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Pre treatments in Soybeans

Trial ID: 14S-THP-CTS-43 Protocol ID: 14S-THP-CTS-43
 Location: Throckmorton Study Director: Bill Johnson
 Project ID: Fierce MD 64.02 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

General Trial Information

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

Discipline: H herbicide
Trial Status: E established

Trial Location

City: Lafayette
State/Prov.: IN
Postal Code: 47909
Country: USA

Personnel

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

Cooperator/Landowner

Cooperator: Throckmorton Purdue Ag Center **Role:** Purdue Ag Center
Organization: Purdue University
Address 1: 8343 US 231 S

City: Lafayette **Phone No.:** 765-538-3422
State/Prov: IN **Fax No.:** 765-538-3423
Postal Code: 47909 **E-mail:** jayyoung@purdue.edu
Country: USA United States

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Asgrow 2933 **Description:** RR2
BBCH Scale: BSOY **Planting Date:** May-7-2014
Planting Method: SEEDED seeded **Rate, Unit:** 130000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Seed Bed: FINE fine
Soil Moisture: DRY dry **Emergence Date:** May-13-2014

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 2 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

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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Soil Description

Description Name: TPAC - Field 4B
% OM: 2.9 **Texture:** SIL silt loam
pH: 6.2 **Soil Name:** Toronto-Millbrook
CEC: 13.3

Application Description

	A	B
Application Date:	May-8-2014	Jul-2-2014
Time of Day:	AM	
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	MIPOCR
Application Placement:	SOIL	FOLIAR
Air Temperature, Unit:	74 F	77 F
% Relative Humidity:	62	66
Wind Velocity, Unit:	10 mph	3 MPH
Wind Direction:	SW	NW
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	64 F	72 F
Soil Moisture:	Dry	SLIWET
% Cloud Cover:	15	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	00	60

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:		24 IN
Density, Unit:		2 FT2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:		20 IN
Density, Unit:		3 FT2

Application Equipment

	A	B
Appl. Equipment:	CO2 FORD	CO2 FORD
Equipment Type:	SPTRMO	SPTRMO
Operation Pressure, Unit:	25 PSI	25 PSI
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
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

No. Date By
 1.May-27-2014

Deviations

Poor Stand - Replanted - 4 rows Population - 75,000 seeds/acre - Emergence date - 6/2

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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 Unit	Growth Stage	Appl Code	Appl Description	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check													101	405	702	805
2	Authority XL (70 WG)	70 %		WG	2.8 oz ai/a		4 oz wt/a		ATPLAN A			3.745 g/mx		102	404	602	804
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
3	Authority XL (70 WG)	70 %		WG	5.25 oz ai/a		7.5 oz wt/a		ATPLAN A			7.021 g/mx		104	502	704	901
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
4	Fierce XLT	62.41 %		WG	2.5 oz ai/a		4 oz wt/a		ATPLAN A			3.75 g/mx		105	402	605	904
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
5	Fierce XLT	62.41 %		WG	3.74 oz ai/a		6 oz wt/a		ATPLAN A			5.61 g/mx		201	505	705	905
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
6	Authority First (70 WG)	70 %		WG	2.24 oz ai/a		3.2 oz wt/a		ATPLAN A			2.996 g/mx		202	501	802	1005
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
7	Authority First (70 WG)	70 %		WG	4.5 oz ai/a		6.45 oz wt/a		ATPLAN A			6.018 g/mx		204	401	601	902
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
8	Fierce (76 WG)	76 %		WG	2.28 oz ai/a		3 oz wt/a		ATPLAN A			2.808 g/mx		205	305	604	1004
	FirstRate (84 WG)	84 %		WG	0.252 oz ai/a		0.3 oz wt/a		ATPLAN A			0.2808 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	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	304	701	1001
	FirstRate (84 WG)	84 %		WG	0.378 oz ai/a		0.45 oz wt/a		ATPLAN A			0.4213 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
10	Classic	25 %AW/W		DF	0.276 oz ai/a		1.1 oz wt/a		ATPLAN A		Envive	1.034 g/mx		302	504	801	1002
	Valor SX (51 WG)	51 %		WG	0.876 oz ai/a		1.72 oz wt/a		ATPLAN A		Envivie	1.608 g/mx					
	Harmony SG (50 SG)	50 %		SG	0.087 oz ai/a		0.174 oz wt/a		ATPLAN A		Envive	0.1629 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
11	Authority Maxx (66 SG)	66 %		WG	3.96 oz ai/a		6 oz wt/a		ATPLAN A			5.617 g/mx		103	303	603	803
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					
12	Fierce XLT	62.41 %		WG	2.5 oz ai/a		4 oz/a		ATPLAN A			3.75 g/mx		203	403	703	903
	Sencor 75DF	75 %AW/W		DF	3 oz ai/a		4 oz/a		ATPLAN A			3.745 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		12.4 oz ae/a		22 fl oz/a		MIPOCR B		56 DAP	21.53 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B		56 DAP	62.49 ml/mx					

Sort Order: Treatment

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Trial ID: 14S-THP-CTS-43 Protocol ID: 14S-THP-CTS-43
 Location: Throckmorton Study Director: Bill Johnson
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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	SETFA	AMBTR		
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium a >	Abutilon theop>	Setaria faberi	Ambrosia trifi>		
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	velvetleaf	Giant foxtail	Giant ragweed		
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-18-2014	Jun-18-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority	1	3	.5	1.5	16	36		
Pest Density, Unit	5 FT2	3 YD2	5 FT2	1 YD2	15 FT2	8 YD2		
Days After First/Last Applic.	26 26	26 26	26 26	26 26	41 41	41 41		
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	41 DA-A	41 DA-A		
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1	42 DP-1	42 DP-1		
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	36 DE-1	36 DE-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
		702	0.0	0.0	0.0	0.0	0.0	0.0
		805	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 Authority XL (70 WG)	2.8 oz ai/a	A 102	90.0	70.0	99.0	99.0	80.0	60.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 404	87.0	93.0	99.0	99.0	85.0	83.0
AMS - Liquid	8.5 lb ai/100 gal	B 602	95.0	99.0	99.0	99.0	96.0	99.0
		804	70.0	99.0	99.0	99.0	99.0	99.0
		Mean =	85.5	90.3	99.0	99.0	90.0	85.3
3 Authority XL (70 WG)	5.25 oz ai/a	A 104	90.0	99.0	99.0	95.0	85.0	85.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 502	93.0	99.0	99.0	99.0	93.0	84.0
AMS - Liquid	8.5 lb ai/100 gal	B 704	85.0	99.0	99.0	99.0	83.0	99.0
		901	97.0	87.0	99.0	99.0	95.0	90.0
		Mean =	91.3	96.0	99.0	98.0	89.0	89.5
4 Fierce XLT	2.5 oz ai/a	A 105	87.9*	84.1*	99.0	99.0	65.0	70.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 402	99.0	99.0	99.0	99.0	95.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 605	97.0	87.0	99.0	99.0	92.0	84.0
		904	90.0	99.0	99.0	99.0	87.0	99.0
		Mean =	93.5	92.3	99.0	99.0	84.8	88.0
5 Fierce XLT	3.74 oz ai/a	A 201	98.0	99.0	99.0	99.0	95.0	93.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 505	99.0	80.0	99.0	99.0	95.0	83.0
AMS - Liquid	8.5 lb ai/100 gal	B 705	90.0	99.0	99.0	99.0	95.0	89.0
		905	99.0	90.0	99.0	99.0	95.0	87.0
		Mean =	96.5	92.0	99.0	99.0	95.0	88.0
6 Authority First (70 WG)	2.24 oz ai/a	A 202	0.0	0.0	99.0	99.0	81.4*	67.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 501	95.0	90.0	99.0	99.0	90.0	86.0
AMS - Liquid	8.5 lb ai/100 gal	B 802	0.0	0.0	99.0	99.0	99.0	99.0
		1005	85.0	70.0	99.0	99.0	80.0	70.0
		Mean =	45.0	40.0	99.0	99.0	87.6	80.5

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	SETFA	AMBTR		
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>	Setaria faberi	Ambrosia trifi>		
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	velvetleaf	Giant foxtail	Giant ragweed		
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-18-2014	Jun-18-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority	1	3	.5	1.5	16	36		
Pest Density, Unit	5 FT2	3 YD2	5 FT2	1 YD2	15 FT2	8 YD2		
Days After First/Last Applic.	26 26	26 26	26 26	26 26	41 41	41 41		
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	41 DA-A	41 DA-A		
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1	42 DP-1	42 DP-1		
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	36 DE-1	36 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
7 Authority First (70 WG)	4.5 oz ai/a	A 204	70.0	99.0	99.0	99.0	84.4*	80.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 401	99.0	99.0	99.0	99.0	95.0	95.0
AMS - Liquid	8.5 lb ai/100 gal	B 601	97.0	99.0	99.0	99.0	93.0	94.0
		902	80.0	70.0	99.0	60.0	90.0	85.0
		Mean =	86.5	91.8	99.0	89.3	90.6	88.5
8 Fierce (76 WG)	2.28 oz ai/a	A 205	99.0	60.0	99.0	99.0	93.0	80.0
FirstRate (84 WG)	0.252 oz ai/a	A 305	99.0	85.0	99.0	99.0	90.0	83.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 604	93.0	90.0	99.0	99.0	85.0	84.0
AMS - Liquid	8.5 lb ai/100 gal	B 1004	60.0	99.0	99.0	99.0	75.0	84.0
		Mean =	87.8	83.5	99.0	99.0	85.8	82.8
9 Fierce (76 WG)	3.42 oz ai/a	A 301	98.0	99.0	99.0	99.0	95.0	99.0
FirstRate (84 WG)	0.378 oz ai/a	A 304	83.0	99.0	99.0	99.0	86.0	87.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 701	95.0	99.0	99.0	99.0	95.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 1001	95.0	95.0	99.0	99.0	95.0	99.0
		Mean =	92.8	98.0	99.0	99.0	92.8	96.0
10 Classic	0.276 oz ai/a	A 302	50.0	60.0	99.0	99.0	75.0	86.0
Valor SX (51 WG)	0.876 oz ai/a	A 504	20.0	50.0	99.0	99.0	60.0	80.0
Harmony SG (50 SG)	0.087 oz ai/a	A 801	80.0	90.0	99.0	99.0	87.0	90.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 1002	50.0	85.0	99.0	70.0	65.0	80.0
AMS - Liquid	8.5 lb ai/100 gal	B						
		Mean =	50.0	71.3	99.0	91.8	71.8	84.0
11 Authority Maxx (66 SG)	3.96 oz ai/a	A 103	85.0	85.0	99.0	99.0	60.0	70.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 303	85.0	87.0	99.0	99.0	88.0	84.0
AMS - Liquid	8.5 lb ai/100 gal	B 603	95.0	99.0	99.0	99.0	94.0	99.0
		803	90.0	50.0	99.0	99.0	92.0	99.0
		Mean =	88.8	80.3	99.0	99.0	83.5	88.0
12 Fierce XLT	2.5 oz ai/a	A 203	70.0	60.0	99.0	70.0	70.0	70.0
Sencor 75DF	3 oz ai/a	A 403	95.0	97.0	99.0	97.0	95.0	94.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 703	95.0	95.0	99.0	99.0	95.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 903	90.0	60.0	99.0	99.0	89.0	85.0
		Mean =	87.5	78.0	99.0	91.3	87.3	87.0

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	ABUTH		SETFA	AMBTR
Pest Scientific Name	Chenopodium a >	Abutilon theop>		Setaria faberi	Ambrosia trifi>
Pest Name	Common lambsqu>	velvetleaf		Giant foxtail	Giant ragweed
Crop Code			GLXMA		
BBCH Scale			BSOY		
Crop Scientific Name			Glycine max		
Crop Name			Soybean		
Rating Date	Jun-18-2014	Jun-18-2014	Jun-18-2014	Jul-1-2014	Jul-1-2014
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT		1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Pest Stage Majority	20	19			
Pest Density, Unit	3 FT2	1 YD2			
Days After First/Last Applic.	41 41	41 41	41 41	54 54	54 54
Trt-Eval Interval	41 DA-A	41 DA-A	41 DA-A	54 DA-A	54 DA-A
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	55 DP-1	55 DP-1
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	49 DE-1	49 DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	7	8	9
1 Untreated Check		101	0.0	0.0	0.0
		405	0.0	0.0	0.0
		702	0.0	0.0	0.0
		805	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0
2 Authority XL (70 WG)	2.8 oz ai/a	A 102	99.0	99.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 404	99.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 602	99.0	99.0	0.0
		804	99.0	99.0	0.0
		Mean =	99.0	99.0	0.0
3 Authority XL (70 WG)	5.25 oz ai/a	A 104	99.0	99.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 502	99.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 704	99.0	99.0	0.0
		901	99.0	99.0	0.0
		Mean =	99.0	99.0	0.0
4 Fierce XLT	2.5 oz ai/a	A 105	99.0	99.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 402	99.0	90.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 605	99.0	99.0	0.0
		904	99.0	99.0	0.0
		Mean =	99.0	96.8	0.0
5 Fierce XLT	3.74 oz ai/a	A 201	99.0	99.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 505	99.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 705	99.0	99.0	0.0
		905	99.0	99.0	0.0
		Mean =	99.0	99.0	0.0
6 Authority First (70 WG)	2.24 oz ai/a	A 202	99.0	99.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 501	99.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 802	99.0	99.0	0.0
		1005	99.0	99.0	0.0
		Mean =	99.0	99.0	0.0

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	CHEAL	ABUTH		SETFA	AMBTR			
Pest Scientific Name	Chenopodium al>	Abutilon theop>		Setaria faberi	Ambrosia trifi>			
Pest Name	Common lambsqu>	velvetleaf		Giant foxtail	Giant ragweed			
Crop Code			GLXMA			GLXMA		
BBCB Scale			BSOY			BSOY		
Crop Scientific Name			Glycine max			Glycine max		
Crop Name			Soybean			Soybean		
Rating Date	Jun-18-2014	Jun-18-2014	Jun-18-2014	Jul-1-2014	Jul-1-2014	Jul-1-2014		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT		1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority	20	19						
Pest Density, Unit	3 FT2	1 YD2						
Days After First/Last Applic.	41 41	41 41	41 41	54 54	54 54	54 54		
Trt-Eval Interval	41 DA-A	41 DA-A	41 DA-A	54 DA-A	54 DA-A	41 DA-A		
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	55 DP-1	55 DP-1	55 DP-1		
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	49 DE-1	49 DE-1	49 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12
7 Authority First (70 WG)	4.5 oz ai/a	A 204	99.0	99.0	0.0	60.0	85.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 401	95.0	99.0	0.0	90.0	83.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 601	99.0	99.0	0.0	90.0	90.0	0.0
		902	99.0	99.0	0.0	85.0	82.0	0.0
		Mean =	98.0	99.0	0.0	81.3	85.0	0.0
8 Fierce (76 WG)	2.28 oz ai/a	A 205	99.0	99.0	0.0	94.0	70.0	0.0
FirstRate (84 WG)	0.252 oz ai/a	A 305	99.0	99.0	0.0	87.0	60.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 604	99.0	99.0	0.0	80.0	70.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 1004	99.0	99.0	0.0	55.0	70.0	0.0
		Mean =	99.0	99.0	0.0	79.0	67.5	0.0
9 Fierce (76 WG)	3.42 oz ai/a	A 301	99.0	99.0	0.0	94.0	94.0	0.0
FirstRate (84 WG)	0.378 oz ai/a	A 304	99.0	99.0	0.0	80.0	85.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 701	99.0	99.0	0.0	96.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 1001	99.0	99.0	0.0	92.0	93.0	0.0
		Mean =	99.0	99.0	0.0	90.5	92.8	0.0
10 Classic	0.276 oz ai/a	A 302	99.0	99.0	0.0	50.0	60.0	0.0
Valor SX (51 WG)	0.876 oz ai/a	A 504	99.0	99.0	0.0	0.0	70.0	0.0
Harmony SG (50 SG)	0.087 oz ai/a	A 801	99.0	99.0	0.0	85.0	90.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 1002	99.0	99.0	0.0	0.0	60.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B						
		Mean =	99.0	99.0	0.0	33.8	70.0	0.0
11 Authority Maxx (66 SG)	3.96 oz ai/a	A 103	99.0	85.0	0.0	50.0	65.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 303	99.0	99.0	0.0	60.0	60.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 603	99.0	99.0	0.0	95.0	87.0	0.0
		803	99.0	99.0	0.0	99.0	99.0	0.0
		Mean =	99.0	95.5	0.0	76.0	77.8	0.0
12 Fierce XLT	2.5 oz ai/a	A 203	99.0	99.0	0.0	70.0	60.0	0.0
Sencor 75DF	3 oz ai/a	A 403	99.0	99.0	0.0	93.0	87.0	0.0
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 703	99.0	99.0	0.0	95.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 903	99.0	99.0	0.0	80.0	75.0	0.0
		Mean =	99.0	99.0	0.0	84.5	80.3	0.0

Purdue University

Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code				GLXMA	
BBCB Scale				BSOY	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Rating Date				Sep-29-2014	
Rating Type				YIELD	
Rating Unit				bu/ac	
Sample Size, Unit					
Number of Subsamples				1	
Pest Stage Majority					
Pest Density, Unit					
Days After First/Last Applic.				144	89
Trt-Eval Interval					
Plant-Eval Interval				145	DP-1
Days After Emergence				139	DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot			13
1 Untreated Check			101	54.19*	
			405	45.10	
			702	75.00	
			805	37.70	
			Mean =	53.00	
2 Authority XL (70 WG)	2.8 oz ai/a	A	102	60.80	
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B	404	74.20	
AMS - Liquid	8.5 lb ai/100 gal	B	602	69.20	
			804	32.50	
			Mean =	59.18	
3 Authority XL (70 WG)	5.25 oz ai/a	A	104	74.70	
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B	502	72.50	
AMS - Liquid	8.5 lb ai/100 gal	B	704	69.10	
			901	77.90	
			Mean =	73.55	
4 Fierce XLT	2.5 oz ai/a	A	105	68.60	
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B	402	89.80	
AMS - Liquid	8.5 lb ai/100 gal	B	605	69.90	
			904	67.60	
			Mean =	73.98	
5 Fierce XLT	3.74 oz ai/a	A	201	72.00	
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B	505	74.80	
AMS - Liquid	8.5 lb ai/100 gal	B	705	66.20	
			905	70.20	
			Mean =	70.80	
6 Authority First (70 WG)	2.24 oz ai/a	A	202	71.70	
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B	501	80.90	
AMS - Liquid	8.5 lb ai/100 gal	B	802	69.00	
			1005	68.20	
			Mean =	72.45	

Purdue University

Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code				GLXMA	
BBCH Scale				BSOY	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Rating Date				Sep-29-2014	
Rating Type				YIELD	
Rating Unit				bu/ac	
Sample Size, Unit					
Number of Subsamples					1
Pest Stage Majority					
Pest Density, Unit					
Days After First/Last Applic.				144	89
Trt-Eval Interval					
Plant-Eval Interval				145	DP-1
Days After Emergence				139	DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot			13
7 Authority First (70 WG)	4.5 oz ai/a	A 204			69.60
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 401			89.60
AMS - Liquid	8.5 lb ai/100 gal	B 601			81.00
		902			74.80
		Mean =			78.75
8 Fierce (76 WG)	2.28 oz ai/a	A 205			83.10
FirstRate (84 WG)	0.252 oz ai/a	A 305			72.30
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 604			74.20
AMS - Liquid	8.5 lb ai/100 gal	B 1004			60.10
		Mean =			72.43
9 Fierce (76 WG)	3.42 oz ai/a	A 301			82.20
FirstRate (84 WG)	0.378 oz ai/a	A 304			74.30
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 701			80.70
AMS - Liquid	8.5 lb ai/100 gal	B 1001			75.20
		Mean =			78.10
10 Classic	0.276 oz ai/a	A 302			81.40
Valor SX (51 WG)	0.876 oz ai/a	A 504			61.30
Harmony SG (50 SG)	0.087 oz ai/a	A 801			83.60
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 1002			68.40
AMS - Liquid	8.5 lb ai/100 gal	B			
		Mean =			73.68
11 Authority Maxx (66 SG)	3.96 oz ai/a	A 103			58.40
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 303			62.50
AMS - Liquid	8.5 lb ai/100 gal	B 603			57.00
		803			59.70
		Mean =			59.40
12 Fierce XLT	2.5 oz ai/a	A 203			76.30
Sencor 75DF	3 oz ai/a	A 403			75.00
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B 703			71.40
AMS - Liquid	8.5 lb ai/100 gal	B 903			70.80
		Mean =			73.38

Purdue University

Pre treatments in Soybeans

Trial ID: 14S-THP-CTS-43 Protocol ID: 14S-THP-CTS-43
 Location: Throckmorton Study Director: Bill Johnson
 Project ID: Fierce MD 64.02 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

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
 ABUTH, Abutilon theophrasti, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

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

Rating Unit

% = percent
 bu/ac = bushels per acre

PLOT = total plot

Pest Stage Majority

16 = 6 true leaves, leaf pairs or whorls unfolded
 36 = 6 visibly extended internode; G₆ 6 node stage
 19 = 9 true leaves, leaf pairs or whorls unfolded

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

27 DP-1 = 1 GLXMA May-7-2014
 42 DP-1 = 1 GLXMA May-7-2014
 55 DP-1 = 1 GLXMA May-7-2014
 145 DP-1 = 1 GLXMA May-7-2014

Purdue University

Pre treatments in Soybeans

Trial ID: 14S-THP-CTS-43 Protocol ID: 14S-THP-CTS-43
 Location: Throckmorton Study Director: Bill Johnson
 Project ID: Fierce MD 64.02 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	SETFA	AMBTR		
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>	Setaria faberi	Ambrosia trifi>		
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	velvetleaf	Giant foxtail	Giant ragweed		
Crop Code								
BBCB Scale								
Crop Scientific Name								
Crop Name								
Rating Date	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-18-2014	Jun-18-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority	1	3	.5	1.5	16	36		
Pest Density, Unit	5 FT2	3 YD2	5 FT2	1 YD2	15 FT2	8 YD2		
Days After First/Last Applic.	26 26	26 26	26 26	26 26	41 41	41 41		
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	41 DA-A	41 DA-A		
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1	42 DP-1	42 DP-1		
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	36 DE-1	36 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	1	2	3	4	5	6
1 Untreated Check	0.0 c		0.0 c	0.0 c	0.0 b	0.0 b	0.0 c	0.0 b
2 Authority XL (70 WG)	2.8 oz ai/a	A	85.5 a	90.3 a	99.0 a	99.0 a	90.0 ab	85.3 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
3 Authority XL (70 WG)	5.25 oz ai/a	A	91.3 a	96.0 a	99.0 a	98.0 a	89.0 ab	89.5 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
4 Fierce XLT	2.5 oz ai/a	A	93.5 a	92.3 a	99.0 a	99.0 a	84.8 ab	88.0 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
5 Fierce XLT	3.74 oz ai/a	A	96.5 a	92.0 a	99.0 a	99.0 a	95.0 a	88.0 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
6 Authority First (70 WG)	2.24 oz ai/a	A	45.0 b	40.0 b	99.0 a	99.0 a	87.6 ab	80.5 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
7 Authority First (70 WG)	4.5 oz ai/a	A	86.5 a	91.8 a	99.0 a	89.3 a	90.6 ab	88.5 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
8 Fierce (76 WG)	2.28 oz ai/a	A	87.8 a	83.5 a	99.0 a	99.0 a	85.8 ab	82.8 a
FirstRate (84 WG)	0.252 oz ai/a	A						
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
9 Fierce (76 WG)	3.42 oz ai/a	A	92.8 a	98.0 a	99.0 a	99.0 a	92.8 a	96.0 a
FirstRate (84 WG)	0.378 oz ai/a	A						
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
10 Classic	0.276 oz ai/a	A	50.0 ab	71.3 a	99.0 a	91.8 a	71.8 b	84.0 a
Valor SX (51 WG)	0.876 oz ai/a	A						
Harmony SG (50 SG)	0.087 oz ai/a	A						
Roundup PowerMax 4.5 SL	12.4 oz 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.

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	SETFA	AMBTR		
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>	Setaria faberi	Ambrosia trifi>		
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	velvetleaf	Giant foxtail	Giant ragweed		
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-18-2014	Jun-18-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority	1	3	.5	1.5	16	36		
Pest Density, Unit	5 FT2	3 YD2	5 FT2	1 YD2	15 FT2	8 YD2		
Days After First/Last Applic.	26 26	26 26	26 26	26 26	41 41	41 41		
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	41 DA-A	41 DA-A		
Plant-Eval Interval	27 DP-1	27 DP-1	27 DP-1	27 DP-1	42 DP-1	42 DP-1		
Days After Emergence	21 DE-1	21 DE-1	21 DE-1	21 DE-1	36 DE-1	36 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	1	2	3	4	5	6
11 Authority Maxx (66 SG)	3.96 oz ai/a	A	88.8 a	80.3 a	99.0 a	99.0 a	83.5 ab	88.0 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
12 Fierce XLT	2.5 oz ai/a	A	87.5 a	78.0 a	99.0 a	91.3 a	87.3 ab	87.0 a
Sencor 75DF	3 oz ai/a	A						
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
LSD (P=.05)	28.17		27.53	0.00	11.61	12.46	12.70	
Standard Deviation	19.51		19.06	0.00	8.04	8.63	8.79	
CV	25.87		25.05	0.0	9.07	10.81	11.02	
Bartlett's X2	36.711		27.084	0.0	9.255	9.51	18.734	
P(Bartlett's X2)	0.001*		0.003*	.	0.026*	0.392	0.044*	
Replicate F	0.525		1.203	0.000	1.317	3.301	5.709	
Replicate Prob(F)	0.6682		0.3244	1.0000	0.2853	0.0331	0.0029	
Treatment F	8.865		9.034	0.000	49.021	35.806	33.433	
Treatment Prob(F)	0.0001		0.0001	1.0000	0.0001	0.0001	0.0001	

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	CHEAL	ABUTH		SETFA	AMBTR				
Pest Scientific Name	Chenopodium ai>	Abutilon theop>		Setaria faberi	Ambrosia trifi>				
Pest Name	Common lambsqu>	velvetleaf		Giant foxtail	Giant ragweed				
Crop Code			GLXMA			GLXMA			
BBCB Scale			BSOY			BSOY			
Crop Scientific Name			Glycine max			Glycine max			
Crop Name			Soybean			Soybean			
Rating Date	Jun-18-2014	Jun-18-2014	Jun-18-2014	Jul-1-2014	Jul-1-2014	Jul-1-2014			
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	PHYGEN			
Rating Unit	%	%	%	%	%	%			
Sample Size, Unit	1 PLOT	1 PLOT		1 PLOT	1 PLOT				
Number of Subsamples	1	1	1	1	1	1			
Pest Stage Majority	20	19							
Pest Density, Unit	3 FT2	1 YD2							
Days After First/Last Applic.	41 41	41 41	41 41	54 54	54 54	54 54			
Trt-Eval Interval	41 DA-A	41 DA-A	41 DA-A	54 DA-A	54 DA-A	41 DA-A			
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	55 DP-1	55 DP-1	55 DP-1			
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	49 DE-1	49 DE-1	49 DE-1			
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	7	8	9	10	11	12	13
1 Untreated Check			0.0 b	0.0 b	0.0 a	0.0 c	0.0 b	0.0 a	53.00 b
2 Authority XL (70 WG)	2.8 oz ai/a	A	99.0 a	99.0 a	0.0 a	58.8 ab	73.0 a	0.0 a	59.18 ab
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
3 Authority XL (70 WG)	5.25 oz ai/a	A	99.0 a	99.0 a	0.0 a	71.8 a	80.3 a	0.0 a	73.55 ab
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
4 Fierce XLT	2.5 oz ai/a	A	99.0 a	96.8 a	0.0 a	81.0 a	81.8 a	0.0 a	73.98 ab
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
5 Fierce XLT	3.74 oz ai/a	A	99.0 a	99.0 a	0.0 a	95.0 a	74.5 a	0.0 a	70.80 ab
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
6 Authority First (70 WG)	2.24 oz ai/a	A	99.0 a	99.0 a	0.0 a	71.5 a	74.0 a	0.0 a	72.45 ab
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
7 Authority First (70 WG)	4.5 oz ai/a	A	98.0 a	99.0 a	0.0 a	81.3 a	85.0 a	0.0 a	78.75 a
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
8 Fierce (76 WG)	2.28 oz ai/a	A	99.0 a	99.0 a	0.0 a	79.0 a	67.5 a	0.0 a	72.43 ab
FirstRate (84 WG)	0.252 oz ai/a	A							
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
9 Fierce (76 WG)	3.42 oz ai/a	A	99.0 a	99.0 a	0.0 a	90.5 a	92.8 a	0.0 a	78.10 a
FirstRate (84 WG)	0.378 oz ai/a	A							
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
10 Classic	0.276 oz ai/a	A	99.0 a	99.0 a	0.0 a	33.8 b	70.0 a	0.0 a	73.68 ab
Valor SX (51 WG)	0.876 oz ai/a	A							
Harmony SG (50 SG)	0.087 oz ai/a	A							
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	CHEAL	ABUTH		SETFA	AMBTR				
Pest Scientific Name	Chenopodium al>	Abutilon theop>		Setaria faberi	Ambrosia trifi>				
Pest Name	Common lambsqu>	velvetleaf		Giant foxtail	Giant ragweed				
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	Jun-18-2014	Jun-18-2014	Jun-18-2014	Jul-1-2014	Jul-1-2014	Jul-1-2014	Sep-29-2014		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	PHYGEN	YIELD		
Rating Unit	%	%	%	%	%	%	bu/ac		
Sample Size, Unit	1 PLOT	1 PLOT		1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1	1		
Pest Stage Majority	20	19							
Pest Density, Unit	3 FT2	1 YD2							
Days After First/Last Applic.	41 41	41 41	41 41	54 54	54 54	54 54	144 89		
Trt-Eval Interval	41 DA-A	41 DA-A	41 DA-A	54 DA-A	54 DA-A	41 DA-A			
Plant-Eval Interval	42 DP-1	42 DP-1	42 DP-1	55 DP-1	55 DP-1	55 DP-1	145 DP-1		
Days After Emergence	36 DE-1	36 DE-1	36 DE-1	49 DE-1	49 DE-1	49 DE-1	139 DE-1		
Trt Treatment									
No. Name	7	8	9	10	11	12	13		
Rate									
Unit									
Appl Code									
11 Authority Maxx (66 SG)	3.96 oz ai/a	A	99.0 a	95.5 a	0.0 a	76.0 a	77.8 a	0.0 a	59.40 ab
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
12 Fierce XLT	2.5 oz ai/a	A	99.0 a	99.0 a	0.0 a	84.5 a	80.3 a	0.0 a	73.38 ab
Sencor 75DF	3 oz ai/a	A							
Roundup PowerMax 4.5 SL	12.4 oz ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
LSD (P=.05)	0.83	3.52	0.00	26.38	15.51	0.00	13.028		
Standard Deviation	0.58	2.44	0.00	18.27	10.74	0.00	9.022		
CV	0.64	2.7	0.0	26.64	15.05	0.0	12.91		
Bartlett's X2	0.0	0.56	0.0	10.55	19.371	0.0	26.025		
P(Bartlett's X2)	.	0.454	.	0.308	0.036*	.	0.006*		
Replicate F	1.000	0.678	0.000	3.343	5.400	0.000	2.665		
Replicate Prob(F)	0.4051	0.5717	1.0000	0.0309	0.0039	1.0000	0.0645		
Treatment F	9784.001	546.009	0.000	8.654	19.155	0.000	3.245		
Treatment Prob(F)	0.0001	0.0001	1.0000	0.0001	0.0001	1.0000	0.0045		

Purdue University

Pre treatments in Soybeans

Trial ID: 14S-THP-CTS-43 Protocol ID: 14S-THP-CTS-43
 Location: Throckmorton Study Director: Bill Johnson
 Project ID: Fierce MD 64.02 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

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
 ABUTH, Abutilon theophrasti, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

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

Rating Unit

% = percent
 bu/ac = bushels per acre

PLOT = total plot

Pest Stage Majority

16 = 6 true leaves, leaf pairs or whorls unfolded
 36 = 6 visibly extended internode; G₆ 6 node stage
 19 = 9 true leaves, leaf pairs or whorls unfolded

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

27 DP-1 = 1 GLXMA May-7-2014
 42 DP-1 = 1 GLXMA May-7-2014
 55 DP-1 = 1 GLXMA May-7-2014
 145 DP-1 = 1 GLXMA May-7-2014