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Soybean weed control in conventional till

Trial ID: 13S-THP-CTS-51 Protocol ID: 13S-THP-CTS-51
 Location: Throckmorton Study Director:
 Project ID: DEM-AWC-SOY02-2013 Investigator: Dr. Bill Johnson
 Sponsor Contact: BASF- Gery Welker

General Trial Information

Investigator: Dr. Bill Johnson **Title:** Professor

Personnel

Investigator: Dr. Bill Johnson **Title:** Professor
Affiliation: Purdue University
Address: 915 W State Street
Location: West Lafayette, IN, USA
Postal Code: 47907 **E-mail:** wgj@purdue.edu
Phone No.: 765-494-4656 **Mobile No.:** 765-404-9801

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: ASGROW AG29-33 **Description:** RR
BBCH Scale: BSOY **Planting Date:** May-16-2013
Planting Method: DIRDRI direct drilled **Rate, Unit:** 130000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN **Soil Temperature, Unit:** 78 F
Soil Moisture: DRY dry

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:** ABUTH Abutilon theophrasti
Common Name: velvetleaf
Pest 4 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT **Experimental Unit:** 1 PLOT plot
Plot Area, Unit: 300 FT2 **Tillage Type:** CONTIL conventional-till
Replications: 4 **Study Design:** RACOB� Randomized Complete Block (RCB)
Untreated Arrangement: INCLUDED single control randomized in each block

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Application Description

	A	B
Application Date:	May-16-2013	Jun-24-2013
Time of Day:	1:15 PM	8:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	MIPOWE
Application Placement:	SOIL	FOLIAR
Applied By:	MW	MW
Air Temperature, Unit:	80 F	73 F
% Relative Humidity:	43	79
Wind Velocity, Unit:	1.9 MPH	2.8 MPH
Wind Direction:	N	SW
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	78 F	69 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	40	95

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		V5

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
	IN	
Height Minimum, Maximum:		1 18
Density, Unit:		15 FT2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
	IN	
Height Minimum, Maximum:		2 24
Density, Unit:		6 YD2
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W
Height, Unit:		2 IN
Density, Unit:		3 YD2
Pest 4 Code, Type, Scale:	CHEAL W	CHEAL W
	IN	
Height Minimum, Maximum:		1 9
Density, Unit:		5 YD2

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Application Equipment

	A	B
Appl. Equipment:	CO2 FORD	CO2 FORD
Equipment Type:	SPTRMO	SPTRMO
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	XR 100 02	XR 100 02
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	6	6
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	20 IN	20 IN
Ground Speed, Unit:	2.1 MPH	2.1 MPH
Carrier:	MEIGS	MEIGS
Spray Volume, Unit:	20 gal/ac	20 gal/ac
Mix Size, Unit:	2.5 liters	2.5 liters
Propellant:	CO2	CO2

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Reps: 4 Plots: 10 by 30 feet
 Spray vol: 20 gal/ac Mix size: 2.5 liters (min 2.0856)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check													101	405	703	907
2	Zidua (85 WG)	85 %		WG	2.13 oz ai/a		2.5 oz wt/a		ATPLAN	A		2.346 g/mx		103	307	603	905
	Sharpen 2.85 SC	2.85 LBAE/GAL		SC	0.356 oz ai/a		1 fl oz/a		ATPLAN	A		0.9758 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
3	Zidua (85 WG)	85 %		WG	2.13 oz ai/a		2.5 oz wt/a		ATPLAN	A		2.346 g/mx		105	501	701	1007
	Sharpen 2.85 SC	2.85 LBAE/GAL		SC	0.356 oz ai/a		1 fl oz/a		ATPLAN	A		0.9758 ml/mx					
	Sencor 75DF	75 %AW/W		DF	7.5 oz ai/a		10 oz wt/a		ATPLAN	A		9.361 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
4	Zidua (85 WG)	85 %		WG	2.13 oz ai/a		2.5 oz wt/a		ATPLAN	A		2.346 g/mx		107	403	605	1001
	Verdict (5.57 SC)	5.57 LBAE/GAL		SC	3.48 oz ai/a		5 fl oz/a		ATPLAN	A		4.881 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
5	Zidua (85 WG)	85 %		WG	2.13 oz ai/a		2.5 oz wt/a		ATPLAN	A		2.346 g/mx		201	507	803	1003
	Verdict (5.57 SC)	5.57 LBAE/GAL		SC	3.48 oz ai/a		5 fl oz/a		ATPLAN	A		4.881 ml/mx					
	Sencor 75DF	75 %AW/W		DF	7.5 oz ai/a		10 oz wt/a		ATPLAN	A		9.361 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
6	Optil (68 WG)	68 %		WG	1.36 oz ai/a		2 oz wt/a		ATPLAN	A		1.872 g/mx		203	407	601	903
	Outlook (6.0 EC)	6 LBAE/GAL		EC	7.5 oz ai/a		10 fl oz/a		ATPLAN	A		9.765 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
7	Verdict (5.57 SC)	5.57 LBAE/GAL		SC	3.48 oz ai/a		5 fl oz/a		ATPLAN	A		4.881 ml/mx		205	305	707	805
	Outlook (6.0 EC)	6 LBAE/GAL		EC	9 oz ai/a		12 fl oz/a		ATPLAN	A		11.72 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
8	Valor SX (51 WG)	51 %		WG	0.9 oz ai/a		1.76 oz wt/a		ATPLAN	A		1.652 g/mx		207	505	607	901
	Classic	25 %AW/W		DF	0.31 oz ai/a		1.24 oz wt/a		ATPLAN	A		1.161 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
9	Fierce (76 WG)	76 %		WG	3.42 oz ai/a		4.5 oz wt/a		ATPLAN	A		4.213 g/mx		301	401	705	807
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
10	Anthem (2.2 SC)	2.2 LB/GAL		SC	2.48 oz ai/a		9 fl oz/a		ATPLAN	A		8.806 ml/mx		303	503	801	1005
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
11	Prefix (5.29 EC)	5.29 LBAE/GAL		EC	21.2 oz ai/a		2 pt/a		ATPLAN	A		31.31 ml/mx		102	304	606	1002
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
12	Authority MTZ (45 WG)	45 %		WG	7.2 oz ai/a		16 oz wt/a		ATPLAN	A		14.98 g/mx		104	502	702	904
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx					
13	Sonic (70 WG)	70 %		WG	2.1 oz ai/a		6 oz wt/a		ATPLAN	A		2.808 g/mx		106	406	602	902
	Durango DMA (4 SL)	4 LBAE/GAL		SL	0.75 lb ae/a		24 fl oz/a		MIPOWE	B	4-6" Weeds	23.43 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	4-6" Weeds	62.49 ml/mx					
14	Sonic (70 WG)	70 %		WG	3.15 oz ai/a		4.5 oz wt/a		ATPLAN	A		4.213 g/mx		202	306	604	906
	Durango DMA (4 SL)	4 LBAE/GAL		SL	0.75 lb ae/a		24 fl oz/a		MIPOWE	B	4-6" Weeds	23.43 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	4-6" Weeds	62.49 ml/mx					

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Reps: 4

Plots: 10 by 30 feet

Spray vol: 20 gal/ac

Mix size: 2.5 liters (min 2.0856)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
15	Sonic (70 WG)	70 %		WG	4.2 oz ai/a		6 oz wt/a		ATPLAN	A		5.617 g/mx	204	506	706	1006
	Durango DMA (4 SL)	4 LBAE/GAL		SL	0.75 lb ae/a		24 fl oz/a		MIPOWE	B	4-6" Weeds	23.43 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	4-6" Weeds	62.49 ml/mx				
16	Sonic (70 WG)	70 %		WG	2.1 oz ai/a		3 oz wt/a		ATPLAN	A		2.808 g/mx	206	404	704	806
	Durango DMA (4 SL)	4 LBAE/GAL		SL	0.75 lb ae/a		24 fl oz/a		MIPOWE	B	4-6" Weeds	23.43 ml/mx				
	FirstRate (84 WG)	84 %		WG	0.252 oz ai/a		0.3 oz wt/a		MIPOWE	B	4-6" Weeds	0.2808 g/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	4-6" Weeds	62.49 ml/mx				
17	Zidua (85 WG)	85 %		WG	2.55 oz ai/a		3 oz wt/a		ATPLAN	A		2.808 g/mx	302	402	802	804
	Sharpen 2.85 SC	2.85 LBA/GAL		SC	0.356 oz ai/a		1 fl oz/a		ATPLAN	A		0.9758 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOWE	B	6-8 WAT	21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOWE	B	6-8 WAT	62.49 ml/mx				

Sort Order: Treatment

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Trial ID: 13S-THP-CTS-51 Protocol ID: 13S-THP-CTS-51
 Location: Throckmorton Study Director:
 Project ID: DEM-AWC-SOY02-2013 Investigator: Dr. Bill Johnson
 Sponsor Contact: BASF- Gery Welker

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	GLXMA					
BBCH Scale	BSOY	BSOY	BSOY					
Crop Scientific Name	Glycine max	Glycine max	Glycine max					
Crop Name	Soybean	Soybean	Soybean					
Rating Date	May-29-2013	May-29-2013	May-29-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013		
Rating Type	PHYCHL	PHYNEC	PHYLMA	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	V1	V1	V1	V2	V2	V2		
Pest Stage Majority								
Pest Density, Unit								
Assessed By	MW	MW	MW	DOUG	DOUG	DOUG		
Days After First/Last Applic.	13 13	13 13	13 13	27 27	27 27	27 27		
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	27 DP-1	27 DP-1	27 DP-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
1 Untreated Check		101	0.0	0.0	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0	0.0	0.0
		703	0.0	0.0	0.0	0.0	0.0	0.0
		907	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 Zidua (85 WG)	2.13 oz ai/a	A 103	0.0	0.0	0.0	95.0	35.0	95.0
Sharpen 2.85 SC	0.356 oz ai/a	A 307	0.0	10.0	0.0	95.0	20.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 603	0.0	5.0	0.0	86.0	80.0	85.0
AMS - Liquid	8.5 lb ai/100 gal	B 905	0.0	0.0	0.0	95.0	80.0	86.0
		Mean =	0.0	3.8	0.0	92.8	53.8	90.3
3 Zidua (85 WG)	2.13 oz ai/a	A 105	3.0	15.0	0.0	90.0	85.0	95.0
Sharpen 2.85 SC	0.356 oz ai/a	A 501	3.0	0.0	0.0	60.0	40.0	95.0
Sencor 75DF	7.5 oz ai/a	A 701	0.0	0.0	0.0	94.0	60.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 1007	0.0	0.0	0.0	95.0	60.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B						
		Mean =	1.5	3.8	0.0	84.8	61.3	95.0
4 Zidua (85 WG)	2.13 oz ai/a	A 107	0.0	15.0	0.0	95.0	10.0	95.0
Verdict (5.57 SC)	3.48 oz ai/a	A 403	0.0	10.0	0.0	95.0	30.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 605	3.0	0.0	0.0	90.0	30.0	92.0
AMS - Liquid	8.5 lb ai/100 gal	B 1001	0.0	0.0	0.0	87.0	50.0	90.0
		Mean =	0.8	6.3	0.0	91.8	30.0	93.0
5 Zidua (85 WG)	2.13 oz ai/a	A 201	0.0	0.0	0.0	50.0	10.0	90.0
Verdict (5.57 SC)	3.48 oz ai/a	A 507	0.0	15.0	0.0	90.0	20.0	95.0
Sencor 75DF	7.5 oz ai/a	A 803	0.0	5.0	3.0	88.0	85.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 1003	0.0	5.0	0.0	95.0	68.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B						
		Mean =	0.0	6.3	0.8	80.8	45.8	93.8

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				W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed CHEAL Chenopodium al> Common lambsqu>			
Pest Type									
Pest Code									
Pest Scientific Name									
Pest Name									
Crop Code	GLXMA	GLXMA	GLXMA						
BBCH Scale	BSOY	BSOY	BSOY						
Crop Scientific Name	Glycine max	Glycine max	Glycine max						
Crop Name	Soybean	Soybean	Soybean						
Rating Date	May-29-2013	May-29-2013	May-29-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013			
Rating Type	PHYCHL	PHYNEC	PHYLMA	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V1	V1	V1	V2	V2	V2			
Pest Stage Majority									
Pest Density, Unit									
Assessed By	MW	MW	MW	DOUG	DOUG	DOUG			
Days After First/Last Applic.	13 13	13 13	13 13	27 27	27 27	27 27			
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	27 DP-1	27 DP-1	27 DP-1			
Trt Treatment	Rate	Appl	Plot	1	2	3	4	5	6
6 Optil (68 WG)	1.36 oz ai/a	A	203	3.0	0.0	0.0	95.0	85.0	95.0
Outlook (6.0 EC)	7.5 oz ai/a	A	407	0.0	15.0	0.0	95.0	20.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	601	0.0	0.0	3.0	85.0	30.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	903	0.0	0.0	0.0	95.0	94.0	95.0
Mean =				0.8	3.8	0.8	92.5	57.3	95.0
7 Verdict (5.57 SC)	3.48 oz ai/a	A	205	0.0	5.0	5.0	90.0	80.0	95.0
Outlook (6.0 EC)	9 oz ai/a	A	305	3.0	0.0	0.0	95.0	85.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	707	0.0	5.0	0.0	95.0	55.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	805	0.0	5.0	0.0	90.0	77.0	93.0
Mean =				0.8	3.8	1.3	92.5	74.3	94.5
8 Valor SX (51 WG)	0.9 oz ai/a	A	207	0.0	10.0	5.0	87.0	10.0	95.0
Classic	0.31 oz ai/a	A	505	0.0	5.0	5.0	75.0	75.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	607	0.0	0.0	5.0	90.0	20.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	901	0.0	0.0	3.0	90.0	30.0	95.0
Mean =				0.0	3.8	4.5	85.5	33.8	95.0
9 Fierce (76 WG)	3.42 oz ai/a	A	301	0.0	0.0	5.0	90.0	10.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	401	0.0	5.0	10.0	90.0	70.0	98.0
AMS - Liquid	8.5 lb ai/100 gal	B	705	0.0	5.0	7.0	95.0	35.0	95.0
			807	3.0	5.0	10.0	95.0	20.0	95.0
Mean =				0.8	3.8	8.0	92.5	33.8	95.8
10 Anthem (2.2 SC)	2.48 oz ai/a	A	303	0.0	0.0	0.0	95.0	50.0	70.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	503	0.0	0.0	0.0	95.0	30.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	801	0.0	15.0	0.0	85.0	50.0	95.0
			1005	0.0	0.0	0.0	95.0	70.0	92.0
Mean =				0.0	3.8	0.0	92.5	50.0	88.0
11 Prefix (5.29 EC)	21.2 oz ai/a	A	102	0.0	0.0	0.0	80.0	80.0	88.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	304	0.0	0.0	0.0	90.0	50.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	606	0.0	0.0	0.0	95.0	20.0	95.0
			1002	0.0	0.0	0.0	93.0	30.0	85.0
Mean =				0.0	0.0	0.0	89.5	45.0	90.8
12 Authority MTZ (45 WG)	7.2 oz ai/a	A	104	0.0	0.0	0.0	60.0	10.0	90.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	502	0.0	0.0	0.0	95.0	15.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	702	0.0	15.0	0.0	50.0	38.0	90.0
			904	3.0	0.0	0.0	70.0	85.0	95.0
Mean =				0.8	3.8	0.0	68.8	37.0	92.5

Purdue University

				W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed CHEAL Chenopodium al> Common lambsqu>			
Pest Type	Pest Code	Pest Scientific Name	Pest Name						
Crop Code	GLXMA	GLXMA	GLXMA						
BBCH Scale	BSOY	BSOY	BSOY						
Crop Scientific Name	Glycine max Soybean	Glycine max Soybean	Glycine max Soybean						
Crop Name									
Rating Date	May-29-2013	May-29-2013	May-29-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013			
Rating Type	PHYCHL	PHYNEC	PHYLMA	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V1	V1	V1	V2	V2	V2			
Pest Stage Majority									
Pest Density, Unit									
Assessed By	MW	MW	MW	DOUG	DOUG	DOUG			
Days After First/Last Applic.	13 13	13 13	13 13	27 27	27 27	27 27			
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	27 DP-1	27 DP-1	27 DP-1			
Trt Treatment	Rate	Appl	Plot	1	2	3	4	5	6
No. Name	Rate Unit	Code	Plot						
13 Sonic (70 WG)	2.1 oz ai/a	A	106	0.0	0.0	0.0	80.0	30.0	95.0
Durango DMA (4 SL)	0.75 lb ae/a	B	406	0.0	0.0	0.0	85.0	0.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	602	0.0	0.0	0.0	90.0	20.0	95.0
			902	0.0	0.0	0.0	60.0	50.0	90.0
			Mean =	0.0	0.0	0.0	78.8	25.0	93.8
14 Sonic (70 WG)	3.15 oz ai/a	A	202	0.0	0.0	0.0	50.0	20.0	90.0
Durango DMA (4 SL)	0.75 lb ae/a	B	306	0.0	0.0	0.0	85.0	0.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	604	0.0	0.0	0.0	15.0	20.0	95.0
			906	0.0	0.0	0.0	86.0	30.0	95.0
			Mean =	0.0	0.0	0.0	59.0	17.5	93.8
15 Sonic (70 WG)	4.2 oz ai/a	A	204	0.0	0.0	0.0	85.0	70.0	95.0
Durango DMA (4 SL)	0.75 lb ae/a	B	506	0.0	0.0	0.0	90.0	40.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	706	0.0	0.0	0.0	93.0	20.0	94.0
			1006	3.0	0.0	3.0	60.0	30.0	95.0
			Mean =	0.8	0.0	0.8	82.0	40.0	94.8
16 Sonic (70 WG)	2.1 oz ai/a	A	206	0.0	0.0	0.0	90.0	10.0	90.0
Durango DMA (4 SL)	0.75 lb ae/a	B	404	0.0	0.0	0.0	70.0	10.0	90.0
FirstRate (84 WG)	0.252 oz ai/a	B	704	0.0	20.0	0.0	95.0	20.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	806	0.0	0.0	0.0	95.0	0.0	94.0
			Mean =	0.0	5.0	0.0	87.5	10.0	92.3
17 Zidua (85 WG)	2.55 oz ai/a	A	302	0.0	0.0	0.0	90.0	40.0	80.0
Sharpen 2.85 SC	0.356 oz ai/a	A	402	0.0	0.0	0.0	95.0	10.0	90.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	802	0.0	15.0	0.0	70.0	50.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B	804	0.0	10.0	0.0	86.0	83.0	94.0
			Mean =	0.0	6.3	0.0	85.3	45.8	89.8

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Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	SETFA	AMBTR		
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>		
Pest Name	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed		
Crop Code						
BBCB Scale						
Crop Scientific Name						
Crop Name						
Rating Date	Jun-24-2013	Jun-24-2013	Jul-15-2013	Jul-15-2013		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%		
Number of Subsamples	1	1	1	1		
Crop Stage Majority	V5	V5	R2	R2		
Pest Stage Majority	8 IN	15 IN	42 IN	53 IN		
Pest Density, Unit	15 FT2	6 YD2	22 FT2	5 YD2		
Assessed By	MW	MW	MW	MW		
Days After First/Last Applic.	39 39	39 39	60 21	60 21		
Plant-Eval Interval	39 DP-1	39 DP-1	60 DP-1	60 DP-1		
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
1 Untreated Check		101	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0
		703	0.0	0.0	0.0	0.0
		907	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0
2 Zidua (85 WG)	2.13 oz ai/a	A 103	95.0	40.0	97.0	90.0
Sharpen 2.85 SC	0.356 oz ai/a	A 307	95.0	10.0	99.0	80.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 603	75.0	60.0	99.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B 905	93.0	65.0	99.0	85.0
		Mean =	89.5	43.8	98.5	87.5
3 Zidua (85 WG)	2.13 oz ai/a	A 105	97.0	87.0	99.0	95.0
Sharpen 2.85 SC	0.356 oz ai/a	A 501	80.0	20.0	99.0	85.0
Sencor 75DF	7.5 oz ai/a	A 701	97.0	40.0	99.0	93.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 1007	95.0	50.0	99.0	87.0
AMS - Liquid	8.5 lb ai/100 gal	B				
		Mean =	92.3	49.3	99.0	90.0
4 Zidua (85 WG)	2.13 oz ai/a	A 107	95.0	20.0	99.0	77.0
Verdict (5.57 SC)	3.48 oz ai/a	A 403	90.0	50.0	99.0	80.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 605	97.0	70.0	99.0	85.0
AMS - Liquid	8.5 lb ai/100 gal	B 1001	70.0	35.0	99.0	83.0
		Mean =	88.0	43.8	99.0	81.3
5 Zidua (85 WG)	2.13 oz ai/a	A 201	60.0	40.0	99.0	87.0
Verdict (5.57 SC)	3.48 oz ai/a	A 507	97.0	65.0	99.0	83.0
Sencor 75DF	7.5 oz ai/a	A 803	95.0	80.0	99.0	90.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 1003	93.0	55.0	99.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B				
		Mean =	86.3	60.0	99.0	88.8

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	SETFA	AMBTR
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>
Pest Name	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	Jun-24-2013	Jun-24-2013	Jul-15-2013	Jul-15-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Crop Stage Majority	V5	V5	R2	R2
Pest Stage Majority	8 IN	15 IN	42 IN	53 IN
Pest Density, Unit	15 FT2	6 YD2	22 FT2	5 YD2
Assessed By	MW	MW	MW	MW
Days After First/Last Applic.	39 39	39 39	60 21	60 21
Plant-Eval Interval	39 DP-1	39 DP-1	60 DP-1	60 DP-1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	7	8
6 Optil (68 WG)	1.36 oz ai/a	A 203	97.0	75.0
Outlook (6.0 EC)	7.5 oz ai/a	A 407	95.0	40.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 601	90.0	15.0
AMS - Liquid	8.5 lb ai/100 gal	B 903	90.0	85.0
		Mean =	93.0	53.8
7 Verdict (5.57 SC)	3.48 oz ai/a	A 205	87.0	80.0
Outlook (6.0 EC)	9 oz ai/a	A 305	90.0	80.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 707	95.0	40.0
AMS - Liquid	8.5 lb ai/100 gal	B 805	85.0	70.0
		Mean =	89.3	67.5
8 Valor SX (51 WG)	0.9 oz ai/a	A 207	90.0	10.0
Classic	0.31 oz ai/a	A 505	75.0	70.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 607	95.0	60.0
AMS - Liquid	8.5 lb ai/100 gal	B 901	95.0	10.0
		Mean =	88.8	37.5
9 Fierce (76 WG)	3.42 oz ai/a	A 301	90.0	10.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 401	93.0	65.0
AMS - Liquid	8.5 lb ai/100 gal	B 705	97.0	65.0
		807	90.0	15.0
		Mean =	92.5	38.8
10 Anthem (2.2 SC)	2.48 oz ai/a	A 303	97.0	50.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 503	95.0	30.0
AMS - Liquid	8.5 lb ai/100 gal	B 801	65.0	45.0
		1005	90.0	65.0
		Mean =	86.8	47.5
11 Prefix (5.29 EC)	21.2 oz ai/a	A 102	80.0	70.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 304	85.0	80.0
AMS - Liquid	8.5 lb ai/100 gal	B 606	97.0	50.0
		1002	90.0	40.0
		Mean =	88.0	60.0
12 Authority MTZ (45 WG)	7.2 oz ai/a	A 104	50.0	20.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 502	90.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 702	80.0	0.0
		904	70.0	75.0
		Mean =	72.5	23.8

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	W Weed SETFA	W Weed AMBTR	W Weed SETFA	W Weed AMBTR		
Pest Type	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>		
Pest Code	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed		
Pest Scientific Name						
Pest Name						
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date	Jun-24-2013	Jun-24-2013	Jul-15-2013	Jul-15-2013		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%		
Number of Subsamples	1	1	1	1		
Crop Stage Majority	V5	V5	R2	R2		
Pest Stage Majority	8 IN	15 IN	42 IN	53 IN		
Pest Density, Unit	15 FT2	6 YD2	22 FT2	5 YD2		
Assessed By	MW	MW	MW	MW		
Days After First/Last Applic.	39 39	39 39	60 21	60 21		
Plant-Eval Interval	39 DP-1	39 DP-1	60 DP-1	60 DP-1		
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
13 Sonic (70 WG)	2.1 oz ai/a	A 106	90.0	40.0	99.0	83.0
Durango DMA (4 SL)	0.75 lb ae/a	B 406	90.0	10.0	99.0	80.0
AMS - Liquid	8.5 lb ai/100 gal	B 602	95.0	30.0	99.0	87.0
		902	70.0	20.0	99.0	85.0
		Mean =	86.3	25.0	99.0	83.8
14 Sonic (70 WG)	3.15 oz ai/a	A 202	95.0	20.0	99.0	93.0
Durango DMA (4 SL)	0.75 lb ae/a	B 306	87.0	20.0	99.0	83.0
AMS - Liquid	8.5 lb ai/100 gal	B 604	60.0	30.0	99.0	87.0
		906	90.0	30.0	99.0	77.0
		Mean =	83.0	25.0	99.0	85.0
15 Sonic (70 WG)	4.2 oz ai/a	A 204	90.0	80.0	99.0	93.0
Durango DMA (4 SL)	0.75 lb ae/a	B 506	90.0	60.0	99.0	93.0
AMS - Liquid	8.5 lb ai/100 gal	B 706	95.0	20.0	99.0	83.0
		1006	80.0	35.0	99.0	80.0
		Mean =	88.8	48.8	99.0	87.3
16 Sonic (70 WG)	2.1 oz ai/a	A 206	90.0	10.0	99.0	80.0
Durango DMA (4 SL)	0.75 lb ae/a	B 404	40.0	40.0	99.0	85.0
FirstRate (84 WG)	0.252 oz ai/a	B 704	90.0	0.0	99.0	70.0
AMS - Liquid	8.5 lb ai/100 gal	B 806	60.0	0.0	99.0	73.0
		Mean =	70.0	12.5	99.0	77.0
17 Zidua (85 WG)	2.55 oz ai/a	A 302	95.0	30.0	99.0	77.0
Sharpen 2.85 SC	0.356 oz ai/a	A 402	95.0	30.0	99.0	95.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 802	90.0	50.0	99.0	87.0
AMS - Liquid	8.5 lb ai/100 gal	B 804	87.0	65.0	99.0	90.0
		Mean =	91.8	43.8	99.0	87.3

Purdue University

Soybean weed control in conventional till

Trial ID: 13S-THP-CTS-51 Protocol ID: 13S-THP-CTS-51
Location: Throckmorton Study Director:
Project ID: DEM-AWC-SOY02-2013 Investigator: Dr. Bill Johnson
Sponsor Contact: BASF- Gery Welker

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

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

PHYCHL = phytotoxicity - chlorosis
PHYNEC = phytotoxicity - necrosis /burn
PHYLMA = phytotoxicity - leaf malformation
CONTRO = control / burndown or knockdown

Rating Unit

% = percent

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

13 DP-1 = 1 GLXMA May-16-2013
27 DP-1 = 1 GLXMA May-16-2013
39 DP-1 = 1 GLXMA May-16-2013
60 DP-1 = 1 GLXMA May-16-2013

Purdue University

Soybean weed control in conventional till

Trial ID: 13S-THP-CTS-51 Protocol ID: 13S-THP-CTS-51
 Location: Throckmorton Study Director:
 Project ID: DEM-AWC-SOY02-2013 Investigator: Dr. Bill Johnson
 Sponsor Contact: BASF- Gery Welker

Pest Type				W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifida Giant ragweed	W Weed CHEAL Chenopodium album Common lambsquarters	W Weed SETFA Setaria faberi Giant foxtail				
Pest Code											
Pest Scientific Name											
Pest Name											
Crop Code	GLXMA	GLXMA	GLXMA								
BBCH Scale	BSOY	BSOY	BSOY								
Crop Scientific Name	Glycine max	Glycine max	Glycine max								
Crop Name	Soybean	Soybean	Soybean								
Rating Date	May-29-2013	May-29-2013	May-29-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-24-2013				
Rating Type	PHYCHL	PHYNEC	PHYLMA	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1				
Crop Stage Majority	V1	V1	V1	V2	V2	V2	V5				
Pest Stage Majority							8 IN				
Pest Density, Unit							15 FT2				
Assessed By	MW	MW	MW	DOUG	DOUG	DOUG	MW				
Days After First/Last Applic.	13 13	13 13	13 13	27 27	27 27	27 27	39 39				
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	27 DP-1	27 DP-1	27 DP-1	39 DP-1				
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6	7
1	Untreated Check				0.0 a	0.0 a	0.0 c	0.0 b	0.0 c	0.0 b	0.0 b
2	Zidua (85 WG)	2.13 oz ai/a		A	0.0 a	3.8 a	0.0 c	92.8 a	53.8 abc	90.3 a	89.5 a
	Sharpen 2.85 SC	0.356 oz ai/a		A							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
	AMS - Liquid	8.5 lb ai/100 gal		B							
3	Zidua (85 WG)	2.13 oz ai/a		A	1.5 a	3.8 a	0.0 c	84.8 a	61.3 ab	95.0 a	92.3 a
	Sharpen 2.85 SC	0.356 oz ai/a		A							
	Sencor 75DF	7.5 oz ai/a		A							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
	AMS - Liquid	8.5 lb ai/100 gal		B							
4	Zidua (85 WG)	2.13 oz ai/a		A	0.8 a	6.3 a	0.0 c	91.8 a	30.0 abc	93.0 a	88.0 a
	Verdict (5.57 SC)	3.48 oz ai/a		A							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
	AMS - Liquid	8.5 lb ai/100 gal		B							
5	Zidua (85 WG)	2.13 oz ai/a		A	0.0 a	6.3 a	0.8 c	80.8 a	45.8 abc	93.8 a	86.3 a
	Verdict (5.57 SC)	3.48 oz ai/a		A							
	Sencor 75DF	7.5 oz ai/a		A							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
	AMS - Liquid	8.5 lb ai/100 gal		B							
6	Optil (68 WG)	1.36 oz ai/a		A	0.8 a	3.8 a	0.8 c	92.5 a	57.3 abc	95.0 a	93.0 a
	Outlook (6.0 EC)	7.5 oz ai/a		A							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
	AMS - Liquid	8.5 lb ai/100 gal		B							
7	Verdict (5.57 SC)	3.48 oz ai/a		A	0.8 a	3.8 a	1.3 c	92.5 a	74.3 a	94.5 a	89.3 a
	Outlook (6.0 EC)	9 oz ai/a		A							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
	AMS - Liquid	8.5 lb ai/100 gal		B							
8	Valor SX (51 WG)	0.9 oz ai/a		A	0.0 a	3.8 a	4.5 b	85.5 a	33.8 abc	95.0 a	88.8 a
	Classic	0.31 oz ai/a		A							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
	AMS - Liquid	8.5 lb ai/100 gal		B							

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

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Pest Type				W Weed SETFA	W Weed AMBTR	W Weed CHEAL	W Weed SETFA			
Pest Code				Setaria faberi	Ambrosia trifida	Chenopodium album	Setaria faberi			
Pest Scientific Name				Giant foxtail	Giant ragweed	Common lambsquarters	Giant foxtail			
Pest Name										
Crop Code	GLXMA	GLXMA	GLXMA							
BBCH Scale	BSOY	BSOY	BSOY							
Crop Scientific Name	Glycine max	Glycine max	Glycine max							
Crop Name	Soybean	Soybean	Soybean							
Rating Date	May-29-2013	May-29-2013	May-29-2013	Jun-12-2013	Jun-12-2013	Jun-12-2013	Jun-24-2013			
Rating Type	PHYCHL	PHYNEC	PHYLMA	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority	V1	V1	V1	V2	V2	V2	V5			
Pest Stage Majority							8 IN			
Pest Density, Unit							15 FT2			
Assessed By	MW	MW	MW	DOUG	DOUG	DOUG	MW			
Days After First/Last Applic.	13 13	13 13	13 13	27 27	27 27	27 27	39 39			
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	27 DP-1	27 DP-1	27 DP-1	39 DP-1			
Trt Treatment	Rate	Unit	Appl Code	1	2	3	4	5	6	7
9 Fierce (76 WG)	3.42 oz ai/a		A	0.8 a	3.8 a	8.0 a	92.5 a	33.8 abc	95.8 a	92.5 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
10 Anthem (2.2 SC)	2.48 oz ai/a		A	0.0 a	3.8 a	0.0 c	92.5 a	50.0 abc	88.0 a	86.8 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
11 Prefix (5.29 EC)	21.2 oz ai/a		A	0.0 a	0.0 a	0.0 c	89.5 a	45.0 abc	90.8 a	88.0 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
12 Authority MTZ (45 WG)	7.2 oz ai/a		A	0.8 a	3.8 a	0.0 c	68.8 a	37.0 abc	92.5 a	72.5 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
13 Sonic (70 WG)	2.1 oz ai/a		A	0.0 a	0.0 a	0.0 c	78.8 a	25.0 abc	93.8 a	86.3 a
Durango DMA (4 SL)	0.75 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
14 Sonic (70 WG)	3.15 oz ai/a		A	0.0 a	0.0 a	0.0 c	59.0 a	17.5 abc	93.8 a	83.0 a
Durango DMA (4 SL)	0.75 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
15 Sonic (70 WG)	4.2 oz ai/a		A	0.8 a	0.0 a	0.8 c	82.0 a	40.0 abc	94.8 a	88.8 a
Durango DMA (4 SL)	0.75 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
16 Sonic (70 WG)	2.1 oz ai/a		A	0.0 a	5.0 a	0.0 c	87.5 a	10.0 bc	92.3 a	70.0 a
Durango DMA (4 SL)	0.75 lb ae/a		B							
FirstRate (84 WG)	0.252 oz ai/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
17 Zidua (85 WG)	2.55 oz ai/a		A	0.0 a	6.3 a	0.0 c	85.3 a	45.8 abc	89.8 a	91.8 a
Sharpen 2.85 SC	0.356 oz ai/a		A							
Roundup PowerMax 4.5 SL	0.77 lb ae/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
LSD (P=.05)				1.44	7.97	1.59	19.45	33.82	5.68	17.12
Standard Deviation				1.00	5.58	1.11	13.61	23.67	3.97	11.98
CV				284.63	176.41	118.44	17.06	60.96	4.54	14.69
Bartlett's X2				0.109	8.868	3.372	40.874	12.577	39.318	26.423
P(Bartlett's X2)				1.00	0.634	0.643	0.001*	0.635	0.001*	0.034*
Replicate F				0.350	1.209	0.095	0.598	2.142	2.530	0.316
Replicate Prob(F)				0.7895	0.3165	0.9626	0.6192	0.1072	0.0683	0.8135
Treatment F				0.869	0.681	14.574	10.966	2.542	130.184	13.437
Treatment Prob(F)				0.6060	0.7978	0.0001	0.0001	0.0065	0.0001	0.0001

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Pest Type			W Weed	W Weed	W Weed	
Pest Code			AMBTR	SETFA	AMBTR	
Pest Scientific Name			Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	
Pest Name			Giant ragweed	Giant foxtail	Giant ragweed	
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Rating Date			Jun-24-2013	Jul-15-2013	Jul-15-2013	
Rating Type			CONTRO	CONTRO	CONTRO	
Rating Unit			%	%	%	
Number of Subsamples			1	1	1	
Crop Stage Majority			V5	R2	R2	
Pest Stage Majority			15 IN	42 IN	53 IN	
Pest Density, Unit			6 YD2	22 FT2	5 YD2	
Assessed By			MW	MW	MW	
Days After First/Last Applic.			39 39	60 21	60 21	
Plant-Eval Interval			39 DP-1	60 DP-1	60 DP-1	
Trt No.	Treatment Name	Rate	Appl Code	8	9	10
		Rate Unit				
1	Untreated Check			0.0 b	0.0 b	0.0 b
2	Zidua (85 WG)	2.13 oz ai/a	A	43.8 ab	98.5 a	87.5 a
	Sharpen 2.85 SC	0.356 oz ai/a	A			
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
3	Zidua (85 WG)	2.13 oz ai/a	A	49.3 ab	99.0 a	90.0 a
	Sharpen 2.85 SC	0.356 oz ai/a	A			
	Sencor 75DF	7.5 oz ai/a	A			
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
4	Zidua (85 WG)	2.13 oz ai/a	A	43.8 ab	99.0 a	81.3 a
	Verdict (5.57 SC)	3.48 oz ai/a	A			
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
5	Zidua (85 WG)	2.13 oz ai/a	A	60.0 ab	99.0 a	88.8 a
	Verdict (5.57 SC)	3.48 oz ai/a	A			
	Sencor 75DF	7.5 oz ai/a	A			
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
6	Optii (68 WG)	1.36 oz ai/a	A	53.8 ab	99.0 a	87.5 a
	Outlook (6.0 EC)	7.5 oz ai/a	A			
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
7	Verdict (5.57 SC)	3.48 oz ai/a	A	67.5 a	99.0 a	86.8 a
	Outlook (6.0 EC)	9 oz ai/a	A			
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
8	Valor SX (51 WG)	0.9 oz ai/a	A	37.5 ab	99.0 a	82.5 a
	Classic	0.31 oz ai/a	A			
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			

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Pest Type	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	AMBTR
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Rating Date	Jun-24-2013	Jul-15-2013	Jul-15-2013
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1
Crop Stage Majority	V5	R2	R2
Pest Stage Majority	15 IN	42 IN	53 IN
Pest Density, Unit	6 YD2	22 FT2	5 YD2
Assessed By	MW	MW	MW
Days After First/Last Applic.	39 39	60 21	60 21
Plant-Eval Interval	39 DP-1	60 DP-1	60 DP-1
Trt Treatment	Rate	Rate	Rate
No. Name	Unit	Unit	Unit
9 Fierce (76 WG)	3.42 oz ai/a		
Roundup PowerMax 4.5 SL	0.77 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
10 Anthem (2.2 SC)	2.48 oz ai/a		
Roundup PowerMax 4.5 SL	0.77 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
11 Prefix (5.29 EC)	21.2 oz ai/a		
Roundup PowerMax 4.5 SL	0.77 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
12 Authority MTZ (45 WG)	7.2 oz ai/a		
Roundup PowerMax 4.5 SL	0.77 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
13 Sonic (70 WG)	2.1 oz ai/a		
Durango DMA (4 SL)	0.75 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
14 Sonic (70 WG)	3.15 oz ai/a		
Durango DMA (4 SL)	0.75 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
15 Sonic (70 WG)	4.2 oz ai/a		
Durango DMA (4 SL)	0.75 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
16 Sonic (70 WG)	2.1 oz ai/a		
Durango DMA (4 SL)	0.75 lb ae/a		
FirstRate (84 WG)	0.252 oz ai/a		
AMS - Liquid	8.5 lb ai/100 gal		
17 Zidua (85 WG)	2.55 oz ai/a		
Sharpen 2.85 SC	0.356 oz ai/a		
Roundup PowerMax 4.5 SL	0.77 lb ae/a		
AMS - Liquid	8.5 lb ai/100 gal		
LSD (P=.05)	33.54	1.58	11.02
Standard Deviation	23.47	1.10	7.71
CV	58.62	1.19	9.53
Bartlett's X2	12.413	5.105	15.437
P(Bartlett's X2)	0.648	0.024*	0.42
Replicate F	0.070	1.462	0.567
Replicate Prob(F)	0.9759	0.2366	0.6396
Treatment F	2.308	1889.477	30.006
Treatment Prob(F)	0.0131	0.0001	0.0001

Purdue University

Soybean weed control in conventional till

Trial ID: 13S-THP-CTS-51 Protocol ID: 13S-THP-CTS-51
Location: Throckmorton Study Director:
Project ID: DEM-AWC-SOY02-2013 Investigator: Dr. Bill Johnson
Sponsor Contact: BASF- Gery Welker

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

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

PHYCHL = phytotoxicity - chlorosis
PHYNEC = phytotoxicity - necrosis /burn
PHYLMA = phytotoxicity - leaf malformation
CONTRO = control / burndown or knockdown

Rating Unit

% = percent

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

13 DP-1 = 1 GLXMA May-16-2013
27 DP-1 = 1 GLXMA May-16-2013
39 DP-1 = 1 GLXMA May-16-2013
60 DP-1 = 1 GLXMA May-16-2013