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Residual Contorl of Zidua in Total Post Weed Program

Trial ID: 11S-THP-CTS-34 Protocol ID: 11S-THP-CTS-204
Location: Throckmorton Study Director: White/Marquardt
Project ID: ZIDUA SOY 07-11-MW 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: 4-8-2011

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:** 5-10-2011
Planting Method: PLANTD planted **Rate, Unit:** 124000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Emergence Date: 5-16-2011

Pest Description

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

Pest 2 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

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

Pest 4 Type: W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed

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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 4A
% OM: 3.1
pH: 6
CEC: 11.1
Texture: SIL silt loam
Soil Name: Toronto-Millbrook

Application Description

	A
Application Date:	6-1-2011
Time of Day:	9:30 AM
Application Method:	SPRAY
Application Timing:	EAPOCR
Application Placement:	FOLIAR
Applied By:	MH
Air Temperature, Unit:	74.2 F
% Relative Humidity:	47
Wind Velocity, Unit:	1.8 MPH
Wind Direction:	SE
Dew Presence (Y/N):	Y yes
Soil Temperature, Unit:	70 F
Soil Moisture:	SLIWET
% Cloud Cover:	20

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY
Stage Scale Used:	BBCH
Stage Majority, Percent:	V1
Height, Unit:	2.5 IN

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Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	AMBTR W
Height, Unit:	3.5 IN
Height Minimum, Maximum:	2 5
Density, Unit:	20 YD2
Pest 2 Code, Type, Scale:	CHEAL W
Height, Unit:	1 IN
Density, Unit:	3 YD2
Pest 3 Code, Type, Scale:	SETFA W
Height, Unit:	2.5 IN
Height Minimum, Maximum:	1 4
Density, Unit:	30 YD2
Pest 4 Code, Type, Scale:	AMARE W
Height, Unit:	0.5 IN
Density, Unit:	2 YD2

Application Equipment

	A
Appl. Equipment:	CO2 BKPK
Equipment Type:	SPRBAC
Operation Pressure, Unit:	17 PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	XR 110 02
Nozzle Spacing, Unit:	15 IN
Nozzles/Row:	8
Boom Length, Unit:	10 FT
Boom Height, Unit:	18 IN
Ground Speed, Unit:	3 MPH
Carrier:	H20
Water Hardness (ppm CaCO3):	150
Spray Volume, Unit:	15 gal/ac
Mix Size, Unit:	1.8 liters
Propellant:	C02
Tank Mix (Y/N):	N no

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5
	Pest Type					W Weed	W Weed	W Weed	W Weed
	Pest Code					AMBTR	SETFA	AMBTR	SETFA
	Pest Scientific Name					Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi
	Pest Name					Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail
	Crop Code				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
	BBCH Scale				BSOY	BSOY	BSOY	BSOY	BSOY
	Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
	Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean
	Rating Date				6-15-2011	6-15-2011	6-15-2011	7-11-2011	7-11-2011
	Rating Type				PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%	%
	Number of Subsamples				1	1	1	1	1
	Crop Stage Majority				V4	V4	V4		
	Pest Stage Majority					12 IN	10 IN	48-86 IN	12-36 IN
	Pest Density, Unit					10 YD2	100 YD2	32.5YD2	17.5YD2
	Assessed By				JR/RT	JR/RT		CB	CB
	Days After First/Last Applic.				14 14	14 14	14 14	40 40	40 40
	Trt-Eval Interval				14 DA-A	14 DA-A	14 DA-A	40 DA-A	40 DA-A
	Plant-Eval Interval				36 DP-1	36 DP-1	36 DP-1	62 DP-1	62 DP-1
	Days After Emergence				30 DE-1	30 DE-1	30 DE-1	56 DE-1	56 DE-1
1	Untreated Check				0.0 b	0.0 b	0.0 c	0.0 b	0.0 c
2	Roundup PowerMax 4.5 SL	0.77	lb ae/a	A	0.0 b	63.8 a	67.0 b	57.5 a	60.0 b
	AMS - Liquid	17	lb ai/100 gal	A					
3	Zidua (85 WG)	0.106	lb ai/a	A	0.5 b	77.5 a	92.3 a	80.0 a	99.8 a
	Extreme (2.17 SL)	0.81	lb ai/a	A					
	AMS - Liquid	17	lb ai/100 gal	A					
4	Zidua (85 WG)	0.106	lb ai/a	A	0.3 b	65.8 a	92.0 a	64.5 a	98.8 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	A					
	AMS - Liquid	17	lb ai/100 gal	A					
5	Warrant (3 CS)	1.31	lb ai/a	A	1.8 ab	71.3 a	93.0 a	65.0 a	97.0 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	A					
	AMS - Liquid	17	lb ai/100 gal	A					
6	Prefix (5.29 EC)	1.31	lb ai/a	A	3.8 a	75.0 a	95.0 a	71.3 a	99.8 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	A					
	AMS - Liquid	17	lb ai/100 gal	A					
7	Anthem (2.2 SC)	0.103	lb ai/a	A	2.8 a	73.0 a	92.8 a	61.3 a	98.8 a
	Roundup PowerMax 4.5 SL	0.77	lb ae/a	A					
	AMS - Liquid	17	lb ai/100 gal	A					
	LSD (P=.05)				1.72	11.26	3.96	26.65	5.75
	Standard Deviation				1.15	7.58	2.67	17.94	3.87
	CV				89.81	12.44	3.51	31.43	4.89
	Bartlett's X2				6.053	2.212	4.41	6.566	24.178
	P(Bartlett's X2)				0.195	0.819	0.353	0.255	0.001*
	Replicate F				0.500	2.391	0.723	3.010	0.840
	Replicate Prob(F)				0.6870	0.1024	0.5514	0.0573	0.4894
	Treatment F				6.714	51.886	684.708	8.537	381.770
	Treatment Prob(F)				0.0007	0.0001	0.0001	0.0002	0.0001

Pest Type
W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
Pest Code
AMBTR, Ambrosia trifida, = US
SETFA, Setaria faberi, = US
Crop Code

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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GLXMA, BSOY, Glycine max, = US

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

Rating Unit
% = percent

YD2 = per square yard

Plant-Eval Interval
36 DP-1 = 1 GLXMA 5-10-2011
62 DP-1 = 1 GLXMA 5-10-2011