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Soybean weed control in conventional till.

Trial ID: 12S-THP-CTS-34 Protocol ID: 12S-THP-CTS-34
Location: Throckmorton Study Director: White/Marquardt
Project ID: Conv Till Sbean Investigator: Dr. Bill Johnson
Sponsor Contact: BASF- Gery Welker

General Trial Information

Study Director: White/Marquardt **Title:** Research Associate
Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established
Initiation Date: 3-18-2012

Trial Location

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

Personnel

Study Director: White/Marquardt **Title:** Research Associate
Affiliation: Purdue University
Address: 915 W State Street
Location: West Lafayette, IN, USA
Postal Code: 47907 **E-mail:** mdwhite@purdue.edu
Phone No.: 765-494-0891
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

Cooperator/Landowner

Cooperator: Throckmorton Purdue Ag Center **Role:** Purdue Ag Center
Organization: Purdue University
Address 1: 8343 US 231 S
Phone No.: 765-538-3422
City: Lafayette **Fax No.:** 765-538-3423
State/Prov: IN
Postal Code: 47909 **E-mail:** jayyoung@purdue.edu
Country: USA United States

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Asgrow AG2931 **Description:** RR2
BBCH Scale: BSOY **Planting Date:** 4-24-2012
Planting Method: PLANTD planted **Rate, Unit:** 124000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Seed Bed: COMPAC compacted **Soil Temperature, Unit:** 60 f
Soil Moisture: DRY dry **Emergence Date:** 5-7-2012

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

Pest 3 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 4 Type: W **Code:** ABUTH Abutilon theophrasti
Common Name: Velvetleaf

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Site and Design

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

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:	4-24-2012	6-18-2012
Time of Day:		9 AM
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	POSPOS
Application Placement:	SOIL	FOLIAR
Applied By:	MW	GT
Air Temperature, Unit:	59 F	89 F
% Relative Humidity:	33	69
Wind Velocity, Unit:	6 MPH	8 MPH
Wind Direction:	W	SW
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	60 F	74 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	100	8

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH
Stage Majority, Percent:		V6
Height, Unit:		14 IN

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Height, Unit:		27 IN
Height Minimum, Maximum:		17 30
Density, Unit:		33 YD2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W
Height, Unit:		9 IN
Height Minimum, Maximum:		6 12
Density, Unit:		50 YD2
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W
Height, Unit:		7 IN
Height Minimum, Maximum:		3 11
Density, Unit:		40 YD2
Pest 4 Code, Type, Scale:	ABUTH W	ABUTH W
Height, Unit:		11.5 IN
Height Minimum, Maximum:		8 15
Density, Unit:		8 YD2

Application Equipment

	A	B
Appl. Equipment:	CO2 FORD	CUB
Equipment Type:	SPTRMO	SPTRMO
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	XR 100 02	XR 110 02
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	6	6
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	20 IN	19 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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Soybean weed control in conventional till.

Trial ID: 12S-THP-CTS-34 Protocol ID: 12S-THP-CTS-34
Location: Throckmorton Study Director: White/Marquardt
Project ID: Conv Till Sbean Investigator: Dr. Bill Johnson
Sponsor Contact: BASF- Gery Welker

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6	7
	Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
	Pest Code					AMBTR	SETFA	ABUTH	SETFA	AMBTR	CHEAL
	Pest Scientific Name					Ambrosia trifi>	Setaria faberi	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>
	Pest Name					Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>
	Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	BBCH Scale				BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
	Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
	Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
	Rating Date				5-16-2012	5-16-2012	5-16-2012	5-16-2012	6-18-2012	6-18-2012	6-18-2012
	Rating Type				PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%	%	%	%
	Number of Subsamples				1	1	1	1	1	1	1
	Crop Stage Scale				VC	VC	VC	VC			
	Pest Stage Majority					1-3 IN	1-2 IN	1 IN			
	Pest Density, Unit					15 YD2	35 YD2	3 YD2			
	Assessed By				JS/JR	JS/JR	JS/JR	JS/JR	MW	MW	MW
	Days After First/Last Applic.				22 22	22 22	22 22	22 22	55 55	55 55	55 55
	Plant-Eval Interval				22 DP-1	22 DP-1	22 DP-1	22 DP-1	55 DP-1	55 DP-1	55 DP-1
	Days After Emergence				9 DE-1	9 DE-1	9 DE-1	9 DE-1	42 DE-1	42 DE-1	42 DE-1
1	Untreated Check				0.00 b	0.0 b	0.0 c	0.0 c	0.0 c	0.0 d	0.0 c
2	Zidua (85 WG)	0.133	lb ai/a	A	0.50 b	80.0 a	94.5 a	100.0 a	88.8 a	43.8 bc	99.0 a
	Sharpen 2.85 SC	0.0223	lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B							
	AMS - Liquid	8.5	lb ai/100 gal	B							
3	Optil (68 WG)	0.085	lb ai/a	A	0.88 b	91.3 a	97.0 a	100.0 a	95.5 a	80.0 a	99.0 a
	Outlook (6.0 EC)	0.47	lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B							
	AMS - Liquid	8.5	lb ai/100 gal	B							
4	Verdict (5.57 SC)	3.48	oz ai/a	A	1.13 b	86.3 a	96.3 a	100.0 a	88.8 a	27.5 cd	99.0 a
	Outlook (6.0 EC)	0.56	lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B							
	AMS - Liquid	8.5	lb ai/100 gal	B							
5	Verdict (5.57 SC)	3.48	oz ai/a	A	0.63 b	90.0 a	98.3 a	100.0 a	92.5 a	45.0 bc	91.8 a
	Zidua (85 WG)	0.133	lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B							
	AMS - Liquid	8.5	lb ai/100 gal	B							
6	Valor SX (51 WG)	0.9	oz ai/a	A	1.13 b	91.3 a	91.8 a	97.5 a	77.5 a	72.5 ab	99.0 a
	Classic	0.309	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	Fierce (76 WG)	2.28	oz ai/a	A	2.75 a	80.5 a	95.5 a	98.8 a	92.5 a	53.8 abc	99.0 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B							
	AMS - Liquid	8.5	lb ai/100 gal	B							
8	Anthem (2.2 SC)	0.103	lb ai/a	A	0.00 b	63.8 a	96.3 a	96.3 a	90.0 a	15.0 d	61.3 b
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B							
	AMS - Liquid	8.5	lb ai/100 gal	B							
9	Prefix (5.29 EC)	1.32	lb ai/a	A	0.00 b	85.0 a	99.5 a	85.0 b	90.5 a	52.5 abc	79.5 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	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code					AMBTR	SETFA	ABUTH	SETFA	AMBTR	CHEAL
Pest Scientific Name					Ambrosia trifi>	Setaria faberi	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>
Pest Name					Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code					GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale					BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name					Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name					Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date					5-16-2012	5-16-2012	5-16-2012	5-16-2012	6-18-2012	6-18-2012	6-18-2012
Rating Type					PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%	%	%	%	%
Number of Subsamples					1	1	1	1	1	1	1
Crop Stage Scale					VC	VC	VC	VC			
Pest Stage Majority						1-3 IN	1-2 IN	1 IN			
Pest Density, Unit						15 YD2	35 YD2	3 YD2			
Assessed By					JS/JR	JS/JR	JS/JR	JS/JR	MW	MW	MW
Days After First/Last Applic.					22 22	22 22	22 22	22 22	55 55	55 55	55 55
Plant-Eval Interval					22 DP-1	22 DP-1	22 DP-1	22 DP-1	55 DP-1	55 DP-1	55 DP-1
Days After Emergence					9 DE-1	9 DE-1	9 DE-1	9 DE-1	42 DE-1	42 DE-1	42 DE-1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6	7
10	Authority MTZ (45 WG)	0.45	lb ai/a	A	0.00 b	67.5 a	80.0 b	95.0 a	42.5 b	12.5 d	99.0 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B							
	AMS - Liquid	8.5	lb ai/100 gal	B							
LSD (P=.05)					1.058	17.37	10.41	8.09	23.53	21.78	16.19
Standard Deviation					0.729	11.97	7.18	5.58	16.21	15.01	11.15
CV					104.15	16.27	8.45	6.39	21.38	37.3	13.5
Bartlett's X2					3.578	12.211	40.438	11.209	61.948	11.672	1.193
P(Bartlett's X2)					0.612	0.094	0.001*	0.024*	0.001*	0.166	0.551
Replicate F					1.976	0.408	2.313	0.777	1.667	4.737	2.172
Replicate Prob(F)					0.1414	0.7486	0.0985	0.5172	0.1975	0.0088	0.1145
Treatment F					5.519	21.165	71.442	123.518	14.464	12.182	32.095
Treatment Prob(F)					0.0003	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	8	9	10	11	12	13
	Pest Type				W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
	Pest Code				ABUTH	IPOHE	AMBTR	IPOHE	SETFA	AMARE
	Pest Scientific Name				Abutilon theop>	Ipomoea hedera>	Ambrosia trifi>	Ipomoea hedera>	Setaria faberi	Amaranthus ret>
	Pest Name				Velvetleaf	Ivyleaf mornin>	Giant ragweed	Ivyleaf mornin>	Giant foxtail	Redroot pigweed
	Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	BBCH Scale				BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
	Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
	Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
	Rating Date				6-18-2012	6-18-2012	7-12-2012	7-12-2012	7-12-2012	7-12-2012
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%	%	%
	Number of Subsamples				1	1	1	1	1	1
	Crop Stage Scale									
	Pest Stage Majority						48 IN	30 IN	7-40 IN	17 IN
	Pest Density, Unit						20 YD2	3 YD2	50 YD2	2 YD2
	Assessed By				MW	MW	BM/GT	BM/GT	BM/GT	BM/GT
	Days After First/Last Applic.				55 55	55 55	79 24	79 24	79 24	79 24
	Plant-Eval Interval				55 DP-1	55 DP-1	79 DP-1	79 DP-1	79 DP-1	79 DP-1
	Days After Emergence				42 DE-1	42 DE-1	66 DE-1	66 DE-1	66 DE-1	66 DE-1
1	Untreated Check				0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	49.5 b
2	Zidua (85 WG)	0.133	lb ai/a	A	89.3 a	99.0 a	85.5 a	98.0 a	99.0 a	99.0 a
	Sharpen 2.85 SC	0.0223	lb ai/a	A						
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B						
	AMS - Liquid	8.5	lb ai/100 gal	B						
3	Optil (68 WG)	0.085	lb ai/a	A	99.0 a	99.0 a	97.5 a	98.5 a	99.0 a	99.0 a
	Outlook (6.0 EC)	0.47	lb ai/a	A						
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B						
	AMS - Liquid	8.5	lb ai/100 gal	B						
4	Verdict (5.57 SC)	3.48	oz ai/a	A	99.0 a	99.0 a	91.0 a	98.5 a	99.0 a	99.0 a
	Outlook (6.0 EC)	0.56	lb ai/a	A						
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B						
	AMS - Liquid	8.5	lb ai/100 gal	B						
5	Verdict (5.57 SC)	3.48	oz ai/a	A	99.0 a	96.8 a	94.3 a	97.0 a	99.0 a	99.0 a
	Zidua (85 WG)	0.133	lb ai/a	A						
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B						
	AMS - Liquid	8.5	lb ai/100 gal	B						
6	Valor SX (51 WG)	0.9	oz ai/a	A	74.3 a	96.8 a	95.8 a	98.5 a	99.0 a	99.0 a
	Classic	0.309	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	Fierce (76 WG)	2.28	oz ai/a	A	75.8 a	67.3 a	87.5 a	95.8 a	99.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B						
	AMS - Liquid	8.5	lb ai/100 gal	B						
8	Anthem (2.2 SC)	0.103	lb ai/a	A	91.8 a	72.0 a	83.8 a	97.5 a	99.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B						
	AMS - Liquid	8.5	lb ai/100 gal	B						
9	Prefix (5.29 EC)	1.32	lb ai/a	A	59.8 a	20.0 b	94.8 a	97.5 a	99.0 a	99.0 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	W Weed	W Weed	W Weed
Pest Code				ABUTH	IPOHE	AMBTR	IPOHE	SETFA	AMARE
Pest Scientific Name				Abutilon theop>	Ipomoea hedera>	Ambrosia trifi>	Ipomoea hedera>	Setaria faberi	Amaranthus ret>
Pest Name				Velvetleaf	Ivyleaf mornin>	Giant ragweed	Ivyleaf mornin>	Giant foxtail	Redroot pigweed
Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale				BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Rating Date				6-18-2012	6-18-2012	7-12-2012	7-12-2012	7-12-2012	7-12-2012
Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit				%	%	%	%	%	%
Number of Subsamples				1	1	1	1	1	1
Crop Stage Scale									
Pest Stage Majority						48 IN	30 IN	7-40 IN	17 IN
Pest Density, Unit						20 YD2	3 YD2	50 YD2	2 YD2
Assessed By				MW	MW	BM/GT	BM/GT	BM/GT	BM/GT
Days After First/Last Applic.				55 55	55 55	79 24	79 24	79 24	79 24
Plant-Eval Interval				55 DP-1	55 DP-1	79 DP-1	79 DP-1	79 DP-1	79 DP-1
Days After Emergence				42 DE-1	42 DE-1	66 DE-1	66 DE-1	66 DE-1	66 DE-1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	8	9	10	11	12	13
10	Authority MTZ (45 WG)	0.45	lb ai/a	A	98.0 a	98.0 a	81.8 a	98.5 a	98.5 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B						
	AMS - Liquid	8.5	lb ai/100 gal	B						
LSD (P=.05)					30.35	23.16	11.90	2.11	0.46	26.23
Standard Deviation					20.92	15.96	8.20	1.45	0.32	18.07
CV					26.62	21.34	10.11	1.65	0.36	19.22
Bartlett's X2					17.091	24.81	22.322	13.599	0.0	0.0
P(Bartlett's X2)					0.004*	0.001*	0.004*	0.093	.	.
Replicate F					1.462	0.829	1.819	4.411	1.000	1.000
Replicate Prob(F)					0.2470	0.4895	0.1676	0.0120	0.4079	0.4079
Treatment F					8.607	20.803	50.085	1815.889	39161.004	3.000
Treatment Prob(F)					0.0001	0.0001	0.0001	0.0001	0.0001	0.0130

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	14	15	16
	Pest Type				W Weed	W Weed	
	Pest Code				CHEAL	ABUTH	
	Pest Scientific Name				Chenopodium al>	Abutilon theop>	
	Pest Name				Common lambsqu>	Velvetleaf	
	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				7-12-2012	7-12-2012	10-10-2012
	Rating Type				CONTRO	CONTRO	YIELD
	Rating Unit				%	%	bu/ac
	Number of Subsamples				1	1	1
	Crop Stage Scale						
	Pest Stage Majority				1-29 IN	28 IN	
	Pest Density, Unit				57 YD2	5 YD2	
	Assessed By				BM/GT	BM/GT	
	Days After First/Last Applic.				79 24	79 24	169 114
	Plant-Eval Interval				79 DP-1	79 DP-1	169 DP-1
	Days After Emergence				66 DE-1	66 DE-1	156 DE-1
1	Untreated Check				0.0 c	0.0 b	
2	Zidua (85 WG)	0.133	lb ai/a	A	99.0 a	99.0 a	27.30 a
	Sharpen 2.85 SC	0.0223	lb ai/a	A			
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B			
	AMS - Liquid	8.5	lb ai/100 gal	B			
3	Optil (68 WG)	0.085	lb ai/a	A	99.0 a	99.0 a	34.40 a
	Outlook (6.0 EC)	0.47	lb ai/a	A			
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B			
	AMS - Liquid	8.5	lb ai/100 gal	B			
4	Verdict (5.57 SC)	3.48	oz ai/a	A	99.0 a	99.0 a	30.63 a
	Outlook (6.0 EC)	0.56	lb ai/a	A			
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B			
	AMS - Liquid	8.5	lb ai/100 gal	B			
5	Verdict (5.57 SC)	3.48	oz ai/a	A	99.0 a	99.0 a	36.68 a
	Zidua (85 WG)	0.133	lb ai/a	A			
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B			
	AMS - Liquid	8.5	lb ai/100 gal	B			
6	Valor SX (51 WG)	0.9	oz ai/a	A	99.0 a	99.0 a	35.13 a
	Classic	0.309	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	Fierce (76 WG)	2.28	oz ai/a	A	99.0 a	99.0 a	32.55 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B			
	AMS - Liquid	8.5	lb ai/100 gal	B			
8	Anthem (2.2 SC)	0.103	lb ai/a	A	98.0 b	98.5 a	27.38 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B			
	AMS - Liquid	8.5	lb ai/100 gal	B			
9	Prefix (5.29 EC)	1.32	lb ai/a	A	99.0 a	99.0 a	36.68 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	
Pest Code					CHEAL	ABUTH	
Pest Scientific Name					Chenopodium al>	Abutilon theop>	
Pest Name					Common lambsqu>	Velvetleaf	
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					7-12-2012	7-12-2012	10-10-2012
Rating Type					CONTRO	CONTRO	YIELD
Rating Unit					%	%	bu/ac
Number of Subsamples					1	1	1
Crop Stage Scale							
Pest Stage Majority					1-29 IN	28 IN	
Pest Density, Unit					57 YD2	5 YD2	
Assessed By					BM/GT	BM/GT	
Days After First/Last Applic.					79 24	79 24	169 114
Plant-Eval Interval					79 DP-1	79 DP-1	169 DP-1
Days After Emergence					66 DE-1	66 DE-1	156 DE-1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	14	15	16
10	Authority MTZ (45 WG)	0.45	lb ai/a	A	99.0 a	99.0 a	28.43 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	B			
	AMS - Liquid	8.5	lb ai/100 gal	B			
LSD (P=.05)					0.53	0.46	9.128
Standard Deviation					0.37	0.32	6.254
CV					0.41	0.36	19.47
Bartlett's X2					0.0	0.0	5.316
P(Bartlett's X2)					.	.	0.723
Replicate F					1.000	1.000	0.854
Replicate Prob(F)					0.4079	0.4079	0.4781
Treatment F					29340.003	39161.004	1.503
Treatment Prob(F)					0.0001	0.0001	0.2084

Purdue University

Soybean weed control in conventional till.

Trial ID: 12S-THP-CTS-34
Location: Throckmorton
Project ID: Conv Till Sbean
Protocol ID: 12S-THP-CTS-34
Study Director: White/Marquardt
Investigator: Dr. Bill Johnson
Sponsor Contact: BASF- Gery Welker

Pest Type
W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
Pest Code
AMBTR, Ambrosia trifida, = US
SETFA, Setaria faberi, = US
ABUTH, Abutilon theophrasti, = US
CHEAL, Chenopodium album, = US
IPOHE, Ipomoea hederacea, = US
AMARE, Amaranthus retroflexus, = US
Crop Code
GLXMA, BSOY, Glycine max, = US
Rating Type
PHYGEN = phytotoxicity - general / injury
CONTRO = control / burndown or knockdown
YIELD = yield
Rating Unit
% = percent
bu/ac = bushels per acre

YD2 = per square yard
Plant-Eval Interval
22 DP-1 = 1 GLXMA 4-24-2012
55 DP-1 = 1 GLXMA 4-24-2012
79 DP-1 = 1 GLXMA 4-24-2012
169 DP-1 = 1 GLXMA 4-24-2012