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Weed program for soybeans

Trial ID: 12S-THP-CTS-44 Protocol ID: 12S-THP-CTS-44
Location: Throckmorton Study Director: White/Marquardt
Project ID: SOYSSAI 001 Investigator: Dr. Bill Johnson
Sponsor Contact: Syngenta- Steve Mroczkiewicz

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: 4-2-2012

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:** 5-24-2012
Planting Method: PLANTD planted **Rate, Unit:** 124000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Soil Temperature, Unit: 60 F
Soil Moisture: DRY dry **Emergence Date:** 5-7-2012

Pest Description

Pest 1 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 2 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 3 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

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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: MINTIL minimum-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
pH: 6.2
CEC: 13.3
Texture: SIL silt loam
Soil Name: Toronto-Millbrook

Application Description

	A	B	C
Application Date:	4-24-2012	5-24-2012	6-19-2012
Time of Day:		7 AM	8 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	ATPLAN	EAPOCR	MIPOCR
Application Placement:	SOIL	FOLIAR	FOLIAR
Applied By:	MW	MW	MW
Air Temperature, Unit:	66 F	68 F	81 F
% Relative Humidity:	25	68	63
Wind Velocity, Unit:	6 MPH	3 MPH	7 MPH
Wind Direction:	SE	SE	SW
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	60 F	70 F	79 F
Soil Moisture:	DRY	DRY	DRY
% Cloud Cover:	60	5	10

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:		BBCH	
Stage Majority, Percent:		V1	
Height, Unit:			11 IN
Height Minimum, Maximum:		3 6	

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W
Height Minimum, Maximum:		0.5 3	1 17
Density, Unit:		35 YD2	55 YD2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height Minimum, Maximum:		0.5 8	3.5 25
Density, Unit:		10 YD2	29 YD2
Pest 3 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height Minimum, Maximum:		0.5 7	1 17
Density, Unit:		50 YD2	70 YD2

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Application Equipment

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

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Weed program for soybeans

Trial ID: 12S-THP-CTS-44 Protocol ID: 12S-THP-CTS-44
Location: Throckmorton Study Director: White/Marquardt
Project ID: SOYSSAI 001 Investigator: Dr. Bill Johnson
Sponsor Contact: Syngenta- Steve Mroczkiewicz

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
	Pest Code					SETFA	AMBTR	CHEAL	ABUTH		SETFA
	Pest Scientific Name					Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>		Setaria faberi
	Pest Name					Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf		Giant foxtail
	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				5-29-2012	6-18-2012	6-18-2012	6-18-2012	6-18-2012	6-26-2012	6-26-2012
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
	Rating Unit				%	%	%	%	%	%	%
	Number of Subsamples				1	1	1	1	1	1	1
	Crop Stage Scale				V2-V3	V4	V4	V4	V4	R2-R3	R2-R3
	Pest Stage Majority					10 IN	24 IN	14 IN	10 IN		6-30 IN
	Pest Density, Unit					20 FT2	10 YD2	10 FT2	2 YD2		50 M2
	Assessed By				JR	MW	MW	MW	MW	JS/JR	JS/JR
	Days After First/Last Applic.				35 5	55 25	55 25	55 25	55 25	63 7	63 7
	Plant-Eval Interval				5 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	33 DP-1	33 DP-1
	Days After Emergence				22 DE-1	42 DE-1	42 DE-1	42 DE-1	42 DE-1	50 DE-1	50 DE-1
1	Untreated Check				0.0 b	0.0 c	0.0 d	0.0 b	0.0 c	0.0 b	0.0 c
2	Prefix (5.29 EC)	1.32	lb ai/a	A	0.0 b	86.0 a	36.3 c	89.5 a	34.8 bc	0.0 b	93.3 ab
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
3	Boundary (6.5 EC)	1.22	lb ai/a	A	0.3 b	91.3 a	22.5 cd	91.8 a	29.8 bc	0.0 b	97.0 a
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
4	Boundary (6.5 EC)	1.22	lb ai/a	A	0.8 b	89.8 a	37.5 c	94.3 a	91.8 a	1.8 b	88.8 ab
	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	C							
	MSO	1	% v/v	C							
	AMS - Liquid	17	lb ai/100 gal	C							
5	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	B	8.8 a	99.0 a	97.0 a	85.5 a	99.0 a	17.0 a	99.5 a
	MSO	1	% v/v	B							
	AMS - Liquid	17	lb ai/100 gal	B							
6	Touchdown Total (4.17 SL)	0.78	lb ae/a	B	0.0 b	99.0 a	94.8 a	84.8 a	99.0 a	0.5 b	99.5 a
	AMS - Liquid	17	lb ai/100 gal	B							
7	Touchdown Total (4.17 SL)	0.78	lb ae/a	B	0.0 b	99.0 a	94.8 a	82.5 a	99.0 a	1.3 b	98.5 a
	AMS - Liquid	17	lb ai/100 gal	B							
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
8	Fierce (76 WG)	2.28	oz ai/a	A	0.5 b	89.1 a	48.1 bc	62.1 a	97.4 a	0.0 b	90.8 ab
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
9	Fierce (76 WG)	2.28	oz ai/a	A	0.0 b	62.5 b	30.0 c	91.8 a	57.3 ab	0.3 b	76.3 b
	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	C							
	MSO	1	% v/v	C							
	AMS - Liquid	17	lb ai/100 gal	C							

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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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
	Pest Code					SETFA	AMBTR	CHEAL	ABUTH		SETFA
	Pest Scientific Name					Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>		Setaria faberi
	Pest Name					Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf		Giant foxtail
	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				5-29-2012	6-18-2012	6-18-2012	6-18-2012	6-18-2012	6-26-2012	6-26-2012
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO
	Rating Unit				%	%	%	%	%	%	%
	Number of Subsamples				1	1	1	1	1	1	1
	Crop Stage Scale				V2-V3	V4	V4	V4	V4	R2-R3	R2-R3
	Pest Stage Majority					10 IN	24 IN	14 IN	10 IN		6-30 IN
	Pest Density, Unit					20 FT2	10 YD2	10 FT2	2 YD2		50 M2
	Assessed By				JR	MW	MW	MW	MW	JS/JR	JS/JR
	Days After First/Last Applic.				35 5	55 25	55 25	55 25	55 25	63 7	63 7
	Plant-Eval Interval				5 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	33 DP-1	33 DP-1
	Days After Emergence				22 DE-1	42 DE-1	42 DE-1	42 DE-1	42 DE-1	50 DE-1	50 DE-1
10	Prefix (5.29 EC)	21.2	oz ai/a	A	1.3 b	66.3 b	75.0 ab	96.8 a	99.0 a	1.3 b	86.3 ab
	Sharpen 2.85 SC	0.356	oz ai/a	A							
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
11	Valor SX (51 WG)	0.0539	lb ai/a	A	0.3 b	75.0 ab	71.3 ab	99.0 a	82.0 a	0.0 b	81.5 ab
	Classic	0.0182	lb ai/a	A							
	KIH-485 (85 WG)	0.0497	lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
12	Verdict (5.57 SC)	0.218	lb ai/a	A	0.0 b	58.8 b	52.5 bc	73.5 a	54.8 ab	0.0 b	80.0 ab
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
	LSD (P=.05)				1.00	16.36	24.47	24.77	33.99	3.95	11.77
	Standard Deviation				0.69	11.33	16.95	17.15	23.54	2.74	8.15
	CV				70.79	14.85	30.83	21.64	33.48	149.28	9.86
	Bartlett's X2				9.119	10.046	28.902	20.678	5.222	35.24	44.795
	P(Bartlett's X2)				0.104	0.123	0.001*	0.014*	0.389	0.001*	0.001*
	Replicate F				0.622	0.918	0.391	1.412	2.147	1.728	0.957
	Replicate Prob(F)				0.6061	0.4430	0.7604	0.2574	0.1138	0.1803	0.4250
	Treatment F				51.134	24.433	13.935	9.918	8.460	12.388	44.547
	Treatment Prob(F)				0.0001	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				AMBTR	CHEAL	SETFA	AMBTR	CHEAL	AMARE
	Pest Scientific Name				Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
	Pest Name				Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>	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				6-26-2012	6-26-2012	7-2-2012	7-2-2012	7-2-2012	7-2-2012
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%	%	%
	Number of Subsamples				1	1	1	1	1	1
	Crop Stage Scale				R2-R3	R2-R3	R3	R3	R3	R3
	Pest Stage Majority				6-36 IN	3-24 IN	18 IN	30 IN	26 IN	22 IN
	Pest Density, Unit				12 M2	5 M2				
	Assessed By				JS/JR	JS/JR	MW	MW	MW	MW
	Days After First/Last Applic.				63 7	63 7	69 13	69 13	69 13	69 13
	Plant-Eval Interval				33 DP-1	33 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1
	Days After Emergence				50 DE-1	50 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1
1	Untreated Check				0.0 d	0.0 c	0.0 b	0.0 b	0.0 c	0.0 b
2	Prefix (5.29 EC)	1.32	lb ai/a	A	63.8 bc	97.5 a	94.5 a	83.8 a	95.5 a	99.0 a
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C						
	AMS - Liquid	17	lb ai/100 gal	C						
3	Boundary (6.5 EC)	1.22	lb ai/a	A	50.0 c	100.0 a	97.0 a	76.3 a	95.5 a	99.0 a
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C						
	AMS - Liquid	17	lb ai/100 gal	C						
4	Boundary (6.5 EC)	1.22	lb ai/a	A	58.8 bc	99.5 a	91.3 a	76.3 a	99.0 a	99.0 a
	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	C						
	MSO	1	% v/v	C						
	AMS - Liquid	17	lb ai/100 gal	C						
5	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	B	90.8 a	40.0 b	96.5 a	92.3 a	62.5 b	99.0 a
	MSO	1	% v/v	B						
	AMS - Liquid	17	lb ai/100 gal	B						
6	Touchdown Total (4.17 SL)	0.78	lb ae/a	B	94.5 a	73.8 a	96.5 a	87.3 a	97.0 a	99.0 a
	AMS - Liquid	17	lb ai/100 gal	B						
7	Touchdown Total (4.17 SL)	0.78	lb ae/a	B	93.8 a	87.5 a	96.5 a	95.3 a	92.8 a	99.0 a
	AMS - Liquid	17	lb ai/100 gal	B						
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C						
	AMS - Liquid	17	lb ai/100 gal	C						
8	Fierce (76 WG)	2.28	oz ai/a	A	58.4 bc	91.1 a	95.7 a	78.2 a	97.8 a	99.0 a
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C						
	AMS - Liquid	17	lb ai/100 gal	C						
9	Fierce (76 WG)	2.28	oz ai/a	A	68.8 abc	98.8 a	90.0 a	80.0 a	99.0 a	99.0 a
	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	C						
	MSO	1	% v/v	C						
	AMS - Liquid	17	lb ai/100 gal	C						

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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				AMBTR	CHEAL	SETFA	AMBTR	CHEAL	AMARE
	Pest Scientific Name				Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
	Pest Name				Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>	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				6-26-2012	6-26-2012	7-2-2012	7-2-2012	7-2-2012	7-2-2012
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%	%	%
	Number of Subsamples				1	1	1	1	1	1
	Crop Stage Scale				R2-R3	R2-R3	R3	R3	R3	R3
	Pest Stage Majority				6-36 IN	3-24 IN	18 IN	30 IN	26 IN	22 IN
	Pest Density, Unit				12 M2	5 M2				
	Assessed By				JS/JR	JS/JR	MW	MW	MW	MW
	Days After First/Last Applic.				63 7	63 7	69 13	69 13	69 13	69 13
	Plant-Eval Interval				33 DP-1	33 DP-1	39 DP-1	39 DP-1	39 DP-1	39 DP-1
	Days After Emergence				50 DE-1	50 DE-1	56 DE-1	56 DE-1	56 DE-1	56 DE-1
10	Prefix (5.29 EC)	21.2	oz ai/a	A	82.5 ab	98.8 a	92.5 a	93.5 a	99.0 a	99.0 a
	Sharpen 2.85 SC	0.356	oz ai/a	A						
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C						
	AMS - Liquid	17	lb ai/100 gal	C						
11	Valor SX (51 WG)	0.0539	lb ai/a	A	77.5 ab	100.0 a	92.0 a	90.0 a	99.0 a	99.0 a
	Classic	0.0182	lb ai/a	A						
	KIH-485 (85 WG)	0.0497	lb ai/a	A						
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C						
	AMS - Liquid	17	lb ai/100 gal	C						
12	Verdict (5.57 SC)	0.218	lb ai/a	A	77.5 ab	98.8 a	88.8 a	87.5 a	99.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C						
	AMS - Liquid	17	lb ai/100 gal	C						
	LSD (P=.05)				17.16	22.29	7.47	13.52	14.19	0.00
	Standard Deviation				11.88	15.43	5.17	9.36	9.83	0.00
	CV				17.47	18.79	6.02	11.95	11.38	0.0
	Bartlett's X2				21.926	54.197	39.117	20.648	19.274	0.0
	P(Bartlett's X2)				0.015*	0.001*	0.001*	0.024*	0.001*	.
	Replicate F				2.050	0.527	0.181	1.520	1.857	0.000
	Replicate Prob(F)				0.1265	0.6672	0.9085	0.2282	0.1568	1.0000
	Treatment F				19.105	16.342	110.622	29.823	34.940	0.000
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	14	15	16	17	18	19	20
	Pest Type				W Weed	W Weed	W Weed	W Weed	W Weed		
	Pest Code				ABUTH	SETFA	AMBTR	CHEAL	ABUTH		
	Pest Scientific Name				Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>		
	Pest Name				Velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf		
	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				7-2-2012	7-17-2012	7-17-2012	7-17-2012	7-17-2012	7-17-2012	10-9-2012
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA	YIELD
	Rating Unit				%	%	%	%	"	"	bu/ac
	Number of Subsamples				1	1	1	1	1	1	1
	Crop Stage Scale				R3	R2	R2	R2	R2	R2	
	Pest Stage Majority				22 IN	26 IN	40 IN	36 IN	20 IN		
	Pest Density, Unit					10 FT2	4 YD2	10 YD2	1 YD2		
	Assessed By				MW	MW	MW	MW	MW	MW	
	Days After First/Last Applic.				69 13	84 28	84 28	84 28	84 28	84 28	168 112
	Plant-Eval Interval				39 DP-1	54 DP-1	54 DP-1	54 DP-1	54 DP-1	54 DP-1	138 DP-1
	Days After Emergence				56 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	155 DE-1
1	Untreated Check				0.0 b	0.0 b	0.0 c	0.0 c	0.0 b	0.0 b	
2	Prefix (5.29 EC)	1.32	lb ai/a	A	99.0 a	99.0 a	89.3 ab	99.0 a	99.0 a	0.0 b	59.64 a
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
3	Boundary (6.5 EC)	1.22	lb ai/a	A	91.8 a	99.0 a	78.8 ab	99.0 a	99.0 a	0.0 b	57.84 a
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
4	Boundary (6.5 EC)	1.22	lb ai/a	A	99.0 a	99.0 a	66.3 b	99.0 a	99.0 a	8.8 a	48.38 a
	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	C							
	MSO	1	% v/v	C							
	AMS - Liquid	17	lb ai/100 gal	C							
5	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	B	99.0 a	99.0 a	91.3 ab	79.8 b	99.0 a	0.0 b	66.31 a
	MSO	1	% v/v	B							
	AMS - Liquid	17	lb ai/100 gal	B							
6	Touchdown Total (4.17 SL)	0.78	lb ae/a	B	99.0 a	99.0 a	99.0 a	95.8 a	99.0 a	0.0 b	57.15 a
	AMS - Liquid	17	lb ai/100 gal	B							
7	Touchdown Total (4.17 SL)	0.78	lb ae/a	B	99.0 a	99.0 a	98.0 a	98.0 a	99.0 a	0.0 b	59.53 a
	AMS - Liquid	17	lb ai/100 gal	B							
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
8	Fierce (76 WG)	2.28	oz ai/a	A	99.0 a	99.0 a	81.5 ab	98.7 a	99.0 a	0.0 b	48.97 a
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
9	Fierce (76 WG)	2.28	oz ai/a	A	99.0 a	98.5 a	82.5 ab	99.0 a	99.0 a	8.8 a	63.45 a
	Flexstar GT 3.5 (2.82 SL)	1.23	lb ai/a	C							
	MSO	1	% v/v	C							
	AMS - Liquid	17	lb ai/100 gal	C							

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	14	15	16	17	18	19	20
	Pest Type				W Weed	W Weed	W Weed	W Weed	W Weed		
	Pest Code				ABUTH	SETFA	AMBTR	CHEAL	ABUTH		
	Pest Scientific Name				Abutilon theop>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>		
	Pest Name				Velvetleaf	Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf		
	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				7-2-2012	7-17-2012	7-17-2012	7-17-2012	7-17-2012	7-17-2012	10-9-2012
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA	YIELD
	Rating Unit				%	%	%	%	"	"	bu/ac
	Number of Subsamples				1	1	1	1	1	1	1
	Crop Stage Scale				R3	R2	R2	R2	R2	R2	
	Pest Stage Majority				22 IN	26 IN	40 IN	36 IN	20 IN		
	Pest Density, Unit					10 FT2	4 YD2	10 YD2	1 YD2		
	Assessed By				MW	MW	MW	MW	MW	MW	
	Days After First/Last Applic.				69 13	84 28	84 28	84 28	84 28	84 28	168 112
	Plant-Eval Interval				39 DP-1	54 DP-1	54 DP-1	54 DP-1	54 DP-1	54 DP-1	138 DP-1
	Days After Emergence				56 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	71 DE-1	155 DE-1
10	Prefix (5.29 EC)	21.2	oz ai/a	A	99.0 a	99.0 a	93.8 ab	96.8 a	99.0 a	0.0 b	61.83 a
	Sharpen 2.85 SC	0.356	oz ai/a	A							
	Touchdown Total (4.17 SL)	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
11	Valor SX (51 WG)	0.0539	lb ai/a	A	99.0 a	99.0 a	93.3 ab	99.0 a	99.0 a	0.0 b	56.03 a
	Classic	0.0182	lb ai/a	A							
	KIH-485 (85 WG)	0.0497	lb ai/a	A							
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
12	Verdict (5.57 SC)	0.218	lb ai/a	A	99.0 a	99.0 a	92.3 ab	99.0 a	99.0 a	0.0 b	58.15 a
	Roundup PowerMax 4.5 SL	0.78	lb ae/a	C							
	AMS - Liquid	17	lb ai/100 gal	C							
	LSD (P=.05)				6.04	0.42	17.44	8.21	0.00	3.72	15.439
	Standard Deviation				4.19	0.29	12.08	5.68	0.00	2.57	10.599
	CV				4.64	0.32	15.01	6.42	0.0	176.55	18.3
	Bartlett's X2				0.0	0.0	28.037	14.386	0.0	0.0	11.759
	P(Bartlett's X2)				.	.	0.001*	0.002*	.	.	0.302
	Replicate F				1.000	1.038	0.112	0.581	0.000	0.943	2.625
	Replicate Prob(F)				0.4051	0.3889	0.9523	0.6320	1.0000	0.4311	0.0726
	Treatment F				184.981	38171.894	19.963	100.041	0.000	7.000	1.058
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.4279

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Weed program for soybeans

Trial ID: 12S-THP-CTS-44 Protocol ID: 12S-THP-CTS-44
Location: Throckmorton Study Director: White/Marquardt
Project ID: SOYSSAI 001 Investigator: Dr. Bill Johnson
Sponsor Contact: Syngenta- Steve Mroczkiewicz

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
AMARE, Amaranthus retroflexus, = US
Crop Code
GLXMA, BSOY, Glycine max, = US
Rating Type
CONTRO = control / burndown or knockdown
PHYGEN = phytotoxicity - general / injury
PHYLMA = phytotoxicity - leaf malformation
YIELD = yield
Rating Unit
% = percent
bu/ac = bushels per acre

FT2 = per square foot
YD2 = per square yard
M2 = per square meter
Plant-Eval Interval
5 DP-1 = 1 GLXMA 5-24-2012
25 DP-1 = 1 GLXMA 5-24-2012
33 DP-1 = 1 GLXMA 5-24-2012
39 DP-1 = 1 GLXMA 5-24-2012
54 DP-1 = 1 GLXMA 5-24-2012
138 DP-1 = 1 GLXMA 5-24-2012