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NON-GMO pre followed by post

Trial ID: 09S-THP-CTS-72   Protocol ID: 09NONGMO
Location: Throckmorton PAC   Study Director: Paul Marquardt/Melissa Kruger
Project ID: 09NONGMO   Investigator: Dr. Mark M. Loux
                                 Sponsor Contact:

General Trial Information

Study Director: Paul Marquardt/Melissa Kruger **Title:** Research Associate
Investigator: Dr. Bill Johnson   **Title:** Professor

Discipline: H herbicide
Trial Status: E established
Initiation Date: 5/12/09

Trial Location

City: West Lafayette
State/Prov.: IN
Postal Code: 47907
Country: USA   United States

Objectives:
Non-GMO Pre followed by Post

Personnel

Study Director: Paul Marquardt/Melissa Kruger **Title:** Research Associate
Affiliation: Purdue University
Address: 915 W. State Street, Department of Botany & Plant Path.
Location: West Lafayette, IN
Postal Code: 47907   **E-mail:** pmarquar@purdue.edu
Phone No.: 765-494-4621   **Mobile No.:** 765-409-6369
Investigator: Dr. Bill Johnson   **Title:** Professor
Affiliation: Purdue University
Address: 915 W. State Street, Department of Botany & Plant Path.
Location: West Lafayette, IN
Postal Code: 47907   **E-mail:** wgj@purdue.edu

Cooperator/Landowner

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

Crop Description

Crop 1:   GLXMA   Glycine max   Soybean
Variety: P93M62   **Description:** Non-GMO
BBCH Scale: BSOY   **Planting Date:** 5/12/09
Planting Method: DIRDRI   direct drilled   **Rate, Unit:** 160000 P/A
Depth, Unit: 1   IN
Row Spacing, Unit: 15   IN   **Spacing Within Row, Unit:** 2.5   IN
Seed Bed: CLOTRA   cloddy/trashy   **Soil Temperature, Unit:** 64   F
Soil Moisture: ABONOR above normal   **Emergence Date:** 5/24/09
Harvested Width, Unit: 10   FT   **Harvested Length, Unit:** 25   FT

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:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed

Pest 5 Type: W **Code:** TAROF Taraxacum officinale
Common Name: Common dandelion

Pest 6 Type: W **Code:** IPOHE Ipomoea hederacea
Common Name: Ivyleaf morningglory

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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:** NOTILL   no-till
Replications: 4   **Study Design:** RACOBL Randomized Complete Block (RCB)
                          Untreated Arrangement: INCLUDED   single control randomized in each block

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Field Prep./Maintenance:
1X blanket of glyphosate 1 week prior to planting to burndown weeds due to no-till planting

Soil Description

Description Name: Silty Loam
          % OM: 3.1   **Texture:** SIL   silt loam
          pH: 6   **Soil Name:** Tornonto-Millbrook
          CEC: 11.1

Application Description

	A	B	C
Application Date:	5/12/09	6/23/09	7/16/09
Time of Day:	5:00 PM	6:06 AM	7:40 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREPRE	EAPOWE	LAPOWE
Application Placement:	BANT	BANT	BANT
Applied By:	CB	PM	RH
Air Temperature, Unit:	74 F	73	68 F
% Relative Humidity:	34	92	88
Wind Velocity, Unit:	7 mph	1 MPH	4 MPH
Wind Direction:	SSE	E	W
Dew Presence (Y/N):	N no	Y yes	Y yes
Soil Temperature, Unit:	64 F	75 F	71 F
Soil Moisture:	ABONOR	SLIWET	WET
% Cloud Cover:	10	0	10
Next Rain Occurred On:	5/13/09		

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	00	V3	R2 60
Stage Minimum, Percent:		V3	R2 60
Stage Maximum, Percent:		V4	R3 40
Height, Unit:		6.5 IN	18 IN
Height Minimum, Maximum:		5 8	12 24

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Stage Minimum, Percent:		cotyl	34
Stage Maximum, Percent:		3 node	38
Height, Unit:		4 IN	21 IN
Height Minimum, Maximum:		1 7	6 36
Density, Unit:		1 YD2	2 YD2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Stage Minimum, Percent:			12
Stage Maximum, Percent:			18
Height, Unit:		7 IN	19 IN
Height Minimum, Maximum:		2 12	2 36
Density, Unit:		7.5 FT2	125 YD2
Pest 3 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W
Stage Minimum, Percent:			36
Stage Maximum, Percent:			39
Height, Unit:			10 IN
Height Minimum, Maximum:			2 18
Density, Unit:			2 YD2
Pest 4 Code, Type, Scale:	AMBEL W	AMBEL W	AMBEL W
Stage Minimum, Percent:			32
Stage Maximum, Percent:			36
Height, Unit:			21 IN
Height Minimum, Maximum:			6 36
Density, Unit:			1 YD2
Pest 5 Code, Type, Scale:	TAROF W	TAROF W	TAROF W
Stage Minimum, Percent:		11	
Stage Maximum, Percent:		60	
Height, Unit:		7 IN	
Height Minimum, Maximum:		2 12	
Density, Unit:		1 YD2	
Pest 6 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W
Stage Minimum, Percent:		10	
Stage Maximum, Percent:		10	
Height, Unit:		1.5 IN	
Height Minimum, Maximum:		0 3	
Density, Unit:	YD2	1 YD2	

Application Equipment

	A	B	C
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	SPRBAC	SPRBAC	SPRBAC
Operating Pressure, Unit:	17 psi	17 psi	17 psi
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	XR11002	XR11002	XR11002
Nozzle Spacing, Unit:	15 IN	15 IN	15 IN
Nozzles/Row:	8	8	8
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	18 IN	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	H20	H20	H20
Water Hardness (ppm CaCO3):	150	150	150
Spray Volume, Unit:	15 gal/ac	15 gal/ac	15 gal/ac
Mix Size, Unit:	1.8 liters	1.8 liters	1.8 liters
Propellant:	CO2	CO2	CO2
Tank Mix (Y/N):	N no	N no	N no

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Trt No	Treatment Application Comment
6	Plot 106 did not get sprayed with Application B (EAPOWE)

No. Date	By	Deviations
1.5/12/09	PM	Planted no-till due to wet conditions and inability to get into the field for tillage operations.

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Trial ID: 09S-THP-CTS-72   Protocol ID: 09NONGMO
Location: Throckmorton PAC   Study Director: Paul Marquardt/Melissa Kruger
Project ID: 09NONGMO   Investigator: Dr. Mark M. Loux
Sponsor Contact:

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	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
Crop Variety			P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date			6/24/09	6/24/09	6/24/09	6/29/09	6/29/09	6/29/09
Rating Type			PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit			%	%	%	%	%	%
Number of Subsamples			1	1	1	1	1	1
Crop Stage Majority			V3	V3	V3	R1	R1	R1
Pest Stage Majority				4-6"	1-8"		2-8"	1-10"
Pest Density, Unit				1 YD2	25 YD2		2 YD2	20 FT2
Assessed By			PM	PM	PM	JD/JM	JD/JM	JD/JM
Days After First/Last Applic.			43 1	43 1	43 1	48 6	48 6	48 6
Plant-Eval Interval			43 DP-1	43 DP-1	43 DP-1	48 DP-1	48 DP-1	48 DP-1
Days After Emergence			31 DE-	31 DE-	31 DE-	36 DE-	36 DE-	36 DE-
ARM Action Codes								
Number of Decimals								

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6
1	Valor SX	0.064	lb ai/a	A	9.0 b	97.5 a	75.0 a	1.0 c	95.0 a	98.5 a
	Flexstar	0.305	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
2	Valor SX	0.064	lb ai/a	A	5.5 b	260.5 a	87.5 a	1.5 c	92.5 a	98.8 a
	Flexstar	0.305	lb ai/a	B						
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
3	Valor SX	0.064	lb ai/a	A	1.3 b	71.3 a	45.0 a	0.0 c	75.0 a	85.0 ab
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
4	Valor SX	0.064	lb ai/a	A	9.0 b	93.3 a	59.5 a	1.8 c	98.0 a	94.5 a
	Flexstar	0.305	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
	Cobra	0.156	lb ai/a	C						
	Superb HC	0.5	% v/v	C						
5	Valor SX	0.064	lb ai/a	A	0.5 b	56.3 a	45.0 a	0.3 c	85.0 a	74.0 b
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
	Cobra	0.156	lb ai/a	C						
	Superb HC	0.5	% v/v	C						
6	Valor SX	0.064	lb ai/a	A	32.5 a	95.5 a	87.5 a	4.3 c	91.3 a	97.3 a
	Cobra	0.195	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
7	Valor SX	0.064	lb ai/a	A	18.8 b	282.5 a	93.0 a	1.5 c	95.0 a	96.8 a
	Flexstar	0.235	lb ai/a	B						
	Classic	0.0078	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						

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					W Weed	W Weed		W Weed	W Weed
Pest Type									
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	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
Crop Variety				P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date				6/24/09	6/24/09	6/24/09	6/29/09	6/29/09	6/29/09
Rating Type				PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit				%	%	%	%	%	%
Number of Subsamples				1	1	1	1	1	1
Crop Stage Majority				V3	V3	V3	R1	R1	R1
Pest Stage Majority					4-6"	1-8"		2-8"	1-10"
Pest Density, Unit					1 YD2	25 YD2		2 YD2	20 FT2
Assessed By				PM	PM	PM	JD/JM	JD/JM	JD/JM
Days After First/Last Applic.				43 1	43 1	43 1	48 6	48 6	48 6
Plant-Eval Interval				43 DP-1	43 DP-1	43 DP-1	48 DP-1	48 DP-1	48 DP-1
Days After Emergence				31 DE-	31 DE-	31 DE-	36 DE-	36 DE-	36 DE-
ARM Action Codes									
Number of Decimals									

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6
8	Valor SX	0.064	lb ai/a	A	8.0 b	50.0 a	76.8 a	27.5 b	76.3 a	99.8 a
	Roundup Power Max	0.77	lb ae/a	B						
	N-PAK AMS	2.5	% v/v	B						
9	Valor XLT @ 3.5oz			A	11.0 b	94.3 a	89.8 a	3.0 c	94.8 a	94.8 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.305	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
10	Valor XLT @ 3.5oz			A	6.8 b	93.3 a	89.5 a	1.0 c	98.5 a	99.0 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.305	lb ai/a	B						
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
11	Valor XLT @ 3.5oz			A	1.3 b	86.8 a	69.3 a	0.3 c	91.0 a	91.5 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
12	Valor XLT @ 3.5oz			A	11.3 b	97.0 a	94.5 a	2.0 c	98.8 a	98.5 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.305	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
	Cobra	0.156	lb ai/a	C						
	Superb HC	0.5	% v/v	C						
13	Valor XLT @ 3.5oz			A	2.8 b	93.8 a	81.3 a	0.3 c	90.8 a	94.8 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
	Cobra	0.156	lb ai/a	C						
	Superb HC	0.5	% v/v	C						
14	Valor XLT @ 3.5oz			A	38.8 a	96.0 a	97.3 a	6.8 c	99.0 a	99.5 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Cobra	0.195	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						

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					W Weed	W Weed		W Weed	W Weed
Pest Type									
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	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
Crop Variety				P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date				6/24/09	6/24/09	6/24/09	6/29/09	6/29/09	6/29/09
Rating Type				PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit				%	%	%	%	%	%
Number of Subsamples				1	1	1	1	1	1
Crop Stage Majority				V3	V3	V3	R1	R1	R1
Pest Stage Majority					4-6"	1-8"		2-8"	1-10"
Pest Density, Unit					1 YD2	25 YD2		2 YD2	20 FT2
Assessed By				PM	PM	PM	JD/JM	JD/JM	JD/JM
Days After First/Last Applic.				43 1	43 1	43 1	48 6	48 6	48 6
Plant-Eval Interval				43 DP-1	43 DP-1	43 DP-1	48 DP-1	48 DP-1	48 DP-1
Days After Emergence				31 DE-	31 DE-	31 DE-	36 DE-	36 DE-	36 DE-
ARM Action Codes									
Number of Decimals									

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6
15	Valor XLT @ 3.5oz			A	6.8 b	97.0 a	94.5 a	2.8 c	97.5 a	99.0 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.235	lb ai/a	B						
	Classic	0.0078	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
16	Valor XLT @ 3.5oz			A	5.0 b	92.5 a	78.8 a	45.0 a	88.0 a	100.0 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Roundup Power Max	0.77	lb ae/a	B						
	N-PAK AMS	2.5	% v/v	B						
17	Valor XLT @ 3.5oz			A	11.8 b	97.0 a	85.3 a	1.8 c	99.0 a	97.8 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.313	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.094	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						
18	Valor XLT @ 3.5oz			A	15.0 b	93.0 a	85.8 a	2.0 c	99.0 a	98.0 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.313	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.188	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						
19	Valor XLT @ 3.5oz			A	16.8 b	99.5 a	99.0 a	3.3 c	99.8 a	99.8 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.392	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.094	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						

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					W Weed	W Weed		W Weed	W Weed
Pest Type									
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	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
Crop Variety				P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date				6/24/09	6/24/09	6/24/09	6/29/09	6/29/09	6/29/09
Rating Type				PHYGEN	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit				%	%	%	%	%	%
Number of Subsamples				1	1	1	1	1	1
Crop Stage Majority				V3	V3	V3	R1	R1	R1
Pest Stage Majority					4-6"	1-8"		2-8"	1-10"
Pest Density, Unit					1 YD2	25 YD2		2 YD2	20 FT2
Assessed By				PM	PM	PM	JD/JM	JD/JM	JD/JM
Days After First/Last Applic.				43 1	43 1	43 1	48 6	48 6	48 6
Plant-Eval Interval				43 DP-1	43 DP-1	43 DP-1	48 DP-1	48 DP-1	48 DP-1
Days After Emergence				31 DE-	31 DE-	31 DE-	36 DE-	36 DE-	36 DE-
ARM Action Codes									
Number of Decimals									

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6
20	Valor XLT @ 3.5oz			A	18.8 b	96.5 a	88.0 a	3.5 c	97.5 a	96.8 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.392	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.188	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						
21	Untreated				0.0 b	0.0 a	0.0 b	0.0 c	0.0 b	0.0 c
22	Untreated				0.0 b	0.0 a	0.0 b	0.0 c	0.0 b	0.0 c

	1	2	3	4	5	6
LSD (P=.05)	11.43	158.16	31.05	7.99	15.40	12.02
Standard Deviation	8.08	111.83	21.95	5.65	10.89	8.50
CV	77.21	114.8	29.78	113.76	12.87	9.77
Bartlett's X2	70.069	270.479	67.231	147.173	105.189	141.347
P(Bartlett's X2)	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*
Replicate F	1.750	0.576	2.028	1.734	1.245	0.560
Replicate Prob(F)	0.1658	0.6331	0.1189	0.1691	0.3009	0.6433
Treatment F	6.200	1.290	6.572	14.100	26.896	45.795
Treatment Prob(F)	0.0001	0.2167	0.0001	0.0001	0.0001	0.0001

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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				W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Type				AMBTR	SETFA	AMBTR	SETFA	SETFA	AMBTR
Pest Code				Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Setaria faberi	Ambrosia trifi>
Pest Scientific Name				Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail	Giant foxtail	Giant ragweed
Pest Name				GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Crop Code				BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
BBCH Scale				Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max
Crop Scientific Name									
Crop Name				Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Crop Variety				P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date				7/13/09	7/13/09	7/30/09	7/30/09	8/5/09	8/5/09
Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit				%	%	%	%	%	%
Number of Subsamples				1	1	1	1	1	1
Crop Stage Majority				R2	R2	R4	R4	R4	R4
Pest Stage Majority				1-18"	2-15"	24-30"	6-48"	36-48"	24-72"
Pest Density, Unit				3 YD2	100 YD2	2.5 YD2	125 YD2	125 YD2	2.5 YD2
Assessed By				PM	PM	PM	PM		
Days After First/Last Applic.				62 20	62 20	79 14	79 14	85 20	85 20
Plant-Eval Interval				62 DP-1	62 DP-1	79 DP-1	79 DP-1	85 DP-1	85 DP-1
Days After Emergence				50 DE-	50 DE-	67 DE-	67 DE-	73 DE-	73 DE-
ARM Action Codes									
Number of Decimals									

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	7	8	9	10	11	12
1	Valor SX	0.064	lb ai/a	A	91.3 ab	97.0 a	86.3 ab	95.3 a	93.0 a	86.3 abc
	Flexstar	0.305	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
2	Valor SX	0.064	lb ai/a	A	80.8 abc	97.8 a	82.5 abc	96.5 a	96.3 a	81.3 abc
	Flexstar	0.305	lb ai/a	B						
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
3	Valor SX	0.064	lb ai/a	A	60.0 abc	94.5 a	62.5 bc	95.0 a	95.0 a	73.3 abc
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
4	Valor SX	0.064	lb ai/a	A	92.5 ab	92.5 a	99.5 a	87.0 a	91.3 a	99.8 a
	Flexstar	0.305	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
	Cobra	0.156	lb ai/a	C						
	Superb HC	0.5	% v/v	C						
5	Valor SX	0.064	lb ai/a	A	47.5 c	88.3 a	83.8 ab	96.0 a	90.8 a	94.3 ab
	Firstrate	0.0158	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
	Cobra	0.156	lb ai/a	C						
	Superb HC	0.5	% v/v	C						
6	Valor SX	0.064	lb ai/a	A	74.3 abc	90.8 a	67.5 abc	83.8 a	92.0 a	71.3 abc
	Cobra	0.195	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
7	Valor SX	0.064	lb ai/a	A	81.3 abc	97.8 a	70.5 abc	94.5 a	94.3 a	72.5 abc
	Flexstar	0.235	lb ai/a	B						
	Classic	0.0078	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						

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Pest Type				W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code				AMBTR	SETFA	AMBTR	SETFA	SETFA	AMBTR
Pest Scientific Name				Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Setaria faberi	Ambrosia trifi>
Pest Name				Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail	Giant foxtail	Giant ragweed
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
Crop Variety				P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date				7/13/09	7/13/09	7/30/09	7/30/09	8/5/09	8/5/09
Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit				%	%	%	%	%	%
Number of Subsamples				1	1	1	1	1	1
Crop Stage Majority				R2	R2	R4	R4	R4	R4
Pest Stage Majority				1-18"	2-15"	24-30"	6-48"	36-48"	24-72"
Pest Density, Unit				3 YD2	100 YD2	2.5 YD2	125 YD2	125 YD2	2.5 YD2
Assessed By				PM	PM	PM	PM		
Days After First/Last Applic.				62 20	62 20	79 14	79 14	85 20	85 20
Plant-Eval Interval				62 DP-1	62 DP-1	79 DP-1	79 DP-1	85 DP-1	85 DP-1
Days After Emergence				50 DE-	50 DE-	67 DE-	67 DE-	73 DE-	73 DE-
ARM Action Codes									
Number of Decimals									

Trt No.	Treatment Name	Rate / Rate Unit	Appl Code	7	8	9	10	11	12
8	Valor SX	0.064 lb ai/a	A	72.5 abc	97.5 a	65.0 abc	89.0 a	81.5 a	60.0 c
	Roundup Power Max	0.77 lb ae/a	B						
	N-PAK AMS	2.5 % v/v	B						
9	Valor XLT @ 3.5oz		A	85.0 abc	92.0 a	80.0 abc	92.0 a	90.5 a	86.3 abc
	Valor SX	0.0653 lb ai/a	A						
	Classic	0.0227 lb ai/a	A						
	Flexstar	0.305 lb ai/a	B						
	Select Max	0.07 lb ai/a	B						
	Superb HC	0.5 % v/v	B						
	N-PAK AMS	2.5 % v/v	B						
10	Valor XLT @ 3.5oz		A	92.5 ab	97.8 a	96.5 ab	99.5 a	96.3 a	90.0 ab
	Valor SX	0.0653 lb ai/a	A						
	Classic	0.0227 lb ai/a	A						
	Flexstar	0.305 lb ai/a	B						
	Firstrate	0.0158 lb ai/a	B						
	Select Max	0.07 lb ai/a	B						
	Superb HC	0.5 % v/v	B						
	N-PAK AMS	2.5 % v/v	B						
11	Valor XLT @ 3.5oz		A	51.3 bc	96.5 a	52.5 c	97.5 a	96.8 a	65.0 bc
	Valor SX	0.0653 lb ai/a	A						
	Classic	0.0227 lb ai/a	A						
	Firstrate	0.0158 lb ai/a	B						
	Select Max	0.07 lb ai/a	B						
	Superb HC	0.5 % v/v	B						
	N-PAK AMS	2.5 % v/v	B						
12	Valor XLT @ 3.5oz		A	100.0 a	97.8 a	100.0 a	96.0 a	96.8 a	100.0 a
	Valor SX	0.0653 lb ai/a	A						
	Classic	0.0227 lb ai/a	A						
	Flexstar	0.305 lb ai/a	B						
	Select Max	0.07 lb ai/a	B						
	Superb HC	0.5 % v/v	B						
	N-PAK AMS	2.5 % v/v	B						
	Cobra	0.156 lb ai/a	C						
	Superb HC	0.5 % v/v	C						
13	Valor XLT @ 3.5oz		A	63.8 abc	93.8 a	88.8 ab	94.5 a	95.0 a	92.5 ab
	Valor SX	0.0653 lb ai/a	A						
	Classic	0.0227 lb ai/a	A						
	Firstrate	0.0158 lb ai/a	B						
	Select Max	0.07 lb ai/a	B						
	Superb HC	0.5 % v/v	B						
	N-PAK AMS	2.5 % v/v	B						
	Cobra	0.156 lb ai/a	C						
	Superb HC	0.5 % v/v	C						
14	Valor XLT @ 3.5oz		A	97.5 a	98.0 a	95.0 ab	97.5 a	97.8 a	93.3 ab
	Valor SX	0.0653 lb ai/a	A						
	Classic	0.0227 lb ai/a	A						
	Cobra	0.195 lb ai/a	B						
	Select Max	0.07 lb ai/a	B						
	Superb HC	0.5 % v/v	B						
	N-PAK AMS	2.5 % v/v	B						

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Pest Type				W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code				AMBTR	SETFA	AMBTR	SETFA	SETFA	AMBTR
Pest Scientific Name				Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Setaria faberi	Ambrosia trifi>
Pest Name				Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail	Giant foxtail	Giant ragweed
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
Crop Variety				P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date				7/13/09	7/13/09	7/30/09	7/30/09	8/5/09	8/5/09
Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit				%	%	%	%	%	%
Number of Subsamples				1	1	1	1	1	1
Crop Stage Majority				R2	R2	R4	R4	R4	R4
Pest Stage Majority				1-18"	2-15"	24-30"	6-48"	36-48"	24-72"
Pest Density, Unit				3 YD2	100 YD2	2.5 YD2	125 YD2	125 YD2	2.5 YD2
Assessed By				PM	PM	PM	PM		
Days After First/Last Applic.				62 20	62 20	79 14	79 14	85 20	85 20
Plant-Eval Interval				62 DP-1	62 DP-1	79 DP-1	79 DP-1	85 DP-1	85 DP-1
Days After Emergence				50 DE-	50 DE-	67 DE-	67 DE-	73 DE-	73 DE-
ARM Action Codes									
Number of Decimals									

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	7	8	9	10	11	12
15	Valor XLT @ 3.5oz			A	93.0 ab	97.0 a	91.8 ab	96.5 a	96.0 a	84.0 abc
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.235	lb ai/a	B						
	Classic	0.0078	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Superb HC	0.5	% v/v	B						
	N-PAK AMS	2.5	% v/v	B						
16	Valor XLT @ 3.5oz			A	95.8 a	99.8 a	90.0 ab	83.3 a	79.5 a	91.3 ab
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Roundup Power Max	0.77	lb ae/a	B						
	N-PAK AMS	2.5	% v/v	B						
17	Valor XLT @ 3.5oz			A	98.8 a	94.3 a	99.8 a	93.3 a	94.0 a	98.8 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.313	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.094	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						
18	Valor XLT @ 3.5oz			A	91.3 ab	96.5 a	100.0 a	98.3 a	97.3 a	97.5 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.313	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.188	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						
19	Valor XLT @ 3.5oz			A	95.0 a	99.0 a	100.0 a	98.8 a	98.8 a	97.5 a
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.392	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.094	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	AMBTR	SETFA	SETFA	AMBTR
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Setaria faberi	Ambrosia trifi>
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail	Giant foxtail	Giant ragweed
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
Crop Variety	P93M62	P93M62	P93M62	P93M62	P93M62	P93M62
Rating Date	7/13/09	7/13/09	7/30/09	7/30/09	8/5/09	8/5/09
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	R2	R2	R4	R4	R4	R4
Pest Stage Majority	1-18"	2-15"	24-30"	6-48"	36-48"	24-72"
Pest Density, Unit	3 YD2	100 YD2	2.5 YD2	125 YD2	125 YD2	2.5 YD2
Assessed By	PM	PM	PM	PM		
Days After First/Last Applic.	62 20	62 20	79 14	79 14	85 20	85 20
Plant-Eval Interval	62 DP-1	62 DP-1	79 DP-1	79 DP-1	85 DP-1	85 DP-1
Days After Emergence	50 DE-	50 DE-	67 DE-	67 DE-	73 DE-	73 DE-
ARM Action Codes						
Number of Decimals						

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	7	8	9	10	11	12
20	Valor XLT @ 3.5oz			A	87.5 abc	97.0 a	92.5 ab	96.5 a	95.3 a	95.0 ab
	Valor SX	0.0653	lb ai/a	A						
	Classic	0.0227	lb ai/a	A						
	Flexstar	0.392	lb ai/a	B						
	Select Max	0.07	lb ai/a	B						
	Destiny HC	0.5	% v/v	B						
	N-PAK AMS	5	% v/v	B						
	Cobra	0.188	lb ai/a	C						
	Destiny HC	0.5	% v/v	C						
	N-PAK AMS	5	% v/v	C						
21	Untreated				0.0 d	0.0 b	0.0 d	0.0 b	0.0 b	0.0 d
22	Untreated				0.0 d	0.0 b	0.0 d	0.0 b	0.0 b	0.0 d

	7	8	9	10	11	12
LSD (P=.05)	24.68	6.64	19.81	8.97	10.75	17.65
Standard Deviation	17.45	4.70	14.01	6.34	7.60	12.48
CV	23.25	5.4	18.08	7.42	8.95	15.87
Bartlett's X2	49.186	48.544	70.434	54.853	74.123	65.198
P(Bartlett's X2)	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*
Replicate F	1.598	0.680	1.830	3.421	3.598	0.408
Replicate Prob(F)	0.1988	0.5675	0.1508	0.0225	0.0182	0.7480
Treatment F	10.785	145.339	16.694	78.191	53.820	20.060
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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				W Weed	W Weed		
Pest Type				W Weed	W Weed		
Pest Code				AMBTR	SETFA		
Pest Scientific Name				Ambrosia trifi>	Setaria faberi		
Pest Name				Giant ragweed	Giant foxtail		
Crop Code				GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale				BSOY	BSOY	BSOY	BSOY
Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max
Crop Name				Soybean	Soybean	Soybean	Soybean
Crop Variety				P93M62	P93M62	P93M62	P93M62
Rating Date				10/7/09	10/7/09	10/19/09	10/19/09
Rating Type				CONTRO	CONTRO	YIELD	YIELD
Rating Unit				%	%	LB	BU
Number of Subsamples				1	1	1	1
Crop Stage Majority				R8	R8	R8	R8
Pest Stage Majority				36-72"	36-60"		
Pest Density, Unit				2.5 YD2	125 YD2		
Assessed By						PM	PM
Days After First/Last Applic.				148　83	148　83	160　95	160　95
Plant-Eval Interval				148 DP-1	148 DP-1	160 DP-1	160 DP-1
Days After Emergence				136 DE	136 DE	148 DE	148 DE
ARM Action Codes							TY1
Number of Decimals							1

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16
1	Valor SX	0.064	lb ai/a	A	80.8 abc	96.5 a	18.62 a	53.8 a
	Flexstar	0.305	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
2	Valor SX	0.064	lb ai/a	A	75.0 a-d	95.8 a	21.30 a	61.5 a
	Flexstar	0.305	lb ai/a	B				
	Firstrate	0.0158	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
3	Valor SX	0.064	lb ai/a	A	65.0 a-d	95.0 a	18.18 a	52.5 a
	Firstrate	0.0158	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
4	Valor SX	0.064	lb ai/a	A	95.0 ab	88.3 a	17.83 ab	51.5 ab
	Flexstar	0.305	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	Cobra	0.156	lb ai/a	C				
	Superb HC	0.5	% v/v	C				
5	Valor SX	0.064	lb ai/a	A	82.5 abc	88.3 a	16.40 ab	47.4 ab
	Firstrate	0.0158	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	Cobra	0.156	lb ai/a	C				
	Superb HC	0.5	% v/v	C				
6	Valor SX	0.064	lb ai/a	A	67.5 a-d	86.0 a	17.98 ab	51.9 ab
	Cobra	0.195	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
7	Valor SX	0.064	lb ai/a	A	68.8 a-d	96.0 a	19.93 a	57.5 a
	Flexstar	0.235	lb ai/a	B				
	Classic	0.0078	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				

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Pest Type				W Weed	W Weed		
Pest Code				AMBTR	SETFA		
Pest Scientific Name				Ambrosia trifi>	Setaria faberi		
Pest Name				Giant ragweed	Giant foxtail		
Crop Code				GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale				BSOY	BSOY	BSOY	BSOY
Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max
Crop Name				Soybean	Soybean	Soybean	Soybean
Crop Variety				P93M62	P93M62	P93M62	P93M62
Rating Date				10/7/09	10/7/09	10/19/09	10/19/09
Rating Type				CONTRO	CONTRO	YIELD	YIELD
Rating Unit				%	%	LB	BU
Number of Subsamples				1	1	1	1
Crop Stage Majority				R8	R8	R8	R8
Pest Stage Majority				36-72"	36-60"		
Pest Density, Unit				2.5 YD2	125 YD2		
Assessed By						PM	PM
Days After First/Last Applic.				148 83	148 83	160 95	160 95
Plant-Eval Interval				148 DP-1	148 DP-1	160 DP-1	160 DP-1
Days After Emergence				136 DE	136 DE	148 DE	148 DE
ARM Action Codes							TY1
Number of Decimals							1

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16
8	Valor SX	0.064	lb ai/a	A	48.8 cd	52.0 b		
	Roundup Power Max	0.77	lb ae/a	B				
	N-PAK AMS	2.5	% v/v	B				
9	Valor XLT @ 3.5oz			A	77.5 a-d	88.3 a	18.48 a	53.3 a
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.305	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
10	Valor XLT @ 3.5oz			A	90.0 ab	98.3 a	19.48 a	56.2 a
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.305	lb ai/a	B				
	Firstrate	0.0158	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
11	Valor XLT @ 3.5oz			A	61.3 bcd	93.8 a	19.55 a	56.4 a
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Firstrate	0.0158	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
12	Valor XLT @ 3.5oz			A	100.0 a	90.8 a	16.98 ab	49.0 ab
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.305	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	Cobra	0.156	lb ai/a	C				
	Superb HC	0.5	% v/v	C				
13	Valor XLT @ 3.5oz			A	77.0 a-d	92.0 a	16.70 ab	48.2 ab
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Firstrate	0.0158	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	Cobra	0.156	lb ai/a	C				
	Superb HC	0.5	% v/v	C				
14	Valor XLT @ 3.5oz			A	89.3 ab	92.3 a	18.63 a	53.8 a
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Cobra	0.195	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				

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				W Weed	W Weed		
Pest Type				W Weed	W Weed		
Pest Code				AMBTR	SETFA		
Pest Scientific Name				Ambrosia trifi>	Setaria faberi		
Pest Name				Giant ragweed	Giant foxtail		
Crop Code				GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale				BSOY	BSOY	BSOY	BSOY
Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max
Crop Name				Soybean	Soybean	Soybean	Soybean
Crop Variety				P93M62	P93M62	P93M62	P93M62
Rating Date				10/7/09	10/7/09	10/19/09	10/19/09
Rating Type				CONTRO	CONTRO	YIELD	YIELD
Rating Unit				%	%	LB	BU
Number of Subsamples				1	1	1	1
Crop Stage Majority				R8	R8	R8	R8
Pest Stage Majority				36-72"	36-60"		
Pest Density, Unit				2.5 YD2	125 YD2		
Assessed By						PM	PM
Days After First/Last Applic.				148 83	148 83	160 95	160 95
Plant-Eval Interval				148 DP-1	148 DP-1	160 DP-1	160 DP-1
Days After Emergence				136 DE	136 DE	148 DE	148 DE
ARM Action Codes							TY1
Number of Decimals							1

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16
15	Valor XLT @ 3.5oz			A	77.5 a-d	92.0 a	20.88 a	60.3 a
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.235	lb ai/a	B				
	Classic	0.0078	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Superb HC	0.5	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
16	Valor XLT @ 3.5oz			A	45.0 d	26.3 c		
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Roundup Power Max	0.77	lb ae/a	B				
	N-PAK AMS	2.5	% v/v	B				
17	Valor XLT @ 3.5oz			A	98.8 a	92.8 a	17.98 ab	51.9 ab
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.313	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Destiny HC	0.5	% v/v	B				
	N-PAK AMS	5	% v/v	B				
	Cobra	0.094	lb ai/a	C				
	Destiny HC	0.5	% v/v	C				
	N-PAK AMS	5	% v/v	C				
18	Valor XLT @ 3.5oz			A	96.3 ab	96.3 a	17.50 ab	50.5 ab
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.313	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Destiny HC	0.5	% v/v	B				
	N-PAK AMS	5	% v/v	B				
	Cobra	0.188	lb ai/a	C				
	Destiny HC	0.5	% v/v	C				
	N-PAK AMS	5	% v/v	C				
19	Valor XLT @ 3.5oz			A	100.0 a	97.5 a	17.33 ab	50.0 ab
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.392	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Destiny HC	0.5	% v/v	B				
	N-PAK AMS	5	% v/v	B				
	Cobra	0.094	lb ai/a	C				
	Destiny HC	0.5	% v/v	C				
	N-PAK AMS	5	% v/v	C				

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				W Weed	W Weed		
Pest Type				W Weed	W Weed		
Pest Code				AMBTR	SETFA		
Pest Scientific Name				Ambrosia trifi>	Setaria faberi		
Pest Name				Giant ragweed	Giant foxtail		
Crop Code				GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale				BSOY	BSOY	BSOY	BSOY
Crop Scientific Name				Glycine max	Glycine max	Glycine max	Glycine max
Crop Name				Soybean	Soybean	Soybean	Soybean
Crop Variety				P93M62	P93M62	P93M62	P93M62
Rating Date				10/7/09	10/7/09	10/19/09	10/19/09
Rating Type				CONTRO	CONTRO	YIELD	YIELD
Rating Unit				%	%	LB	BU
Number of Subsamples				1	1	1	1
Crop Stage Majority				R8	R8	R8	R8
Pest Stage Majority				36-72"	36-60"		
Pest Density, Unit				2.5 YD2	125 YD2		
Assessed By						PM	PM
Days After First/Last Applic.				148 83	148 83	160 95	160 95
Plant-Eval Interval				148 DP-1	148 DP-1	160 DP-1	160 DP-1
Days After Emergence				136 DE	136 DE	148 DE	148 DE
ARM Action Codes							TY1
Number of Decimals							1

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16
20	Valor XLT @ 3.5oz			A	94.5 ab	99.5 a	16.10 ab	46.5 ab
	Valor SX	0.0653	lb ai/a	A				
	Classic	0.0227	lb ai/a	A				
	Flexstar	0.392	lb ai/a	B				
	Select Max	0.07	lb ai/a	B				
	Destiny HC	0.5	% v/v	B				
	N-PAK AMS	5	% v/v	B				
	Cobra	0.188	lb ai/a	C				
	Destiny HC	0.5	% v/v	C				
	N-PAK AMS	5	% v/v	C				
21	Untreated				0.0 e	0.0 d	14.68 ab	42.4 ab
22	Untreated				0.0 e	0.0 d	11.70 b	33.8 b

LSD (P=.05)	20.54	17.05	3.785	10.93
Standard Deviation	14.52	12.06	2.676	7.73
CV	20.09	15.09	15.03	15.03
Bartlett's X2	47.592	88.037	25.148	25.148
P(Bartlett's X2)	0.001*	0.001*	0.156	0.156
Replicate F	4.118	1.222	3.125	3.125
Replicate Prob(F)	0.0099	0.3092	0.0329	0.0329
Treatment F	15.025	26.078	2.590	2.590
Treatment Prob(F)	0.0001	0.0001	0.0030	0.0030

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NON-GMO pre followed by post

Trial ID: 09S-THP-CTS-72   Protocol ID: 09NONGMO
Location: Throckmorton PAC   Study Director: Paul Marquardt/Melissa Kruger
Project ID: 09NONGMO   Investigator: Dr. Mark M. Loux
Sponsor Contact:

Pest Type
 W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
Pest Code
 AMBTR, Ambrosia trifida, = US
 SETFA, Setaria faberi, = US
Crop Code
 GLXMA, BSOY, Glycine max, = US
Rating Type
 PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 YIELD = yield
Rating Unit
 % = percent
 LB = pound
 BU = bushel

 YD2 = per square yard
 FT2 = per square foot
Plant-Eval Interval
 43 DP-1 = 1 5/12/09
 48 DP-1 = 1 5/12/09
 62 DP-1 = 1 5/12/09
 79 DP-1 = 1 5/12/09
 85 DP-1 = 1 5/12/09
 148 DP-1 = 1 5/12/09
 160 DP-1 = 1 5/12/09
ARM Action Codes
 TY1 = 2.88731*[C15]