83 % v/v		1.33 pt/a			POS	B					
11 N-pak ams	2.5 % v/v		2 qt/a			POS	B					

Ohio State University  
Horticulture and Crop Science

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	AMARE	ABUTH	SETFA	AMBTR	CHEAL					
Pest Scientific Name	Amaranthus ret->	Abutilon theop->	Setaria faberi	Ambrosia trifidi->	Chenopodium al->					
Pest Name	Redroot pigweed	velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu->					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jul-23-2012	Jul-23-2012	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					
Days After First/Last Applic.										
Trt-Eval Interval	33 DA-A	33 DA-A	36 DA-B	36 DA-B	36 DA-B					
Plant-Eval Interval	66 DP-1	66 DP-1	75 DP-1	75 DP-1	75 DP-1					
Days After Emergence										
Number of Decimals	0	0	0	0	0					
Trt Treatment	Rate	Other	Other	Growth	Appl	11	12	13	14	15
No. Name	Rate	Rate	Rate	Stage	Code					
12 Flexstar	0.352 lb ai/a	1.5 pt/a		POS	B	75 b	88 a	98 abc	94 a	90 bc
12 COC	0.83 % v/v	1.33 pt/a		POS	B					
12 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
13 Roundup Power Max	0.77 lb ae/a	22 oz/a		POS	B	100 a	100 a	100 a	92 a	100 a
13 Cobra	0.156 lb ai/a	10 oz/a		POS	B					
13 COC	0.83 % v/v	1.33 pt/a		POS	B					
13 N-pak ams	2.5 % v/v	2 qt/a		POS	B					
14 UTC						0 e	0 c	0 e	0 c	0 e
LSD (P=.05)	13.7	22.1						3.3	12.4	9.7
Standard Deviation	9.6	15.5						2.3	8.7	6.8
CV	12.33	17.72						2.54	10.03	7.71
Replicate F	1.266	0.963						2.804	2.663	0.420
Replicate Prob(F)	0.2995	0.4201						0.0524	0.0613	0.7396
Treatment F	40.824	12.237						516.552	35.226	60.927
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
Pest Code	AMARE	ABUTH
Pest Scientific Name	Amaranthus ret>	Abutilon theop>
Pest Name	Redroot pigweed	velvetleaf
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Rating Date	Aug-1-2012	Aug-1-2012
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
Days After First/Last Applic.		
Trt-Eval Interval	36 DA-B	36 DA-B
Plant-Eval Interval	75 DP-1	75 DP-1
Days After Emergence		
Number of Decimals	0	0

Trt	Treatment	Rate	Other	Other	Growth	Appl		
No.	Name	Rate	Rate	Rate	Stage	Code	16	17
1	CHA-044	1.31 lb ai/a	32 fl oz/a		POS	B	100 a	100 a
1	Glyfos X-tra	0.75 lb ae/a	32 oz/a		POS	B		
1	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
2	CHA-044	1.64 lb ai/a	40 fl oz/a		POS	B	100 a	100 a
2	Glyfos X-tra	0.75 lb ae/a	32 oz/a		POS	B		
2	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
3	Rhythm	0.375 lb ai/a	25.5 fl oz/a		POS	B	100 a	100 a
3	Glyfos X-tra	0.75 lb ae/a	32 oz/a		POS	B		
3	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
4	Dawn	0.375 lb ai/a	24 fl oz/a		EPO	A	100 a	99 a
4	Glyfos X-tra	0.75 lb ae/a	32 oz/a		EPO	A		
4	N-pak ams	2.5 % v/v	2 qt/a		EPO	A		
5	Prefix	1.32 lb ai/a	32 fl oz/a		POS	B	100 a	100 a
5	Glyfos X-tra	0.75 lb ae/a	32 oz/a		POS	B		
5	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
6	Prefix	1.65 lb ai/a	40 fl oz/a		POS	B	100 a	100 a
6	Glyfos X-tra	0.75 lb ae/a	32 oz/a		POS	B		
6	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
7	Roundup Power Max	0.77 lb ae/a	22 oz/a		POS	B	100 a	100 a
7	COC	0.83 % v/v	1.33 pt/a		POS	B		
7	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
8	Cobra	0.125 lb ai/a	8 oz/a		POS	B	79 cd	91 b
8	COC	0.83 % v/v	1.33 pt/a		POS	B		
8	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
9	Cobra	0.156 lb ai/a	10 oz/a		POS	B	75 cd	99 a
9	COC	0.83 % v/v	1.33 pt/a		POS	B		
9	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
10	Cobra	0.188 lb ai/a	12 oz/a		POS	B	73 d	100 a
10	COC	0.83 % v/v	1.33 pt/a		POS	B		
10	N-pak ams	2.5 % v/v	2 qt/a		POS	B		
11	Cobra	0.156 lb ai/a	10 oz/a		POS	B	81 bc	100 a
11	Resource	0.027 lb ai/a	4 oz/a		POS	B		
11	COC	0.83 % v/v	1.33 pt/a		POS	B		
11	N-pak ams	2.5 % v/v	2 qt/a		POS	B		

