

TO DETERMINE THE EFFICACY & SELECTIVITY OF CHA-2745 WHEN APPLIED PRE ALONE AND IN TANK MIX TO SOYBEAN IN 2015

Trial ID: 15 PRES 2 Location: F-7 EAST END Trial Year: 2015
Protocol ID: 15 PRES2 Investigator: Dr. Mark M. Loux
Project ID: HGLXAMPET1502 Study Director: Bryan Reeb
Sponsor Contact: ANDY KENDIG

General Trial Information

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Latitude of LL Corner °: 39.86024 N
Longitude of LL Corner °: 83.6711 W

Conducted Under GLP: No
Conducted Under GEP: No

Keywords: CHA-2745 5EC, PETHOXAMID, DAWN, FOMESAFEN, DUAL MAGNUM, S-METOLACHLOR, CHA-060, CHLORIMURON, SULFENTRAZONE, SOYBEAN, PRE, SELECTIVITY, EFFICACY

Objectives:

DETERMINE SAFETY OF CHA-2745 TO SOYBEAN APPLIED PRE
DETERMINE WEED SPECTRUM OF CHA-2745 APPLIED PRE
DETERMINE IF EITHER DAWN , CHLORIMURON, OR SULFENTRAZONE WILL BROADEN WEED SPECTRUM

Contacts

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: SCS 9363
Description: RoundUp Ready

Planting Rate, Unit: 180000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Soil Temperature, Unit: 70 F
Soil Moisture: GOOD good
Seed Bed: MEDIUM medium

Planting Date: 5-7-2015
Planting Method: PLANTD planted
Planting Equipment: KINZE
Emergence Date: 5-15-2015

Pest Description

- Pest 1 Type:** W **Code:** ABUTH Abutilon theophrasti
Common Name: velvetleaf
- Pest 2 Type:** W **Code:** AMATA Amaranthus tamariscinus
Common Name: Common waterhemp
- Pest 3 Type:** W **Code:** AMAPA Amaranthus palmeri
Common Name: Palmer amaranth
- Pest 4 Type:** W **Code:** IPOSS Ipomoea sp.
Common Name: Morning glory
- Pest 5 Type:** W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters
- Pest 6 Type:** W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail
- Pest 7 Type:** W **Code:** BRAPP Brachiaria platyphylla
Common Name: Broadleaf signalgrass
- Pest 8 Type:** W **Code:** PANDI Panicum dichotomiflorum
Common Name: Fall panicum
- Pest 9 Type:** W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed
- Pest10 Type:** W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed
- Pest11 Type:** W **Code:** SIDSP Sida spinosa
Common Name: Prickly sida

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT2
Replications: 4
Treatments: 12

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: CONTIL conventional-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: F-7 East
% OM: 1.8
pH: 5.7
CEC: 16.2

Texture: SIL silt loam
Soil Name: Crosby
Fert. Level: G good
Soil Drainage: G good

Application Description

A

Application Date: 5-8-2015
Appl. Start Time: 9:00 AM
Appl. Stop Time: 10:00 AM
Application Method: SPRAY
Application Timing: PRE ATPL
Application Placement: BROSOI
Air Temperature, Unit: 73 F
% Relative Humidity: 66
Wind Velocity, Unit: 1.3 MPH
Wind Direction: S
Dew Presence (Y/N): N no
Soil Temperature, Unit: 61 F
Soil Moisture: DRY
% Cloud Cover: 10
Next Moisture Occurred On: 5-11-2015
Time to Next Moisture, Unit: 3 DAY

Crop Stage At Each Application

A
Crop 1 Code, BBCH Scale: GLXMA BSOY

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: ABUTH W
Density, Unit: 3 M2
Pest 2 Code, Type, Scale: AMATA W
Pest 3 Code, Type, Scale: AMAPA W
Pest 4 Code, Type, Scale: IPOSS W
Pest 5 Code, Type, Scale: CHEAL W
Density, Unit: 8 M2
Pest 6 Code, Type, Scale: SETFA W
Density, Unit: 50 M2
Pest 7 Code, Type, Scale: BRAPP W
Pest 8 Code, Type, Scale: PANDI W
Pest 9 Code, Type, Scale: AMBTR W
Density, Unit: 5.67 M2
Pest10 Code, Type, Scale: AMARE W
Density, Unit: 2 M2
Pest11 Code, Type, Scale: SIDSP W
Density, Unit: 1.33 M2

Application Equipment

A

Appl. Equipment: 6' BACKPACK
Equipment Type: BACCAI
Operation Pressure, Unit: 44 PSI
Nozzle Type: AIXR
Nozzle Size: 11015
Nozzle Spacing, Unit: 18 IN
Nozzles/Row: 4
Boom Length, Unit: 6.67 FT
Boom Height, Unit: 20 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 15 gal/ac
Mix Size, Unit: 1 liters
Propellant: COMCO2

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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
BBCH Scale BSOY
Crop Scientific Name Glycine max
Crop Name Soybean
Crop Variety SCS 9363
Description RR
Part Rated PLANT C
Rating Date 6-9-2015 6-9-2015 6-9-2015 6-9-2015
Rating Type PHYGEN CONTRO CONTRO CONTRO
Rating Unit % % % %
Number of Subsamples 1 1 1 1
Days After First/Last Applic. 32 32 32 32
Trt-Eval Interval 32 DA-A 32 DA-A 32 DA-A 32 DA-A
Plant-Eval Interval 33 DP-1 33 DP-1 33 DP-1 33 DP-1
Days After Emergence 25 DE-1 25 DE-1 25 DE-1 25 DE-1

Table with 9 columns: Trt No., Treatment Name, Other Rate, Other Rate, Appl Unit, Appl Code, Description, 1, 2, 3, 4. Rows include treatments like CHA-2745, DAWN, SPARTAN, and DUAL MAGNUM with associated rates and application details.

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.
Missing data estimates are included in columns: Yates=11,16
Could not calculate LSD (% mean diff) for columns 11,21 because error mean square = 0.

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						
BBCH Scale	BSOY						
Crop Scientific Name	Glycine max						
Crop Name	Soybean						
Crop Variety	SCS 9363						
Description	RR						
Part Rated	PLANT C						
Rating Date	6-9-2015	6-9-2015	6-9-2015	6-9-2015	6-9-2015		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1		
Days After First/Last Applic.	32 32	32 32	32 32	32 32	32 32		
Trt-Eval Interval	32 DA-A	32 DA-A	32 DA-A	32 DA-A	32 DA-A		
Plant-Eval Interval	33 DP-1	33 DP-1	33 DP-1	33 DP-1	33 DP-1		
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1	25 DE-1		
Trt Treatment	Other	Other	Appl	Appl			
No. Name	Rate	Rate	Unit	Code	Description		
12 UNTREATED				1	2	3	4
				0.0 a	0.0 d	0.0 b	0.0 e
LSD P=.05				2.18	18.62	18.87	19.64
Standard Deviation				1.29	11.00	11.15	11.60
CV				171.74	19.9	102.89	18.21
Grand Mean				0.75	55.28	10.83	63.69
Bartlett's X2				3.939	8.545	1.179	9.127
P(Bartlett's X2)				0.685	0.576	0.991	0.426
Skewness				1.9254*	-1.0839*	1.2026*	-0.5452
Kurtosis				3.2847*	0.6109	0.378	-1.1269
Replicate F				2.461	7.739	0.805	0.549
Replicate Prob(F)				0.1085	0.0029	0.4599	0.5851
Treatment F				1.210	10.946	4.055	27.497
Treatment Prob(F)				0.3367	0.0001	0.0025	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	HIBTR	AMARE	POLPY	SIDSP				
Pest Scientific Name	Hibiscus trion>	Amaranthus ret>	Persicaria pen>	Sida spinosa				
Pest Name	Venice mallow	Redroot pigweed	Pennsylvania s>	Prickly sida				
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Crop Variety								
Description								
Part Rated								
Rating Date	6-9-2015	6-9-2015	6-9-2015	6-9-2015				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%				
Number of Subsamples	1	1	1	1				
Days After First/Last Applic.	32 32	32 32	32 32	32 32				
Trt-Eval Interval	32 DA-A	32 DA-A	32 DA-A	32 DA-A				
Plant-Eval Interval	33 DP-1	33 DP-1	33 DP-1	33 DP-1				
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1				
Trt Treatment	Other Rate	Other Rate	Appl Unit	Appl Description	5	6	7	8
1 CHA-2745	25.6 oz/a		A	PRE	80.0 b	66.7 c	93.3 a	53.3 c
2 CHA-2745	32 oz/a		A	PRE	93.3 a	73.3 c	91.7 a	70.0 abc
3 CHA-2745	38.4 oz/a		A	PRE	93.3 a	66.7 c	100.0 a	66.7 abc
4 CHA-2745	32 oz/a		A	PRE	96.7 a	100.0 a	100.0 a	92.7 a
4 DAWN	19.2 oz/a		A	PRE				
5 CHA-2745	32 oz/a		A	PRE	100.0 a	100.0 a	96.7 a	86.7 ab
5 CHA-060	1.66 oz/a		A	PRE				
6 CHA-2745	32 oz/a		A	PRE	96.7 a	100.0 a	93.3 a	89.3 a
6 SPARTAN	4.5 oz/a		A	PRE				
7 CHA-2745	25.6 oz/a		A	PRE	96.7 a	100.0 a	100.0 a	96.7 a
7 CHA-060	1.47 oz/a		A	PRE				
7 DAWN	18 oz/a		A	PRE				
8 CHA-2745	25.6 oz/a		A	PRE	100.0 a	100.0 a	100.0 a	91.7 a
8 CHA-060	1.28 oz/a		A	PRE				
8 SPARTAN	5.1 oz/a		A	PRE				
9 DUAL MAGNUM	16.8 oz/a		A	PRE	93.3 a	90.0 b	26.7 c	56.7 bc
10 SPARTAN	4.5 oz/a		A	PRE	96.7 a	96.7 ab	100.0 a	81.7 abc
11 AUTHORITY ELITE	25 oz/a		A	PRE	100.0 a	100.0 a	63.3 b	76.7 abc

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Pest Type	W Weed	W Weed	W Weed	W Weed							
Pest Code	HIBTR	AMARE	POLPY	SIDSP							
Pest Scientific Name	Hibiscus trion>	Amaranthus ret>	Persicaria pen>	Sida spinosa							
Pest Name	Venice mallow	Redroot pigweed	Pennsylvania s>	Prickly sida							
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Crop Variety											
Description											
Part Rated											
Rating Date	6-9-2015	6-9-2015	6-9-2015	6-9-2015							
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO							
Rating Unit	%	%	%	%							
Number of Subsamples	1	1	1	1							
Days After First/Last Applic.	32 32	32 32	32 32	32 32							
Trt-Eval Interval	32 DA-A	32 DA-A	32 DA-A	32 DA-A							
Plant-Eval Interval	33 DP-1	33 DP-1	33 DP-1	33 DP-1							
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1							
Trt Treatment	Other	Other	Appl	Appl							
No. Name	Rate	Rate	Unit	Code Description							
12 UNTREATED				5	0.0 c	6	0.0 d	7	0.0 d	8	0.0 d
LSD P=.05					12.74		8.80		17.36		31.12
Standard Deviation					7.52		5.20		10.25		18.38
CV					8.62		6.28		12.75		25.58
Grand Mean					87.22		82.78		80.42		71.83
Bartlett's X2					2.997		1.699		4.03		8.916
P(Bartlett's X2)					0.885		0.791		0.545		0.54
Skewness					-2.7336*		-2.0524*		-1.6755*		-1.2005*
Kurtosis					6.5723*		3.6759*		1.5077		0.6772
Replicate F					0.196		5.037		1.130		0.753
Replicate Prob(F)					0.8231		0.0158		0.3412		0.4827
Treatment F					41.554		95.738		31.886		6.341
Treatment Prob(F)					0.0001		0.0001		0.0001		0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	ABUTH	ECHCR	SETFA						
Pest Scientific Name	Abutilon theop>	Echinochloa cr>	Setaria faberi						
Pest Name	velvetleaf	Echinochloa cr>	Giant foxtail						
Crop Code			GLXMA						
BBCH Scale			BSOY						
Crop Scientific Name			Glycine max						
Crop Name			Soybean						
Crop Variety			SCS 9363						
Description			RR						
Part Rated			PLANT C						
Rating Date	6-9-2015	6-9-2015	6-25-2015	6-25-2015					
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO					
Rating Unit	%	%	%	%					
Number of Subsamples	1	1	1	1					
Days After First/Last Applic.	32 32	32 32	48 48	48 48					
Trt-Eval Interval	32 DA-A	32 DA-A	48 DA-A	48 DA-A					
Plant-Eval Interval	33 DP-1	33 DP-1	49 DP-1	49 DP-1					
Days After Emergence	25 DE-1	25 DE-1	41 DE-1	41 DE-1					
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	9	10	11	12
1	CHA-2745	25.6 oz/a		A	PRE	76.7 c	40.0 bcd	0.0 a	40.0 d
2	CHA-2745	32 oz/a		A	PRE	93.3 ab	53.3 abc	0.0 a	46.7 bcd
3	CHA-2745	38.4 oz/a		A	PRE	90.0 abc	36.7 cd	0.0 a	40.0 d
4	CHA-2745	32 oz/a		A	PRE	93.3 ab	56.7 abc	0.0 a	46.7 bcd
4	DAWN	19.2 oz/a		A	PRE				
5	CHA-2745	32 oz/a		A	PRE	96.7 a	60.0 ab	0.0 a	43.3 cd
5	CHA-060	1.66 oz/a		A	PRE				
6	CHA-2745	32 oz/a		A	PRE	100.0 a	56.7 abc	0.0 a	91.7 a
6	SPARTAN	4.5 oz/a		A	PRE				
7	CHA-2745	25.6 oz/a		A	PRE	100.0 a	36.7 cd	0.0 a	33.3 de
7	CHA-060	1.47 oz/a		A	PRE				
7	DAWN	18 oz/a		A	PRE				
8	CHA-2745	25.6 oz/a		A	PRE	100.0 a	50.0 bc	0.0 a	50.0 bcd
8	CHA-060	1.28 oz/a		A	PRE				
8	SPARTAN	5.1 oz/a		A	PRE				
9	DUAL MAGNUM	16.8 oz/a		A	PRE	90.0 abc	56.7 abc	0.0 a	70.0 abc
10	SPARTAN	4.5 oz/a		A	PRE	80.0 bc	20.0 de	0.0 a	10.0 ef
11	AUTHORITY ELITE	25 oz/a		A	PRE	100.0 a	73.3 a	0.0 a	75.0 ab

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Pest Type	W Weed	W Weed	W Weed	
Pest Code	ABUTH	ECHCR	SETFA	
Pest Scientific Name	Abutilon theop>	Echinochloa cr>	Setaria faberi	
Pest Name	velvetleaf	Echinochloa cr>	Giant foxtail	
Crop Code			GLXMA	
BBCH Scale			BSOY	
Crop Scientific Name			Glycine max	
Crop Name			Soybean	
Crop Variety			SCS 9363	
Description			RR	
Part Rated			PLANT C	
Rating Date	6-9-2015	6-9-2015	6-25-2015	6-25-2015
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	32 32	32 32	48 48	48 48
Trt-Eval Interval	32 DA-A	32 DA-A	48 DA-A	48 DA-A
Plant-Eval Interval	33 DP-1	33 DP-1	49 DP-1	49 DP-1
Days After Emergence	25 DE-1	25 DE-1	41 DE-1	41 DE-1
Trt Treatment	Other	Other	Appl	Appl
No. Name	Rate	Rate	Unit	Code Description
12 UNTREATED				9 10 11 12
	0.0 d	0.0 e	0.0 a	0.0 f
LSD P=.05	13.75	22.30	.	29.62
Standard Deviation	8.12	13.17	0.00	17.49
CV	9.55	29.27	0.0	38.4
Grand Mean	85.00	45.00	0.00	45.56
Bartlett's X2	1.025	7.695	0.0	7.989
P(Bartlett's X2)	0.985	0.659	.	0.535
Skewness	-2.5064*	-0.5467	.	-0.1066
Kurtosis	5.6509*	-0.6983	.	-1.1566
Replicate F	0.126	7.061	0.000	5.558
Replicate Prob(F)	0.8819	0.0043	1.0000	0.0111
Treatment F	35.356	6.830	0.000	6.389
Treatment Prob(F)	0.0001	0.0001	1.0000	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	AMBTR	CHEAL	HIBTR	AMARE				
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Hibiscus trion>	Amaranthus ret>				
Pest Name	Giant ragweed	Common lambsqu>	Venice mallow	Redroot pigweed				
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Crop Variety								
Description								
Part Rated								
Rating Date	6-25-2015	6-25-2015	6-25-2015	6-25-2015				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%				
Number of Subsamples	1	1	1	1				
Days After First/Last Applic.	48 48	48 48	48 48	48 48				
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A				
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1				
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1				
Trt Treatment	Other	Other	Appl	Appl				
No. Name	Rate	Rate	Unit	Code				
Description	13	14	15	16				
1 CHA-2745	25.6 oz/a		A	PRE	0.0 a	33.3 d	86.7 b	84.8 b
2 CHA-2745	32 oz/a		A	PRE	6.7 a	33.3 d	90.0 ab	93.3 ab
3 CHA-2745	38.4 oz/a		A	PRE	0.0 a	40.0 cd	96.7 ab	100.0 a
4 CHA-2745	32 oz/a		A	PRE	6.7 a	73.3 b	100.0 a	100.0 a
4 DAWN	19.2 oz/a		A	PRE				
5 CHA-2745	32 oz/a		A	PRE	6.7 a	100.0 a	100.0 a	100.0 a
5 CHA-060	1.66 oz/a		A	PRE				
6 CHA-2745	32 oz/a		A	PRE	20.0 a	100.0 a	100.0 a	100.0 a
6 SPARTAN	4.5 oz/a		A	PRE				
7 CHA-2745	25.6 oz/a		A	PRE	6.7 a	100.0 a	100.0 a	100.0 a
7 CHA-060	1.47 oz/a		A	PRE				
7 DAWN	18 oz/a		A	PRE				
8 CHA-2745	25.6 oz/a		A	PRE	6.7 a	96.7 a	100.0 a	100.0 a
8 CHA-060	1.28 oz/a		A	PRE				
8 SPARTAN	5.1 oz/a		A	PRE				
9 DUAL MAGNUM	16.8 oz/a		A	PRE	0.0 a	53.3 c	93.3 ab	90.0 ab
10 SPARTAN	4.5 oz/a		A	PRE	0.0 a	93.3 a	93.3 ab	100.0 a
11 AUTHORITY ELITE	25 oz/a		A	PRE	0.0 a	100.0 a	100.0 a	100.0 a

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL	HIBTR	AMARE
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Hibiscus trion>	Amaranthus ret>
Pest Name	Giant ragweed	Common lambsqu>	Venice mallow	Redroot pigweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description				
Part Rated				
Rating Date	6-25-2015	6-25-2015	6-25-2015	6-25-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Days After First/Last Applic.	48 48	48 48	48 48	48 48
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1
Trt Treatment	Other	Other	Appl	Appl
No. Name	Rate	Rate	Unit	Code Description
12 UNTREATED				13 0.0 a
				14 0.0 e
				15 0.0 c
				16 0.0 c
LSD P=.05	20.14	18.51	12.85	12.65
Standard Deviation	11.89	10.93	7.59	7.45
CV	267.56	15.93	8.59	8.37
Grand Mean	4.44	68.61	88.33	89.02
Bartlett's X2	5.34	8.19	1.972	0.538
P(Bartlett's X2)	0.376	0.225	0.741	0.764
Skewness	3.4388*	-0.7236	-2.7628*	-2.7646*
Kurtosis	13.8142*	-0.9156	6.6498*	6.5015*
Replicate F	2.200	3.233	1.737	1.367
Replicate Prob(F)	0.1346	0.0588	0.1994	0.2767
Treatment F	0.743	31.076	41.421	43.876
Treatment Prob(F)	0.6886	0.0001	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed						
Pest Code	POLPY	SIDSP	ABUTH	ECHCR						
Pest Scientific Name	Persicaria pen>	Sida spinosa	Abutilon theop>	Echinochloa cr>						
Pest Name	Pennsylvania s>	Prickly sida	velvetleaf	Echinochloa cr>						
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Crop Variety										
Description										
Part Rated										
Rating Date	6-25-2015	6-25-2015	6-25-2015	6-25-2015						
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO						
Rating Unit	%	%	%	%						
Number of Subsamples	1	1	1	1 1						
Days After First/Last Applic.	48 48	48 48	48 48	48 48						
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A						
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1						
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1						
Trt Treatment	Other	Other	Appl	Appl						
No. Name	Rate	Rate	Unit	Code	Description	17	18	19	20	21
1 CHA-2745	25.6 oz/a		A	PRE		100.0 a	56.7 c	90.0 ab	40.0 c	
2 CHA-2745	32 oz/a		A	PRE		100.0 a	83.3 b	100.0 a	46.7 bc	
3 CHA-2745	38.4 oz/a		A	PRE		100.0 a	66.7 c	93.3 ab	36.7 cd	
4 CHA-2745	32 oz/a		A	PRE		100.0 a	100.0 a	100.0 a	50.0 bc	
4 DAWN	19.2 oz/a		A	PRE						
5 CHA-2745	32 oz/a		A	PRE		100.0 a	96.7 ab	100.0 a	46.7 bc	
5 CHA-060	1.66 oz/a		A	PRE						
6 CHA-2745	32 oz/a		A	PRE		100.0 a	96.7 ab	70.0 b	81.7 a	
6 SPARTAN	4.5 oz/a		A	PRE						
7 CHA-2745	25.6 oz/a		A	PRE		100.0 a	100.0 a	100.0 a	26.7 cde	
7 CHA-060	1.47 oz/a		A	PRE						
7 DAWN	18 oz/a		A	PRE						
8 CHA-2745	25.6 oz/a		A	PRE		96.7 a	100.0 a	100.0 a	50.0 bc	
8 CHA-060	1.28 oz/a		A	PRE						
8 SPARTAN	5.1 oz/a		A	PRE						
9 DUAL MAGNUM	16.8 oz/a		A	PRE		73.3 b	90.0 ab	100.0 a	70.0 ab	
10 SPARTAN	4.5 oz/a		A	PRE		96.7 a	93.3 ab	100.0 a	10.0 de	
11 AUTHORITY ELITE	25 oz/a		A	PRE		86.7 ab	93.3 ab	100.0 a	75.0 ab	

The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	POLPY	SIDSP	ABUTH	ECHCR
Pest Scientific Name	Persicaria pen>	Sida spinosa	Abutilon theop>	Echinochloa cr>
Pest Name	Pennsylvania s>	Prickly sida	velvetleaf	Echinochloa cr>
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Crop Variety				
Description				
Part Rated				
Rating Date	6-25-2015	6-25-2015	6-25-2015	6-25-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1 1
Days After First/Last Applic.	48 48	48 48	48 48	48 48
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	49 DP-1
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1
Trt Treatment	Other	Other	Appl	Appl
No. Name	Rate	Rate	Unit	Code Description
12 UNTREATED				17 18 19 20 21
	0.0 c	0.0 d	0.0 c	0.0 e
LSD P=.05	16.65	16.59	27.32	29.53 .
Standard Deviation	9.83	9.80	16.14	17.44 .
CV	11.2	12.04	18.38	39.24 .
Grand Mean	87.78	81.39	87.78	44.44 .
Bartlett's X2	6.048	3.402	4.544	1.787 .
P(Bartlett's X2)	0.109	0.845	0.103	0.994 .
Skewness	-2.5041*	-1.8962*	-2.4464*	-0.1214 .
Kurtosis	5.2021*	2.9498*	4.4591*	-1.1847 .
Replicate F	1.752	0.811	1.035	6.812
Replicate Prob(F)	0.1968	0.4575	0.3719	0.0050
Treatment F	25.713	26.492	9.692	5.921
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0002

TO DETERMINE THE EFFICACY & SELECTIVITY OF CHA-2745 WHEN APPLIED PRE ALONE AND IN TANK MIX TO SOYBEAN IN 2015

Trial ID: 15 PRES 2	Location: F-7 EAST END	Trial Year: 2015
Protocol ID: 15 PRES2	Investigator: Dr. Mark M. Loux	
Project ID: HGLXAMPET1502	Study Director: Bryan Reeb	
	Sponsor Contact: ANDY KENDIG	

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, *Setaria faberi*, = US
 AMBTR, *Ambrosia trifida*, = US
 CHEAL, *Chenopodium album*, = US
 HIBTR, *Hibiscus trionum*, = US
 AMARE, *Amaranthus retroflexus*, = US
 POLPY, *Persicaria pensylvanica*, = US
 SIDSP, *Sida spinosa*, = US
 ABUTH, *Abutilon theophrasti*, = US
 ECHCR, *Echinochloa crus-ga. oryzicola*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Part Rated

PLANT = plant
C = Crop is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury
CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

33 DP-1 = 1 GLXMA 5-7-2015
49 DP-1 = 1 GLXMA 5-7-2015