

Purdue University

Valor Interaction with Acetochlor

Trial ID: 14S-THP-CTS-42 Protocol ID: 14S-THP-CTS-42
 Location: Throckmorton Study Director: Bill Johnson
 Project ID: Fierce MD 64.08 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

Pest 3 Type: W **Code:** ABUTH Abutilon theophrasti
Common Name: velvetleaf

Pest 4 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 FT ²	Tillage Type: CONTIL conventional-till
Replications: 4	Study Design: RACOB L 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	C	D
Application Date:	May-8-2014	May-12-2014	May-30-2014	Jul-2-2014
Time of Day:	AM	AM		
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	ATPLAN	PREMCR	EAPOCR	LAPOCR
Application Placement:	SOIL	SOIL	FOLIAR	FOLIAR
Applied By:		George Todd		
Air Temperature, Unit:	74 F	73 F	77 F	77 F
% Relative Humidity:	62	83	42	66
Wind Velocity, Unit:	10 mph	7 mph	5.7 MPH	3 MPH
Wind Direction:	SW	S	NE	NW
Dew Presence (Y/N):	N no	Y yes	N no	Y yes
Soil Temperature, Unit:	64 F	69 F	78 F	72 F
Soil Moisture:	DRY	VERWET	DRY	SLIWET
% Cloud Cover:	15	40	10	10

Crop Stage At Each Application				
	A	B	C	D
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent:	00	01	12	60

Pest Stage At Each Application				
	A	B	C	D
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W	AMBTR W
Height, Unit:				20 IN
Height Minimum, Maximum:			1 4	
Density, Unit:			4 YD ²	2 FT ²
Pest 2 Code, Type, Scale:	SETFA W	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:		1		
Height, Unit:				15 IN
Height Minimum, Maximum:			1 3	
Density, Unit:			7 YD ²	
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W	ABUTH W
Height Minimum, Maximum:			1 2	
Density, Unit:			2 YD ²	
Pest 4 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W	IPOHE W
Height Minimum, Maximum:			1 2	
Density, Unit:			1 YD ²	

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Application Equipment

	A	B	C	D
Appl. Equipment:	CO2 FORD	CO2 BKPCK	CO2 FORD	CO2 FORD
Equipment Type:	SPTRMO	SPRBAC	SPTRMO	SPTRMO
Operation Pressure, Unit:	25 PSI	25 PSI	25 PSI	25 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	XR 100 02	XR 100 02	XR 100 02	XR 100 02
Nozzle Spacing, Unit:	20 IN	15 IN	20 IN	20 IN
Nozzles/Row:	6	8	6	6
Boom Length, Unit:	10 FT	10 FT	10 FT	10 FT
Ground Speed, Unit:	2.1 MPH	2.1 MPH	2.1 MPH	2.1 MPH
Carrier:	MEIGS	MEIGS	MEIGS	MEIGS
Spray Volume, Unit:	20 gal/ac	20 gal/ac	20 gal/ac	20 gal/ac
Mix Size, Unit:	2.5 liters	2.5 liters	2.5 liters	2.5 liters
Propellant:	CO2	CO2	CO2	CO2

Date	By	Notes
May-27-2014		Poor soybean stand - Replanted - 4 - 30" rows - population 75,000 seed/acre - Emergence date 6/2

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Trial ID: 14S-THP-CTS-42 Protocol ID: 14S-THP-CTS-42
 Location: Throckmorton Study Director: Bill Johnson
 Project ID: Fierce MD 64.08 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

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 Rate Unit	Growth Stage	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Weed-Free Check												101	502	801	1002
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		EAPOCR C	21 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		EAPOCR C	21 DAP	62.49 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		LAPOCR D	56 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		LAPOCR D	56 DAP	62.49 ml/mx					
2	Fierce (76 WG)	76 %		WG	2.28 oz ai/a		3 oz wt/a		ATPLAN A		2.808 g/mx	102	302	601	902	
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		EAPOCR C	21 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		EAPOCR C	21 DAP	62.49 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		LAPOCR D	56 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		LAPOCR D	56 DAP	62.49 ml/mx					
3	Warrant (3 CS)	3 LBA/GAL	SC		0.94 lb ai/a		1.25 qt/a		ATPLAN A		39.16 ml/mx	201	401	701	1001	
	Valor SX (51 WG)	51 %		WG	0.064 lb ai/a		2 oz wt/a		ATPLAN A		1.88 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		EAPOCR C	21 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		EAPOCR C	21 DAP	62.49 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		LAPOCR D	56 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		LAPOCR D	56 DAP	62.49 ml/mx					
4	Fierce (76 WG)	76 %		WG	2.28 oz ai/a		3 oz wt/a		PREMCR B	3 DAP	2.808 g/mx	202	402	702	901	
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		EAPOCR C	21 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		EAPOCR C	21 DAP	62.49 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		LAPOCR D	56 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		LAPOCR D	56 DAP	62.49 ml/mx					
5	Warrant (3 CS)	3 LBA/GAL	SC		0.94 lb ai/a		1.25 qt/a		PREMCR B	3 DAP	39.16 ml/mx	301	501	602	802	
	Valor SX (51 WG)	51 %		WG	0.064 lb ai/a		2 oz wt/a		PREMCR B	3 DAP	1.88 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		EAPOCR C	21 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		EAPOCR C	21 DAP	62.49 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a		32 oz/a		LAPOCR D	56 DAP	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal		10 qt/100 gal		LAPOCR D	56 DAP	62.49 ml/mx					

Sort Order: Treatment

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 Location: Throckmorton Study Director: Bill Johnson
 Project ID: Fierce MD 64.08 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

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		
Description		1st planting				1 st planting			
Rating Date	May-22-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-19-2014	Jun-19-2014		
Rating Type	STASUB	STASUB	PHYCHL	PHYNEC	PHYLMA	PHYSTU	PHYLMA		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Assessed By	MW								
Days After First/Last Applic.	14 10	26 4	26 4	26 4	26 4	42 20	42 20		
Plant-Eval Interval	15 DP-1	27 DP-1	27 DP-1	27 DP-1	27 DP-1	43 DP-1	43 DP-1		
Days After Emergence	9 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1	37 DE-1	37 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7
1 Weed-Free Check		101	90.0	77.0	0.0	0.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C 502	75.0	85.0	0.0	0.0	0.0	0.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	C 801	85.0	80.0	0.0	0.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	D 1002	85.0	95.0	0.0	0.0	0.0	0.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	D							
	Mean =		83.8	84.3	0.0	0.0	0.0	0.0	0.0
2 Fierce (76 WG)	2.28 oz ai/a	A 102	70.0	85.0	3.0	0.0	0.0	0.0	5.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C 302	10.0	20.0	0.0	0.0	0.0	0.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	C 601	20.0	75.0	0.0	0.0	0.0	10.0	5.0
Roundup PowerMax 4.5 SL	18 oz ae/a	D 902	50.0	85.0	0.0	0.0	0.0	7.0	3.0
AMS - Liquid	8.5 lb ai/100 gal	D							
	Mean =		37.5	66.3	0.8	0.0	0.0	4.3	4.5
3 Warrant (3 CS)	0.94 lb ai/a	A 201	85.0	70.0	3.0	0.0	0.0	0.0	0.0
Valor SX (51 WG)	0.064 lb ai/a	A 401	5.0	70.0	3.0	0.0	0.0	7.0	6.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C 701	50.0	80.0	5.0	10.0	7.0	7.0	3.0
AMS - Liquid	8.5 lb ai/100 gal	C 1001	65.0	65.0	7.0	3.0	7.0	20.0	5.0
Roundup PowerMax 4.5 SL	18 oz ae/a	D							
AMS - Liquid	8.5 lb ai/100 gal	D							
	Mean =		51.3	71.3	4.5	3.3	3.5	8.5	3.5
4 Fierce (76 WG)	2.28 oz ai/a	B 202	40.0	65.0	0.0	0.0	0.0	3.0	3.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C 402	5.0	40.0	0.0	0.0	0.0	5.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	C 702	15.0	45.0	0.0	0.0	0.0	5.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	D 901	40.0	40.0	5.0	5.0	10.0	5.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	D							
	Mean =		25.0	47.5	1.3	1.3	2.5	4.5	2.0
5 Warrant (3 CS)	0.94 lb ai/a	B 301	20.0	60.0	0.0	0.0	0.0	0.0	3.0
Valor SX (51 WG)	0.064 lb ai/a	B 501	10.0	60.0	0.0	10.0	5.0	5.0	3.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C 602	15.0	50.0	0.0	0.0	0.0	5.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	C 802	20.0	30.0	0.0	0.0	7.0	5.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	D							
AMS - Liquid	8.5 lb ai/100 gal	D							
	Mean =		16.3	50.0	0.0	2.5	3.0	3.8	1.5

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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		
Description	1st planting		Replant rows 3>	Replant rows 3>				
Rating Date	Jun-19-2014	Jun-19-2014	Jun-19-2014	Jun-19-2014	Jun-19-2014	Sep-29-2014		
Rating Type	STASUB	SPOT	PHYSTU	STASUB	PHYNEC	YIELD		
Rating Unit	%	%	%	%	%	bu/ac		
Number of Subsamples	1	1	1	1	1	1		
Assessed By								
Days After First/Last Applic.	42 20	42 20	42 20	42 20	42 20	144 89		
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	145 DP-1		
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	139 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	8	9	10	11	12	13
1 Weed-Free Check		101	85.0	10.0	0.0	85.0	0.0	89.00
Roundup PowerMax 4.5 SL	18 oz ae/a	C 502	87.0	5.0	3.0	90.0	0.0	93.80
AMS - Liquid	8.5 lb ai/100 gal	C 801	85.0	0.0	0.0	85.0	0.0	91.80
Roundup PowerMax 4.5 SL	18 oz ae/a	D 1002	97.0	0.0	7.0	83.0	3.0	79.90
AMS - Liquid	8.5 lb ai/100 gal	D						
		Mean =	88.5	3.8	2.5	85.8	0.8	88.63
2 Fierce (76 WG)	2.28 oz ai/a	A 102	90.0	7.0	0.0	86.0	0.0	94.30
Roundup PowerMax 4.5 SL	18 oz ae/a	C 302	25.0	7.0	0.0	83.0	0.0	87.20
AMS - Liquid	8.5 lb ai/100 gal	C 601	85.0	2.0	10.0	90.0	5.0	86.60
Roundup PowerMax 4.5 SL	18 oz ae/a	D 902	87.0	0.0	0.0	90.0	5.0	85.40
AMS - Liquid	8.5 lb ai/100 gal	D						
		Mean =	71.8	4.0	2.5	87.3	2.5	88.38
3 Warrant (3 CS)	0.94 lb ai/a	A 201	85.0	10.0	0.0	90.0	0.0	93.90
Valor SX (51 WG)	0.064 lb ai/a	A 401	65.0	5.0	7.0	90.0	10.0	91.50
Roundup PowerMax 4.5 SL	18 oz ae/a	C 701	65.0	0.0	0.0	93.0	0.0	84.90
AMS - Liquid	8.5 lb ai/100 gal	C 1001	70.0	0.0	0.0	93.0	0.0	77.00
Roundup PowerMax 4.5 SL	18 oz ae/a	D						
AMS - Liquid	8.5 lb ai/100 gal	D						
		Mean =	71.3	3.8	1.8	91.5	2.5	86.83
4 Fierce (76 WG)	2.28 oz ai/a	B 202	65.0	7.0	0.0	92.0	3.0	84.10
Roundup PowerMax 4.5 SL	18 oz ae/a	C 402	40.0	7.0	5.0	85.0	5.0	86.30
AMS - Liquid	8.5 lb ai/100 gal	C 702	25.0	3.0	10.0	80.0	3.0	82.30
Roundup PowerMax 4.5 SL	18 oz ae/a	D 901	40.0	3.0	15.0	80.0	7.0	85.00
AMS - Liquid	8.5 lb ai/100 gal	D						
		Mean =	42.5	5.0	7.5	84.3	4.5	84.43
5 Warrant (3 CS)	0.94 lb ai/a	B 301	60.0	7.0	5.0	90.0	5.0	84.90
Valor SX (51 WG)	0.064 lb ai/a	B 501	55.0	3.0	5.0	87.0	0.0	83.80
Roundup PowerMax 4.5 SL	18 oz ae/a	C 602	50.0	2.0	10.0	85.0	5.0	82.40
AMS - Liquid	8.5 lb ai/100 gal	C 802	20.0	0.0	5.0	83.0	0.0	82.30
Roundup PowerMax 4.5 SL	18 oz ae/a	D						
AMS - Liquid	8.5 lb ai/100 gal	D						
		Mean =	46.3	3.0	6.3	86.3	2.5	83.35

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Project ID: Fierce MD 64.08 Investigator: Dr. Bill Johnson
Sponsor Contact: Valent - Eric Ott

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

STASUB = stand - subjective / emergence

PHYCHL = phytotoxicity - chlorosis

PHYNEC = phytotoxicity - necrosis /burn

PHYLMA = phytotoxicity - leaf malformation

PHYSTU = phytotoxicity - stunting

SPOT = spot

YIELD = yield

Rating Unit

% = percent

bu/ac = bushels per acre

Plant-Eval Interval

15 DP-1 = 1 GLXMA May-7-2014

27 DP-1 = 1 GLXMA May-7-2014

43 DP-1 = 1 GLXMA May-7-2014

145 DP-1 = 1 GLXMA May-7-2014

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 Project ID: Fierce MD 64.08 Investigator: Dr. Bill Johnson
 Sponsor Contact: Valent - Eric Ott

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	
Description		1st planting				1st planting			1st planting	
Rating Date	May-22-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-3-2014	Jun-19-2014	Jun-19-2014	Jun-19-2014	Jun-19-2014	
Rating Type	STASUB	STASUB	PHYCHL	PHYNEC	PHYLMA	PHYSTU	PHYLMA	STASUB		
Rating Unit	%	%	%	%	%	%	%	%	%	
Number of Subsamples	1	1	1	1	1	1	1	1	1	
Assessed By	MW									
Days After First/Last Applic.	14 10	26 4	26 4	26 4	26 4	42 20	42 20	42 20	42 20	
Plant-Eval Interval	15 DP-1	27 DP-1	27 DP-1	27 DP-1	27 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	
Days After Emergence	9 DE-1	21 DE-1	21 DE-1	21 DE-1	21 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8
1 Weed-Free Check			83.8 a	84.3 a	0.0 b	0.0 a	0.0 a	0.0 a	0.0 a	88.5 a
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
AMS - Liquid	8.5 lb ai/100 gal	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	D								
AMS - Liquid	8.5 lb ai/100 gal	D								
2 Fierce (76 WG)	2.28 oz ai/a	A	37.5 bc	66.3 a	0.8 b	0.0 a	0.0 a	4.3 a	4.5 a	71.8 ab
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
AMS - Liquid	8.5 lb ai/100 gal	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	D								
AMS - Liquid	8.5 lb ai/100 gal	D								
3 Warrant (3 CS)	0.94 lb ai/a	A	51.3 b	71.3 a	4.5 a	3.3 a	3.5 a	8.5 a	3.5 a	71.3 ab
Valor SX (51 WG)	0.064 lb ai/a	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
AMS - Liquid	8.5 lb ai/100 gal	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	D								
AMS - Liquid	8.5 lb ai/100 gal	D								
4 Fierce (76 WG)	2.28 oz ai/a	B	25.0 c	47.5 a	1.3 b	1.3 a	2.5 a	4.5 a	2.0 a	42.5 b
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
AMS - Liquid	8.5 lb ai/100 gal	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	D								
AMS - Liquid	8.5 lb ai/100 gal	D								
5 Warrant (3 CS)	0.94 lb ai/a	B	16.3 c	50.0 a	0.0 b	2.5 a	3.0 a	3.8 a	1.5 a	46.3 b
Valor SX (51 WG)	0.064 lb ai/a	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
AMS - Liquid	8.5 lb ai/100 gal	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	D								
AMS - Liquid	8.5 lb ai/100 gal	D								
LSD (P=.05)			21.13	26.49	2.33	5.39	4.38	5.99	3.04	27.26
Standard Deviation			13.72	17.19	1.51	3.50	2.84	3.88	1.97	17.69
CV			32.08	26.92	116.45	249.91	157.79	92.5	85.86	27.62
Bartlett's X2			11.902	8.92	0.729	1.386	0.34	10.124	2.635	7.765
P(Bartlett's X2)			0.018*	0.063	0.694	0.50	0.844	0.018*	0.451	0.101
Replicate F			8.193	0.793	1.309	0.370	2.694	2.792	0.359	1.420
Replicate Prob(F)			0.0031	0.5207	0.3168	0.7759	0.0930	0.0859	0.7837	0.2853
Treatment F			14.874	3.167	6.076	0.700	1.401	2.414	3.154	4.762
Treatment Prob(F)			0.0001	0.0541	0.0065	0.6064	0.2920	0.1064	0.0547	0.0156

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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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			
Description	Replant rows 3>		Replant rows 3>					
Rating Date	Jun-19-2014	Jun-19-2014	Jun-19-2014	Jun-19-2014	Sep-29-2014			
Rating Type	SPOT	PHYSTU	STASUB	PHYNEC	YIELD			
Rating Unit	%	%	%	%	bu/ac			
Number of Subsamples	1	1	1	1	1			
Assessed By								
Days After First/Last Applic.	42 20	42 20	42 20	42 20	144 89			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	145 DP-1			
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	139 DE-1			
Trt No.	Treatment Name	Rate	Appl Code	9	10	11	12	13
		Rate Unit						
1	Weed-Free Check			3.8 a	2.5 a	85.8 a	0.8 a	88.63 a
	Roundup PowerMax 4.5 SL	18 oz ae/a	C					
	AMS - Liquid	8.5 lb ai/100 gal	C					
	Roundup PowerMax 4.5 SL	18 oz ae/a	D					
	AMS - Liquid	8.5 lb ai/100 gal	D					
2	Fierce (76 WG)	2.28 oz ai/a	A	4.0 a	2.5 a	87.3 a	2.5 a	88.38 a
	Roundup PowerMax 4.5 SL	18 oz ae/a	C					
	AMS - Liquid	8.5 lb ai/100 gal	C					
	Roundup PowerMax 4.5 SL	18 oz ae/a	D					
	AMS - Liquid	8.5 lb ai/100 gal	D					
3	Warrant (3 CS)	0.94 lb ai/a	A	3.8 a	1.8 a	91.5 a	2.5 a	86.83 a
	Valor SX (51 WG)	0.064 lb ai/a	A					
	Roundup PowerMax 4.5 SL	18 oz ae/a	C					
	AMS - Liquid	8.5 lb ai/100 gal	C					
	Roundup PowerMax 4.5 SL	18 oz ae/a	D					
	AMS - Liquid	8.5 lb ai/100 gal	D					
4	Fierce (76 WG)	2.28 oz ai/a	B	5.0 a	7.5 a	84.3 a	4.5 a	84.43 a
	Roundup PowerMax 4.5 SL	18 oz ae/a	C					
	AMS - Liquid	8.5 lb ai/100 gal	C					
	Roundup PowerMax 4.5 SL	18 oz ae/a	D					
	AMS - Liquid	8.5 lb ai/100 gal	D					
5	Warrant (3 CS)	0.94 lb ai/a	B	3.0 a	6.3 a	86.3 a	2.5 a	83.35 a
	Valor SX (51 WG)	0.064 lb ai/a	B					
	Roundup PowerMax 4.5 SL	18 oz ae/a	C					
	AMS - Liquid	8.5 lb ai/100 gal	C					
	Roundup PowerMax 4.5 SL	18 oz ae/a	D					
	AMS - Liquid	8.5 lb ai/100 gal	D					
LSD (P=.05)				2.36	6.51	5.85	5.19	5.978
Standard Deviation				1.53	4.22	3.80	3.37	3.880
CV				39.24	102.97	4.37	132.12	4.49
Bartlett's X2				1.991	2.978	3.799	4.597	10.232
P(Bartlett's X2)				0.737	0.561	0.434	0.331	0.037*
Replicate F				26.961	1.395	0.480	0.192	3.679
Replicate Prob(F)				0.0001	0.2920	0.7020	0.8996	0.0435
Treatment F				0.886	1.505	2.079	0.621	1.474
Treatment Prob(F)				0.5012	0.2620	0.1468	0.6561	0.2705

Purdue University

Valor Interaction with Acetochlor

Trial ID: 14S-THP-CTS-42 Protocol ID: 14S-THP-CTS-42
Location: Throckmorton Study Director: Bill Johnson
Project ID: Fierce MD 64.08 Investigator: Dr. Bill Johnson
Sponsor Contact: Valent - Eric Ott

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

STASUB = stand - subjective / emergence

PHYCHL = phytotoxicity - chlorosis

PHYNEC = phytotoxicity - necrosis /burn

PHYLMA = phytotoxicity - leaf malformation

PHYSTU = phytotoxicity - stunting

SPOT = spot

YIELD = yield

Rating Unit

% = percent

bu/ac = bushels per acre

Plant-Eval Interval

15 DP-1 = 1 GLXMA May-7-2014

27 DP-1 = 1 GLXMA May-7-2014

43 DP-1 = 1 GLXMA May-7-2014

145 DP-1 = 1 GLXMA May-7-2014