

Purdue University

MANA Soybean Concepts - Pre Program

Trial ID: 13S-THP-CTS-54 Protocol ID: 13S-THP-CTS-54
 Location: Throckmorton Study Director:
 Project ID: 13-HER-CR-49-2612013-5 Investigator: Dr. Bill Johnson
 Sponsor Contact: MANA Crop Protection

General Trial Information

Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide

Trial Location

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

Personnel

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
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 AG29-33 **Description:** RR2
BBCH Scale: BSOY **Planting Date:** May-16-2013
Planting Method: DIRDRI direct drilled **Rate, Unit:** 130000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Soil Moisture: DRY dry **Soil Temperature, Unit:** 78 F
Emergence Date: May-22-2013

Pest Description

Pest 1 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

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

Pest 3 Type: W **Code:** IPOHE Ipomoea hederacea
Common Name: Ivyleaf morningglory

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

Pest 5 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Purdue University

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: RACOBL Randomized Complete Block (RCB)
	Untreated Arrangement: INCLUDED single control randomized in each block

Maintenance				
No.	Date	Maintenance Treatment Name	Rate	Rate Unit
1.	Jul-17-2013	PowerMax	22	OZ/A

Application Description		
	A	B
Application Date:	May-16-2013	Jun-21-2013
Time of Day:	1:15 PM	9:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	MIPOCR
Application Placement:	SOIL	FOLIAR
Applied By:	MW	MW
Air Temperature, Unit:	80 F	67 F
% Relative Humidity:	43	63
Wind Velocity, Unit:	1.9 MPH	7 MPH
Wind Direction:	N	S
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	78 F	69 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	40	0

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY

Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height Minimum, Maximum:		1 13
Density, Unit:		12 FT ²
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height Minimum, Maximum:		2 22
Density, Unit:		6 YD ²
Pest 3 Code, Type, Scale:	IPOHE W	IPOHE W
Height, Unit:		4 IN
Density, Unit:		2 YD ²
Pest 4 Code, Type, Scale:	ABUTH W	ABUTH W
Height, Unit:		9 IN
Density, Unit:		1 YD ²
Pest 5 Code, Type, Scale:	CHEAL W	CHEAL W
Height Minimum, Maximum:		1 14
Density, Unit:		3 YD ²

Purdue University

Application Equipment

	A	B
Appl. Equipment:	CO2 FORD	CO2 FORD
Equipment Type:	SPTRMO	SPTRMO
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	XR 100 02	XR 100 02
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	6	6
Boom Length, Unit:	10 FT	10 FT
Boom Height, Unit:	20 IN	20 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

Purdue University

MANA Soybean Concepts - Pre Program

Trial ID: 13S-THP-CTS-54 Protocol ID: 13S-THP-CTS-54
 Location: Throckmorton Study Director:
 Project ID: 13-HER-CR-49-2612013-5 Investigator: Dr. Bill Johnson
 Sponsor Contact: MANA Crop Protection

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 Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Appl Description	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check											101	405	703	907
2	Vice (5.4 EC)	5.4 LBA/GAL	EC		21.6 oz ai/a	2 pt/a		ATPLAN A			31.25 ml/mx	103	307	603	905
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
3	Prefix (5.29 EC)	5.29 LBA/GAL	EC		21.6 oz ai/a	2 pt/a		ATPLAN A			31.9 ml/mx	105	501	701	1007
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
4	Tailwind (6.5 EC)	6.5 LBA/GAL	EC		16.3 oz ai/a	20 fl oz/a		ATPLAN A			19.59 ml/mx	107	403	605	1001
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
5	Boundary (6.5 EC)	6.6 LBA/GAL	EC		16.3 oz ai/a	20 fl oz/a		ATPLAN A			19.29 ml/mx	201	507	803	1003
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
6	MANA 25337 (55 WG)	55 %	WG		1.76 oz ai/a	3.2 oz/a		ATPLAN A			2.996 g/mx	203	407	601	903
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
7	MANA 25337 (55 WG)	55 %	WG		2.34 oz ai/a	4.25 oz/a		ATPLAN A			3.983 g/mx	205	305	707	805
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
8	Pummel (5.25 ME)	5.25 LBA/GAL	ME		0.98 lb ai/a	1.5 pt/a		ATPLAN A			23.33 ml/mx	207	505	607	901
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
9	Pummel (5.25 ME)	5.25 LBA/GAL	ME		1.31 lb ai/a	2 pt/a		ATPLAN A			31.19 ml/mx	301	401	705	807
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
10	Torment (2.5 SL)	2.5 LBA/GAL	SL		3.75 oz ai/a	0.75 pt/a		ATPLAN A			11.72 ml/mx	303	503	801	1005
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
11	Torment (2.5 SL)	2.5 LBA/GAL	SL		5 oz ai/a	1 pt/a		ATPLAN A			15.62 ml/mx	102	308	708	1002
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
12	Torment (2.5 SL)	2.5 LBA/GAL	SL		3.75 oz ai/a	0.75 pt/a		ATPLAN A			11.72 ml/mx	104	408	702	904
	Sharpen 2.85 SC	2.85 LBA/GAL	SC		0.356 oz ai/a	1 fl oz/a		ATPLAN A			0.9758 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
13	Optil (68 WG)	68 %	WG		1.36 oz ai/a	2 oz wt/a		ATPLAN A			1.872 g/mx	106	406	602	902
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
14	Warrant (3 CS)	3 LBA/GAL	SC		1.13 lb ai/a	3 pt/a		ATPLAN A			47.08 ml/mx	108	306	604	908
	Glory 75DF	75 %AW/W	DF		0.188 lb ai/a	4 oz wt/a		ATPLAN A			3.755 g/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
15	Outflank (51 WG)	51 %	WG		1.02 oz ai/a	2 oz wt/a		ATPLAN A			1.872 g/mx	202	506	608	808
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
16	Pursuit	2 LBA/GAL	EC		1 oz ai/a	4 fl oz/a		ATPLAN A			3.906 ml/mx	204	404	704	806
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		0.77 lb ae/a	22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL	SL		8.5 lb ai/100 gal	10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				

Purdue University

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	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
17	Valor SX (51 WG)	51 %		WG	0.9 oz ai/a		1.76 oz wt/a		ATPLAN A			1.652 g/mx	206	402	804	906
	Classic	25 %AW/W		DF	0.31 oz ai/a		1.24 oz wt/a		ATPLAN A			1.161 g/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
18	Authority Assist (4 SC)	4 LB/GAL		SC	4 oz ai/a		8 fl oz/a		ATPLAN A			7.812 ml/mx	208	504	706	1006
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
19	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx	302	508	802	1004
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				
20	Canopy	75 %AW/W		DF	0.234 lb ai/a		5 oz wt/a		ATPLAN A			4.673 g/mx	304	502	606	1008
	Glory 75DF	75 %AW/W		DF	0.234 lb ai/a		5 oz wt/a		ATPLAN A			4.673 g/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	0.77 lb ae/a		22 fl oz/a		MIPOCR B	V5 Soybean		21.39 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		MIPOCR B	V5 Soybean		62.49 ml/mx				

Sort Order: Treatment

Purdue University

MANA Soybean Concepts - Pre Program

Trial ID: 13S-THP-CTS-54 Protocol ID: 13S-THP-CTS-54
 Location: Throckmorton Study Director:
 Project ID: 13-HER-CR-49-2612013-5 Investigator: Dr. Bill Johnson
 Sponsor Contact: MANA Crop Protection

Pest Type		W Weed	W Weed	W Weed	W Weed	
Pest Code		AMBTR	SETFA	AMBTR	CHEAL	
Pest Scientific Name		Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Chenopodium al>	
Pest Name		Giant ragweed	Giant foxtail	Giant ragweed	Common lambsqu>	
Crop Code	GLXMA					GLXMA
BBCH Scale	BSOY					BSOY
Crop Scientific Name	Glycine max					Glycine max
Crop Name	Soybean					Soybean
Rating Date	Jun-5-2013	Jun-5-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Pest Stage Majority			1-13 IN	2-22 IN	1-14 IN	
Pest Density, Unit			12 FT2	6 YD2	3 YD2	
Assessed By	DOUG	DOUG	BT/GT	BT/GT	BT/GT	MW
Days After First/Last Applic.	20 20	20 20	36 36	36 36	36 36	36 36
Plant-Eval Interval	20 DP-1	20 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1
Days After Emergence	14 DE-1	14 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1
Trt No.	Treatment	Rate	Appl			
		Rate Unit	Code Plot	1	2	3
				4	5	6
1	Untreated Check		101	0.0	0.0	0.0
			405	0.0	0.0	0.0
			703	1.0	0.0	0.0
			907	0.0	0.0	0.0
	Mean =			0.3	0.0	0.0
2	Vice (5.4 EC)	21.6 oz ai/a	A 103	2.0	93.0	95.0
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 307	2.0	80.0	90.0
	AMS - Liquid	8.5 lb ai/100 gal	B 603	0.0	95.0	85.0
			905	2.0	95.0	95.0
	Mean =			1.5	90.8	91.3
3	Prefix (5.29 EC)	21.6 oz ai/a	A 105	0.0	95.0	97.0
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 501	5.0	90.0	95.0
	AMS - Liquid	8.5 lb ai/100 gal	B 701	2.0	65.0	99.0
			1007	0.0	40.0	99.0
	Mean =			1.8	72.5	97.5
4	Tailwind (6.5 EC)	16.3 oz ai/a	A 107	0.0	50.0	99.0
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 403	0.0	65.0	95.0
	AMS - Liquid	8.5 lb ai/100 gal	B 605	2.0	95.0	85.0
			1001	4.0	82.0	50.0
	Mean =			1.5	73.0	82.3
5	Boundary (6.5 EC)	16.3 oz ai/a	A 201	1.0	97.0	95.0
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 507	0.0	20.0	97.0
	AMS - Liquid	8.5 lb ai/100 gal	B 803	0.0	79.0	95.0
			1003	0.0	65.0	97.0
	Mean =			0.3	65.3	96.0
6	MANA 25337 (55 WG)	1.76 oz ai/a	A 203	1.0	95.0	90.0
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 407	0.0	80.0	99.0
	AMS - Liquid	8.5 lb ai/100 gal	B 601	3.0	90.0	85.0
			903	0.0	90.0	85.0
	Mean =			1.0	88.8	89.8

Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed			
Pest Code		AMBTR	SETFA	AMBTR	CHEAL			
Pest Scientific Name		Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name		Giant ragweed	Giant foxtail	Giant ragweed	Common lambsqu>			
Crop Code	GLXMA					GLXMA		
BBCH Scale	BSOY					BSOY		
Crop Scientific Name	Glycine max					Glycine max		
Crop Name	Soybean					Soybean		
Rating Date	Jun-5-2013	Jun-5-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority			1-13 IN	2-22 IN	1-14 IN			
Pest Density, Unit			12 FT2	6 YD2	3 YD2			
Assessed By	DOUG	DOUG	BT/GT	BT/GT	BT/GT	MW		
Days After First/Last Applic.	20 20	20 20	36 36	36 36	36 36	36 36		
Plant-Eval Interval	20 DP-1	20 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1		
Days After Emergence	14 DE-1	14 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
7 MANA 25337 (55 WG)	2.34 oz ai/a	A 205	2.0	95.0	95.0	99.0	97.0	5.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 305	3.0	95.0	95.0	90.0	99.0	10.0
AMS - Liquid	8.5 lb ai/100 gal	B 707	0.0	85.0	99.0	50.0	99.0	7.0
		805	3.0	75.0	97.0	40.0	99.0	10.0
		Mean =	2.0	87.5	96.5	69.8	98.5	8.0
8 Pummel (5.25 ME)	0.98 lb ai/a	A 207	0.0	50.0	97.0	0.0	99.0	3.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 505	0.0	91.0	95.0	90.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 607	4.0	50.0	97.0	20.0	99.0	0.0
		901	3.0	95.0	90.0	90.0	99.0	5.0
		Mean =	1.8	71.5	94.8	50.0	99.0	2.0
9 Pummel (5.25 ME)	1.31 lb ai/a	A 301	2.0	95.0	95.0	80.0	97.0	5.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 401	2.0	65.0	90.0	80.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 705	2.0	84.0	95.0	90.0	99.0	0.0
		807	0.0	20.0	97.0	70.0	99.0	0.0
		Mean =	1.5	66.0	94.3	80.0	98.5	1.3
10 Torment (2.5 SL)	3.75 oz ai/a	A 303	0.0	85.0	85.0	50.0	97.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 503	0.0	90.0	85.0	80.0	95.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 801	1.0	95.0	50.0	90.0	99.0	5.0
		1005	1.0	75.0	90.0	60.0	99.0	0.0
		Mean =	0.5	86.3	77.5	70.0	97.5	1.3
11 Torment (2.5 SL)	5 oz ai/a	A 102	2.0	94.0	85.0	90.0	95.0	5.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 308	0.0	40.0	95.0	10.0	99.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	B 708	0.0	70.0	97.0	60.0	99.0	0.0
		1002	1.0	70.0	90.0	40.0	99.0	3.0
		Mean =	0.8	68.5	91.8	50.0	98.0	3.3
12 Torment (2.5 SL)	3.75 oz ai/a	A 104	0.0	95.0	97.0	95.0	97.0	0.0
Sharpen 2.85 SC	0.356 oz ai/a	A 408	0.0	40.0	95.0	10.0	99.0	10.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 702	2.0	65.0	95.0	60.0	95.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 904	0.0	95.0	95.0	95.0	99.0	0.0
		Mean =	0.5	73.8	95.5	65.0	97.5	2.5
13 Optil (68 WG)	1.36 oz ai/a	A 106	0.0	0.0	97.0	0.0	95.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 406	0.0	0.0	99.0	0.0	99.0	7.0
AMS - Liquid	8.5 lb ai/100 gal	B 602	3.0	95.0	90.0	85.0	95.0	0.0
		902	0.0	85.0	95.0	50.0	99.0	0.0
		Mean =	0.8	45.0	95.3	33.8	97.0	1.8

Purdue University

Pest Type		W Weed AMBTR	W Weed SETFA	W Weed AMBTR	W Weed CHEAL			
Pest Code		Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Scientific Name		Giant ragweed	Giant foxtail	Giant ragweed	Common lambsqu>			
Pest Name								
Crop Code	GLXMA					GLXMA		
BBCH Scale	BSOY					BSOY		
Crop Scientific Name	Glycine max					Glycine max		
Crop Name	Soybean					Soybean		
Rating Date	Jun-5-2013	Jun-5-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority			1-13 IN	2-22 IN	1-14 IN			
Pest Density, Unit			12 FT2	6 YD2	3 YD2			
Assessed By	DOUG	DOUG	BT/GT	BT/GT	BT/GT	MW		
Days After First/Last Applic.	20 20	20 20	36 36	36 36	36 36	36 36		
Plant-Eval Interval	20 DP-1	20 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1		
Days After Emergence	14 DE-1	14 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Unit	Code Plot	1	2	3	4	5	6
14 Warrant (3 CS)	1.13 lb ai/a	A 108	0.0	60.0	97.0	20.0	99.0	3.0
Glory 75DF	0.188 lb ai/a	A 306	0.0	0.0	95.0	0.0	99.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 604	2.0	95.0	90.0	90.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 908	0.0	20.0	97.0	0.0	99.0	0.0
Mean =			0.5	43.8	94.8	27.5	99.0	0.8
15 Outflank (51 WG)	1.02 oz ai/a	A 202	2.0	94.0	95.0	90.0	90.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 506	3.0	72.0	95.0	0.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 608	0.0	10.0	95.0	0.0	99.0	0.0
		808	0.0	20.0	70.0	0.0	99.0	0.0
Mean =			1.3	49.0	88.8	22.5	96.8	0.0
16 Pursuit	1 oz ai/a	A 204	2.0	94.0	95.0	90.0	99.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 404	0.0	55.0	99.0	0.0	99.0	3.0
AMS - Liquid	8.5 lb ai/100 gal	B 704	3.0	92.0	95.0	85.0	99.0	3.0
		806	0.0	20.0	97.0	0.0	99.0	0.0
Mean =			1.3	65.3	96.5	43.8	99.0	1.5
17 Valor SX (51 WG)	0.9 oz ai/a	A 206	1.0	85.0	60.0	50.0	95.0	5.0
Classic	0.31 oz ai/a	A 402	4.0	93.0	95.0	90.0	99.0	5.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 804	2.0	65.0	40.0	0.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 906	0.0	55.0	20.0	0.0	99.0	0.0
Mean =			1.8	74.5	53.8	35.0	98.0	2.5
18 Authority Assist (4 SC)	4 oz ai/a	A 208	0.0	50.0	99.0	0.0	99.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 504	0.0	94.0	90.0	90.0	99.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	B 706	0.0	78.0	95.0	90.0	99.0	0.0
		1006	2.0	60.0	97.0	0.0	99.0	0.0
Mean =			0.5	70.5	95.3	45.0	99.0	1.3
19 Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 302	0.0	40.0	0.0	0.0	80.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B 508	0.0	20.0	95.0	0.0	99.0	0.0
		802	2.0	88.0	0.0	60.0	95.0	0.0
		1004	0.0	75.0	0.0	20.0	99.0	0.0
Mean =			0.5	55.8	23.8	20.0	93.3	0.0
20 Canopy	0.234 lb ai/a	A 304	0.0	91.0	80.0	90.0	99.0	5.0
Glory 75DF	0.234 lb ai/a	A 502	10.0	90.0	97.0	95.0	99.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 606	0.0	90.0	85.0	85.0	97.0	3.0
AMS - Liquid	8.5 lb ai/100 gal	B 1008	0.0	75.0	95.0	60.0	99.0	0.0
Mean =			2.5	86.5	89.3	82.5	98.5	2.0

Purdue University

Pest Type			W Weed	W Weed	W Weed			
Pest Code			SETFA	AMBTR	CHEAL			
Pest Scientific Name			Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name			Giant foxtail	Giant ragweed	Common lambsqu>			
Crop Code	GLXMA	GLXMA				GLXMA		
BBCB Scale	BSOY	BSOY				BSOY		
Crop Scientific Name	Glycine max	Glycine max				Glycine max		
Crop Name	Soybean	Soybean				Soybean		
Rating Date	Jun-21-2013	Jun-21-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013		
Rating Type	PHYNEC	PHYCHL	CONTRO	CONTRO	CONTRO	PHYLMA		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority			28 IN	48 IN	30 IN			
Pest Density, Unit			10 FT2	5 YD2	4 YD2			
Assessed By	MW	MW	MW	MW	MW	MW		
Days After First/Last Applic.	36 36	36 36	53 17	53 17	53 17	53 17		
Plant-Eval Interval	36 DP-1	36 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1		
Days After Emergence	30 DE-1	30 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12
1 Untreated Check		101	0.0	0.0	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0	0.0	0.0
		703	0.0	0.0	0.0	0.0	0.0	0.0
		907	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 Vice (5.4 EC)	21.6 oz ai/a	A 103	0.0	0.0	99.0	90.0	95.0	3.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 307	0.0	0.0	95.0	70.0	99.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	B 603	0.0	3.0	99.0	95.0	99.0	20.0
		905	0.0	0.0	99.0	90.0	99.0	5.0
		Mean =	0.0	0.8	98.0	86.3	98.0	8.3
3 Prefix (5.29 EC)	21.6 oz ai/a	A 105	0.0	0.0	99.0	95.0	95.0	5.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 501	5.0	0.0	99.0	75.0	99.0	25.0
AMS - Liquid	8.5 lb ai/100 gal	B 701	5.0	0.0	99.0	83.0	95.0	7.0
		1007	0.0	0.0	99.0	65.0	99.0	3.0
		Mean =	2.5	0.0	99.0	79.5	97.0	10.0
4 Tailwind (6.5 EC)	16.3 oz ai/a	A 107	0.0	0.0	99.0	55.0	99.0	5.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 403	0.0	5.0	99.0	60.0	85.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	B 605	0.0	0.0	99.0	90.0	99.0	0.0
		1001	0.0	5.0	99.0	85.0	99.0	9.0
		Mean =	0.0	2.5	99.0	72.5	95.5	4.8
5 Boundary (6.5 EC)	16.3 oz ai/a	A 201	3.0	5.0	99.0	90.0	99.0	0.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 507	0.0	0.0	99.0	60.0	99.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	B 803	0.0	0.0	99.0	65.0	95.0	0.0
		1003	0.0	0.0	99.0	70.0	90.0	0.0
		Mean =	0.8	1.3	99.0	71.3	95.8	1.3
6 MANA 25337 (55 WG)	1.76 oz ai/a	A 203	0.0	0.0	99.0	99.0	99.0	5.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 407	0.0	0.0	99.0	60.0	99.0	3.0
AMS - Liquid	8.5 lb ai/100 gal	B 601	5.0	3.0	95.0	85.0	95.0	15.0
		903	0.0	3.0	99.0	90.0	99.0	10.0
		Mean =	1.3	1.5	98.0	83.5	98.0	8.3

Purdue University

Pest Type										
Pest Code										
Pest Scientific Name										
Pest Name										
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	Jun-21-2013	Jun-21-2013			Jul-8-2013	Jul-8-2013			Jul-8-2013	Jul-8-2013
Rating Type	PHYNEC	PHYCHL			CONTRO	CONTRO			CONTRO	PHYLMA
Rating Unit	%	%			%	%			%	%
Number of Subsamples	1	1			1	1			1	1
Pest Stage Majority					28 IN	48 IN			30 IN	
Pest Density, Unit					10 FT2	5 YD2			4 YD2	
Assessed By	MW	MW			MW	MW			MW	MW
Days After First/Last Applic.	36 36	36 36			53 17	53 17			53 17	53 17
Plant-Eval Interval	36 DP-1	36 DP-1			53 DP-1	53 DP-1			53 DP-1	53 DP-1
Days After Emergence	30 DE-1	30 DE-1			47 DE-1	47 DE-1			47 DE-1	47 DE-1
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12		
7 MANA 25337 (55 WG)	2.34 oz ai/a	A 205	0.0	7.0	99.0	99.0	99.0	10.0		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 305	3.0	5.0	99.0	85.0	99.0	5.0		
AMS - Liquid	8.5 lb ai/100 gal	B 707	5.0	0.0	99.0	70.0	99.0	5.0		
		805	0.0	3.0	99.0	70.0	99.0	3.0		
		Mean =	2.0	3.8	99.0	81.0	99.0	5.8		
8 Pummel (5.25 ME)	0.98 lb ai/a	A 207	0.0	0.0	99.0	60.0	99.0	0.0		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 505	0.0	0.0	99.0	85.0	99.0	5.0		
AMS - Liquid	8.5 lb ai/100 gal	B 607	0.0	0.0	99.0	65.0	99.0	5.0		
		901	0.0	0.0	99.0	87.0	99.0	0.0		
		Mean =	0.0	0.0	99.0	74.3	99.0	2.5		
9 Pummel (5.25 ME)	1.31 lb ai/a	A 301	0.0	0.0	99.0	80.0	99.0	15.0		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 401	0.0	0.0	99.0	70.0	99.0	0.0		
AMS - Liquid	8.5 lb ai/100 gal	B 705	0.0	0.0	99.0	85.0	99.0	3.0		
		807	0.0	0.0	99.0	60.0	99.0	0.0		
		Mean =	0.0	0.0	99.0	73.8	99.0	4.5		
10 Torment (2.5 SL)	3.75 oz ai/a	A 303	3.0	0.0	99.0	70.0	99.0	5.0		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 503	0.0	0.0	95.0	83.0	99.0	3.0		
AMS - Liquid	8.5 lb ai/100 gal	B 801	3.0	7.0	99.0	93.0	99.0	0.0		
		1005	0.0	0.0	90.0	65.0	99.0	3.0		
		Mean =	1.5	1.8	95.8	77.8	99.0	2.8		
11 Torment (2.5 SL)	5 oz ai/a	A 102	3.0	0.0	97.0	95.0	99.0	0.0		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 308	3.0	0.0	99.0	65.0	99.0	5.0		
AMS - Liquid	8.5 lb ai/100 gal	B 708	0.0	0.0	99.0	65.0	99.0	5.0		
		1002	0.0	0.0	99.0	85.0	90.0	3.0		
		Mean =	1.5	0.0	98.5	77.5	96.8	3.3		
12 Torment (2.5 SL)	3.75 oz ai/a	A 104	0.0	0.0	99.0	93.0	99.0	5.0		
Sharpen 2.85 SC	0.356 oz ai/a	A 408	0.0	3.0	90.0	55.0	99.0	5.0		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 702	0.0	0.0	99.0	85.0	99.0	0.0		
AMS - Liquid	8.5 lb ai/100 gal	B 904	0.0	0.0	97.0	93.0	99.0	3.0		
		Mean =	0.0	0.8	96.3	81.5	99.0	3.3		
13 Optil (68 WG)	1.36 oz ai/a	A 106	0.0	0.0	97.0	65.0	99.0	0.0		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 406	3.0	0.0	99.0	60.0	80.0	3.0		
AMS - Liquid	8.5 lb ai/100 gal	B 602	0.0	0.0	99.0	87.0	85.0	10.0		
		902	0.0	0.0	99.0	83.0	99.0	3.0		
		Mean =	0.8	0.0	98.5	73.8	90.8	4.0		

Purdue University

Pest Type						W Weed	W Weed	W Weed	
Pest Code						SETFA	AMBTR	CHEAL	
Pest Scientific Name						Setaria faberi	Ambrosia trif>	Chenopodium al>	
Pest Name						Giant foxtail	Giant ragweed	Common lambsqu>	
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	Jun-21-2013	Jun-21-2013			Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013
Rating Type	PHYNEC	PHYCHL			CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA
Rating Unit	%	%			%	%	%	%	%
Number of Subsamples	1	1			1	1	1	1	1
Pest Stage Majority					28 IN	48 IN	30 IN		
Pest Density, Unit					10 FT2	5 YD2	4 YD2		
Assessed By	MW	MW			MW	MW	MW		MW
Days After First/Last Applic.	36 36	36 36			53 17	53 17	53 17		53 17
Plant-Eval Interval	36 DP-1	36 DP-1			53 DP-1	53 DP-1	53 DP-1		53 DP-1
Days After Emergence	30 DE-1	30 DE-1			47 DE-1	47 DE-1	47 DE-1		47 DE-1
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12	
14 Warrant (3 CS)	1.13 lb ai/a	A 108	0.0	0.0	99.0	40.0	99.0	0.0	
Glory 75DF	0.188 lb ai/a	A 306	0.0	0.0	99.0	60.0	99.0	5.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 604	0.0	0.0	99.0	87.0	99.0	3.0	
AMS - Liquid	8.5 lb ai/100 gal	B 908	0.0	0.0	99.0	45.0	99.0	3.0	
	Mean =		0.0	0.0	99.0	58.0	99.0	2.8	
15 Outflank (51 WG)	1.02 oz ai/a	A 202	0.0	0.0	99.0	87.0	95.0	0.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 506	0.0	0.0	99.0	70.0	99.0	3.0	
AMS - Liquid	8.5 lb ai/100 gal	B 608	0.0	0.0	99.0	50.0	99.0	0.0	
		808	0.0	0.0	95.0	45.0	99.0	0.0	
	Mean =		0.0	0.0	98.0	63.0	98.0	0.8	
16 Pursuit	1 oz ai/a	A 204	3.0	0.0	99.0	85.0	99.0	5.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 404	0.0	0.0	99.0	75.0	99.0	5.0	
AMS - Liquid	8.5 lb ai/100 gal	B 704	0.0	3.0	99.0	90.0	99.0	3.0	
		806	0.0	0.0	99.0	50.0	99.0	0.0	
	Mean =		0.8	0.8	99.0	75.0	99.0	3.3	
17 Valor SX (51 WG)	0.9 oz ai/a	A 206	0.0	0.0	95.0	65.0	99.0	5.0	
Classic	0.31 oz ai/a	A 402	0.0	7.0	99.0	70.0	99.0	5.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 804	0.0	0.0	99.0	85.0	99.0	5.0	
AMS - Liquid	8.5 lb ai/100 gal	B 906	0.0	0.0	99.0	60.0	99.0	0.0	
	Mean =		0.0	1.8	98.0	70.0	99.0	3.8	
18 Authority Assist (4 SC)	4 oz ai/a	A 208	0.0	0.0	99.0	20.0	99.0	3.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 504	3.0	5.0	95.0	87.0	99.0	5.0	
AMS - Liquid	8.5 lb ai/100 gal	B 706	0.0	0.0	95.0	83.0	99.0	0.0	
		1006	0.0	0.0	99.0	40.0	99.0	0.0	
	Mean =		0.8	1.3	97.0	57.5	99.0	2.0	
19 Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 302	0.0	0.0	95.0	80.0	85.0	0.0	
AMS - Liquid	8.5 lb ai/100 gal	B 508	0.0	0.0	99.0	30.0	95.0	5.0	
		802	0.0	0.0	93.0	85.0	85.0	0.0	
		1004	0.0	0.0	99.0	75.0	85.0	0.0	
	Mean =		0.0	0.0	96.5	67.5	87.5	1.3	
20 Canopy	0.234 lb ai/a	A 304	3.0	0.0	99.0	85.0	99.0	7.0	
Glory 75DF	0.234 lb ai/a	A 502	0.0	5.0	99.0	75.0	99.0	0.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 606	0.0	0.0	99.0	83.0	97.0	3.0	
AMS - Liquid	8.5 lb ai/100 gal	B 1008	0.0	0.0	99.0	40.0	99.0	0.0	
	Mean =		0.8	1.3	99.0	70.8	98.5	2.5	

Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code		SETFA	AMBTR	CHEAL	AMBTR	IPHOE		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>	Ambrosia trifi>	Ipomoea heder>		
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Giant ragweed	Ivyleaf mornin>		
Crop Code	GLXMA							
BBCB Scale	BSOY							
Crop Scientific Name	Glycine max							
Crop Name	Soybean							
Rating Date	Jul-8-2013	Jul-23-2013	Jul-23-2013	Jul-23-2013	Sep-24-2013	Sep-24-2013		
Rating Type	PHYCHL	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority		40 IN	60 IN	42 IN				
Pest Density, Unit		18 FT2	6 YD2	3 YD2				
Assessed By	MW	MW	MW	MW				
Days After First/Last Applic.	53 17	68 32	68 32	68 32	131 95	131 95		
Plant-Eval Interval	53 DP-1	68 DP-1	68 DP-1	68 DP-1	131 DP-1	131 DP-1		
Days After Emergence	47 DE-1	62 DE-1	62 DE-1	62 DE-1	125 DE-1	125 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	13	14	15	16	17	18
1 Untreated Check		101	0.0	0.0	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0	0.0	0.0
		703	0.0	0.0	0.0	0.0	0.0	0.0
		907	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 Vice (5.4 EC)	21.6 oz ai/a	A 103	0.0	99.0	95.0	99.0	94.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 307	0.0	99.0	60.0	99.0	75.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 603	0.0	99.0	95.0	99.0	99.0	99.0
		905	0.0	99.0	99.0	99.0	99.0	99.0
		Mean =	0.0	99.0	87.3	99.0	91.8	99.0
3 Prefix (5.29 EC)	21.6 oz ai/a	A 105	0.0	99.0	95.0	99.0	96.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 501	0.0	99.0	85.0	99.0	92.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 701	0.0	99.0	95.0	99.0	98.0	99.0
		1007	0.0	99.0	85.0	99.0	97.0	99.0
		Mean =	0.0	99.0	90.0	99.0	95.8	99.0
4 Tailwind (6.5 EC)	16.3 oz ai/a	A 107	5.0	99.0	50.0	99.0	87.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 403	0.0	99.0	87.0	99.0	96.0	90.0
AMS - Liquid	8.5 lb ai/100 gal	B 605	0.0	99.0	97.0	99.0	99.0	99.0
		1001	5.0	99.0	90.0	99.0	95.0	99.0
		Mean =	2.5	99.0	81.0	99.0	94.3	96.8
5 Boundary (6.5 EC)	16.3 oz ai/a	A 201	0.0	99.0	95.0	99.0	96.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 507	0.0	99.0	77.0	99.0	85.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 803	0.0	99.0	87.0	99.0	96.0	99.0
		1003	0.0	99.0	85.0	99.0	94.0	99.0
		Mean =	0.0	99.0	86.0	99.0	92.8	99.0
6 MANA 25337 (55 WG)	1.76 oz ai/a	A 203	0.0	99.0	99.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 407	0.0	99.0	60.0	99.0	87.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 601	0.0	99.0	95.0	99.0	70.0	99.0
		903	0.0	99.0	99.0	99.0	99.0	99.0
		Mean =	0.0	99.0	88.3	99.0	88.8	99.0

Purdue University

					W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trif> Giant ragweed	W Weed CHEAL Chenopodium al> Common lambsqu>	W Weed AMBTR Ambrosia trifri> Giant ragweed	W Weed IPOHE Ipomoea hedera> Ivyleaf momin>
Pest Type					GLXMA				
Pest Code					BSOY				
Pest Scientific Name					Glycine max				
Pest Name					Soybean				
Crop Code					Jul-8-2013	Jul-23-2013	Jul-23-2013	Jul-23-2013	Sep-24-2013
BBCH Scale					PHYCHL	CONTRO	CONTRO	CONTRO	CONTRO
Crop Scientific Name					%	%	%	%	%
Crop Name					1	1	1	1	1
Rating Date					40 IN	60 IN	42 IN		
Rating Type					18 FT2	6 YD2	3 YD2		
Rating Unit					MW	MW	MW		
Number of Subsamples					53 17	68 32	68 32	131 95	131 95
Pest Stage Majority					53 DP-1	68 DP-1	68 DP-1	131 DP-1	131 DP-1
Pest Density, Unit					47 DE-1	62 DE-1	62 DE-1	125 DE-1	125 DE-1
Assessed By									
Days After First/Last Applic.									
Plant-Eval Interval									
Days After Emergence									
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	13	14	15	16	17	18	
7 MANA 25337 (55 WG)	2.34 oz ai/a	A 205	5.0	99.0	99.0	99.0	99.0	99.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 305	0.0	99.0	99.0	99.0	99.0	99.0	
AMS - Liquid	8.5 lb ai/100 gal	B 707	0.0	99.0	83.0	99.0	97.0	99.0	
		805	0.0	99.0	85.0	99.0	94.0	99.0	
		Mean =	1.3	99.0	91.5	99.0	97.3	99.0	
8 Pummel (5.25 ME)	0.98 lb ai/a	A 207	0.0	99.0	75.0	99.0	75.0	99.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 505	0.0	99.0	99.0	99.0	99.0	99.0	
AMS - Liquid	8.5 lb ai/100 gal	B 607	0.0	99.0	75.0	99.0	93.0	99.0	
		901	0.0	99.0	99.0	99.0	99.0	99.0	
		Mean =	0.0	99.0	87.0	99.0	91.5	99.0	
9 Pummel (5.25 ME)	1.31 lb ai/a	A 301	0.0	99.0	93.0	99.0	96.0	99.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 401	0.0	99.0	93.0	99.0	94.0	99.0	
AMS - Liquid	8.5 lb ai/100 gal	B 705	0.0	99.0	99.0	99.0	99.0	99.0	
		807	0.0	99.0	80.0	99.0	98.0	99.0	
		Mean =	0.0	99.0	91.3	99.0	96.8	99.0	
10 Torment (2.5 SL)	3.75 oz ai/a	A 303	0.0	99.0	90.0	99.0	90.0	70.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 503	0.0	99.0	95.0	99.0	99.0	99.0	
AMS - Liquid	8.5 lb ai/100 gal	B 801	0.0	99.0	97.0	99.0	99.0	99.0	
		1005	0.0	99.0	85.0	99.0	93.0	99.0	
		Mean =	0.0	99.0	91.8	99.0	95.3	91.8	
11 Torment (2.5 SL)	5 oz ai/a	A 102	0.0	99.0	87.0	99.0	92.0	99.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 308	0.0	99.0	65.0	99.0	80.0	99.0	
AMS - Liquid	8.5 lb ai/100 gal	B 708	0.0	99.0	85.0	99.0	97.0	99.0	
		1002	0.0	99.0	99.0	99.0	97.0	99.0	
		Mean =	0.0	99.0	84.0	99.0	91.5	99.0	
12 Torment (2.5 SL)	3.75 oz ai/a	A 104	0.0	99.0	99.0	99.0	99.0	99.0	
Sharpen 2.85 SC	0.356 oz ai/a	A 408	0.0	99.0	80.0	99.0	87.0	99.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 702	0.0	99.0	99.0	99.0	98.0	99.0	
AMS - Liquid	8.5 lb ai/100 gal	B 904	0.0	99.0	99.0	99.0	99.0	99.0	
		Mean =	0.0	99.0	94.3	99.0	95.8	99.0	
13 Optil (68 WG)	1.36 oz ai/a	A 106	0.0	99.0	65.0	99.0	90.0	99.0	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 406	0.0	99.0	80.0	99.0	94.0	99.0	
AMS - Liquid	8.5 lb ai/100 gal	B 602	0.0	99.0	99.0	99.0	99.0	99.0	
		902	0.0	99.0	97.0	99.0	99.0	99.0	
		Mean =	0.0	99.0	85.3	99.0	95.5	99.0	

Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	CHEAL	AMBTR	IPOHE
Pest Scientific Name		Setaria faberi	Ambrosia trif>	Chenopodium al>	Ambrosia trifri>	Ipomoea hedera>
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>	Giant ragweed	Ivyleaf momin>
Crop Code	GLXMA					
BBCH Scale	BSOY					
Crop Scientific Name	Glycine max					
Crop Name	Soybean					
Rating Date	Jul-8-2013	Jul-23-2013	Jul-23-2013	Jul-23-2013	Sep-24-2013	Sep-24-2013
Rating Type	PHYCHL	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Pest Stage Majority		40 IN	60 IN	42 IN		
Pest Density, Unit		18 FT2	6 YD2	3 YD2		
Assessed By	MW	MW	MW	MW		
Days After First/Last Applic.	53 17	68 32	68 32	68 32	131 95	131 95
Plant-Eval Interval	53 DP-1	68 DP-1	68 DP-1	68 DP-1	131 DP-1	131 DP-1
Days After Emergence	47 DE-1	62 DE-1	62 DE-1	62 DE-1	125 DE-1	125 DE-1
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	13	14	15	16
14 Warrant (3 CS)	1.13 lb ai/a	A 108	0.0	99.0	40.0	99.0
Glory 75DF	0.188 lb ai/a	A 306	0.0	99.0	83.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 604	0.0	99.0	95.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 908	0.0	99.0	65.0	99.0
		Mean =	0.0	99.0	70.8	99.0
15 Outflank (51 WG)	1.02 oz ai/a	A 202	0.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 506	3.0	99.0	83.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 608	0.0	99.0	70.0	99.0
		808	0.0	99.0	73.0	99.0
		Mean =	0.8	99.0	81.3	99.0
16 Pursuit	1 oz ai/a	A 204	0.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 404	0.0	99.0	85.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 704	0.0	99.0	99.0	99.0
		806	3.0	99.0	70.0	99.0
		Mean =	0.8	99.0	88.3	99.0
17 Valor SX (51 WG)	0.9 oz ai/a	A 206	0.0	99.0	95.0	99.0
Classic	0.31 oz ai/a	A 402	0.0	99.0	85.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 804	0.0	99.0	99.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 906	0.0	99.0	75.0	99.0
		Mean =	0.0	99.0	88.5	99.0
18 Authority Assist (4 SC)	4 oz ai/a	A 208	0.0	99.0	45.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 504	0.0	99.0	95.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 706	0.0	99.0	93.0	99.0
		1006	0.0	99.0	70.0	99.0
		Mean =	0.0	99.0	75.8	99.0
19 Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 302	0.0	99.0	85.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 508	0.0	99.0	55.0	99.0
		802	0.0	99.0	99.0	99.0
		1004	0.0	99.0	90.0	99.0
		Mean =	0.0	99.0	82.3	99.0
20 Canopy	0.234 lb ai/a	A 304	0.0	99.0	99.0	99.0
Glory 75DF	0.234 lb ai/a	A 502	0.0	99.0	90.0	99.0
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 606	0.0	99.0	93.0	99.0
AMS - Liquid	8.5 lb ai/100 gal	B 1008	0.0	99.0	55.0	99.0
		Mean =	0.0	99.0	84.3	99.0

Purdue University

Pest Type				W Weed	
Pest Code				CHEAL	
Pest Scientific Name				Chenopodium al>	
Pest Name				Common lambsqu>	
Crop Code					GLXMA
BBCH Scale					BSOY
Crop Scientific Name					Glycine max
Crop Name					Soybean
Rating Date				Sep-24-2013	Sep-25-2013
Rating Type				CONTRO	YIELD
Rating Unit				%	bu/ac
Number of Subsamples				1	1
Pest Stage Majority					
Pest Density, Unit					
Assessed By					
Days After First/Last Applic.				131 95	132 96
Plant-Eval Interval				131 DP-1	132 DP-1
Days After Emergence				125 DE-1	126 DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot		19	20
1 Untreated Check			101	0.0	40.10
			405	0.0	79.30
			703	0.0	41.90
			907	0.0	5.70
			Mean =	0.0	41.75
2 Vice (5.4 EC)	21.6 oz ai/a	A	103	97.0	74.90
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	307	99.0	71.70
AMS - Liquid	8.5 lb ai/100 gal	B	603	99.0	99.20
			905	99.0	95.60
			Mean =	98.5	85.35
3 Prefix (5.29 EC)	21.6 oz ai/a	A	105	99.0	88.90
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	501	99.0	88.30
AMS - Liquid	8.5 lb ai/100 gal	B	701	99.0	99.60
			1007	99.0	96.00
			Mean =	99.0	93.20
4 Tailwind (6.5 EC)	16.3 oz ai/a	A	107	99.0	51.70
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	403	85.0	77.70
AMS - Liquid	8.5 lb ai/100 gal	B	605	99.0	91.20
			1001	99.0	55.90
			Mean =	95.5	69.13
5 Boundary (6.5 EC)	16.3 oz ai/a	A	201	99.0	48.60
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	507	99.0	80.40
AMS - Liquid	8.5 lb ai/100 gal	B	803	95.0	78.40
			1003	99.0	74.20
			Mean =	98.0	70.40
6 MANA 25337 (55 WG)	1.76 oz ai/a	A	203	99.0	76.00
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	407	99.0	80.00
AMS - Liquid	8.5 lb ai/100 gal	B	601	99.0	70.60
			903	99.0	89.00
			Mean =	99.0	78.90

Purdue University

Pest Type			W Weed		
Pest Code			CHEAL		
Pest Scientific Name			Chenopodium al>		
Pest Name			Common lambsqu>		
Crop Code				GLXMA	
BBCH Scale				BSOY	
Crop Scientific Name				Glycine max	
Crop Name				Soybean	
Rating Date			Sep-24-2013	Sep-25-2013	
Rating Type			CONTRO	YIELD	
Rating Unit			%	bu/ac	
Number of Subsamples			1	1	
Pest Stage Majority					
Pest Density, Unit					
Assessed By					
Days After First/Last Applic.			131 95	132 96	
Plant-Eval Interval			131 DP-1	132 DP-1	
Days After Emergence			125 DE-1	126 DE-1	
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	19	20	
7 MANA 25337 (55 WG)	2.34 oz ai/a	A 205	99.0	96.80	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 305	99.0	81.10	
AMS - Liquid	8.5 lb ai/100 gal	B 707	99.0	97.00	
		805	99.0	87.10	
		Mean =	99.0	90.50	
8 Pummel (5.25 ME)	0.98 lb ai/a	A 207	99.0	94.70	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 505	99.0	95.00	
AMS - Liquid	8.5 lb ai/100 gal	B 607	99.0	99.70	
		901	99.0	102.20	
		Mean =	99.0	97.90	
9 Pummel (5.25 ME)	1.31 lb ai/a	A 301	99.0	90.70	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 401	99.0	87.90	
AMS - Liquid	8.5 lb ai/100 gal	B 705	99.0	94.40	
		807	99.0	92.30	
		Mean =	99.0	91.33	
10 Torment (2.5 SL)	3.75 oz ai/a	A 303	99.0	96.90	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 503	99.0	93.00	
AMS - Liquid	8.5 lb ai/100 gal	B 801	99.0	78.30	
		1005	99.0	92.30	
		Mean =	99.0	90.13	
11 Torment (2.5 SL)	5 oz ai/a	A 102	99.0	63.80	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 308	99.0	82.80	
AMS - Liquid	8.5 lb ai/100 gal	B 708	99.0	98.20	
		1002	99.0	81.90	
		Mean =	99.0	81.68	
12 Torment (2.5 SL)	3.75 oz ai/a	A 104	99.0	72.90	
Sharpen 2.85 SC	0.356 oz ai/a	A 408	99.0	90.80	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 702	99.0	95.50	
AMS - Liquid	8.5 lb ai/100 gal	B 904	99.0	95.10	
		Mean =	99.0	88.58	
13 Optil (68 WG)	1.36 oz ai/a	A 106	95.0	79.31*	
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 406	99.0	80.20	
AMS - Liquid	8.5 lb ai/100 gal	B 602	97.0	82.30	
		902	99.0	87.90	
		Mean =	97.5	82.43	

Purdue University

Pest Type			W Weed			
Pest Code			CHEAL			
Pest Scientific Name			Chenopodium al>			
Pest Name			Common lambsqu>			
Crop Code				GLXMA		
BBCH Scale				BSOY		
Crop Scientific Name				Glycine max		
Crop Name				Soybean		
Rating Date			Sep-24-2013	Sep-25-2013		
Rating Type			CONTRO	YIELD		
Rating Unit			%	bu/ac		
Number of Subsamples			1	1		
Pest Stage Majority						
Pest Density, Unit						
Assessed By						
Days After First/Last Applic.			131 95	132 96		
Plant-Eval Interval			131 DP-1	132 DP-1		
Days After Emergence			125 DE-1	126 DE-1		
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	19	20		
14 Warrant (3 CS)	1.13 lb ai/a	A 108	99.0	72.51*		
Glory 75DF	0.188 lb ai/a	A 306	99.0	72.00		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 604	99.0	94.90		
AMS - Liquid	8.5 lb ai/100 gal	B 908	99.0	63.10		
		Mean =	99.0	75.63		
15 Outflank (51 WG)	1.02 oz ai/a	A 202	99.0	64.40		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 506	99.0	84.50		
AMS - Liquid	8.5 lb ai/100 gal	B 608	99.0	67.30		
		808	99.0	95.90		
		Mean =	99.0	78.03		
16 Pursuit	1 oz ai/a	A 204	99.0	90.70		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 404	99.0	44.80		
AMS - Liquid	8.5 lb ai/100 gal	B 704	99.0	89.80		
		806	99.0	79.50		
		Mean =	99.0	76.20		
17 Valor SX (51 WG)	0.9 oz ai/a	A 206	99.0	95.60		
Classic	0.31 oz ai/a	A 402	99.0	72.50		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 804	99.0	89.70		
AMS - Liquid	8.5 lb ai/100 gal	B 906	99.0	88.40		
		Mean =	99.0	86.55		
18 Authority Assist (4 SC)	4 oz ai/a	A 208	99.0	90.30		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 504	99.0	91.00		
AMS - Liquid	8.5 lb ai/100 gal	B 706	99.0	97.40		
		1006	99.0	82.70		
		Mean =	99.0	90.35		
19 Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 302	95.0	90.10		
AMS - Liquid	8.5 lb ai/100 gal	B 508	99.0	65.70		
		802	93.0	74.30		
		1004	99.0	91.50		
		Mean =	96.5	80.40		
20 Canopy	0.234 lb ai/a	A 304	99.0	94.10		
Glory 75DF	0.234 lb ai/a	A 502	99.0	88.80		
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B 606	99.0	90.70		
AMS - Liquid	8.5 lb ai/100 gal	B 1008	99.0	74.10		
		Mean =	99.0	86.93		

Purdue University

MANA Soybean Concepts - Pre Program

Trial ID: 13S-THP-CTS-54 Protocol ID: 13S-THP-CTS-54
 Location: Throckmorton Study Director:
 Project ID: 13-HER-CR-49-2612013-5 Investigator: Dr. Bill Johnson
 Sponsor Contact: MANA Crop Protection

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, = US
 SETFA, Setaria faberi, = US
 CHEAL, Chenopodium album, = US
 IPOHE, Ipomoea hederacea, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 PHYLMA = phytotoxicity - leaf malformation
 PHYNEC = phytotoxicity - necrosis /burn
 PHYCHL = phytotoxicity - chlorosis
 YIELD = yield

Rating Unit

% = percent
 bu/ac = bushels per acre

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

20 DP-1 = 1 GLXMA May-16-2013
 36 DP-1 = 1 GLXMA May-16-2013
 53 DP-1 = 1 GLXMA May-16-2013
 68 DP-1 = 1 GLXMA May-16-2013
 131 DP-1 = 1 GLXMA May-16-2013
 132 DP-1 = 1 GLXMA May-16-2013

Purdue University

MANA Soybean Concepts - Pre Program

Trial ID: 13S-THP-CTS-54 Protocol ID: 13S-THP-CTS-54
 Location: Throckmorton Study Director:
 Project ID: 13-HER-CR-49-2612013-5 Investigator: Dr. Bill Johnson
 Sponsor Contact: MANA Crop Protection

Pest Type		W Weed	W Weed	W Weed	W Weed					
Pest Code		AMBTR	SETFA	AMBTR	CHEAL					
Pest Scientific Name		Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name		Giant ragweed	Giant foxtail	Giant ragweed	Common lambsqu>					
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	Jun-5-2013	Jun-5-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA	PHYNEC			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Pest Stage Majority			1-13 IN	2-22 IN	1-14 IN					
Pest Density, Unit			12 FT2	6 YD2	3 YD2					
Assessed By	DOUG	DOUG	BT/GT	BT/GT	BT/GT	MW	MW			
Days After First/Last Applic.	20 20	20 20	36 36	36 36	36 36	36 36	36 36			
Plant-Eval Interval	20 DP-1	20 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1			
Days After Emergence	14 DE-1	14 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1			
Trt No.	Treatment	Rate	Appl							
	Name	Rate Unit	Code	1	2	3	4			
				5	6	7				
1	Untreated Check			0.3 a	0.0 b	0.0 d	0.0 a	0.0 b	0.8 a	0.0 a
2	Vice (5.4 EC)	21.6 oz ai/a	A	1.5 a	90.8 a	91.3 a	81.8 a	92.3 a	1.3 a	0.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
3	Prefix (5.29 EC)	21.6 oz ai/a	A	1.8 a	72.5 a	97.5 a	61.3 a	96.3 a	2.5 a	2.5 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
4	Tailwind (6.5 EC)	16.3 oz ai/a	A	1.5 a	73.0 a	82.3 a	45.0 a	98.0 a	2.0 a	0.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
5	Boundary (6.5 EC)	16.3 oz ai/a	A	0.3 a	65.3 a	96.0 a	31.3 a	98.5 a	2.8 a	0.8 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
6	MANA 25337 (55 WG)	1.76 oz ai/a	A	1.0 a	88.8 a	89.8 a	77.5 a	99.0 a	4.5 a	1.3 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
7	MANA 25337 (55 WG)	2.34 oz ai/a	A	2.0 a	87.5 a	96.5 a	69.8 a	98.5 a	8.0 a	2.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
8	Pummel (5.25 ME)	0.98 lb ai/a	A	1.8 a	71.5 a	94.8 a	50.0 a	99.0 a	2.0 a	0.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
9	Pummel (5.25 ME)	1.31 lb ai/a	A	1.5 a	66.0 a	94.3 a	80.0 a	98.5 a	1.3 a	0.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
10	Torment (2.5 SL)	3.75 oz ai/a	A	0.5 a	86.3 a	77.5 a	70.0 a	97.5 a	1.3 a	1.5 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
11	Torment (2.5 SL)	5 oz ai/a	A	0.8 a	68.5 a	91.8 a	50.0 a	98.0 a	3.3 a	1.5 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.

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	AMBTR	SETFA	AMBTR	CHEAL					
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code	GLXMA				GLXMA	GLXMA			
BBCB Scale	BSOY				BSOY	BSOY			
Crop Scientific Name	Glycine max				Glycine max	Glycine max			
Crop Name	Soybean				Soybean	Soybean			
Rating Date	Jun-5-2013	Jun-5-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013	Jun-21-2013			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	PHYLMA			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Pest Stage Majority			1-13 IN	2-22 IN	1-14 IN				
Pest Density, Unit			12 FT2	6 YD2	3 YD2				
Assessed By	DOUG	DOUG	BT/GT	BT/GT	BT/GT	MW			
Days After First/Last Applic.	20 20	20 20	36 36	36 36	36 36	36 36			
Plant-Eval Interval	20 DP-1	20 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1			
Days After Emergence	14 DE-1	14 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1			
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate			
No. Name	Unit	Unit	Unit	Unit	Unit	Unit			
12 Torment (2.5 SL)	3.75 oz ai/a	A	0.5 a	73.8 a	95.5 a	65.0 a	97.5 a	2.5 a	0.0 a
Sharpen 2.85 SC	0.356 oz ai/a	A							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
13 Optil (68 WG)	1.36 oz ai/a	A	0.8 a	45.0 ab	95.3 a	33.8 a	97.0 a	1.8 a	0.8 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
14 Warrant (3 CS)	1.13 lb ai/a	A	0.5 a	43.8 ab	94.8 a	27.5 a	99.0 a	0.8 a	0.0 a
Glory 75DF	0.188 lb ai/a	A							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
15 Outflank (51 WG)	1.02 oz ai/a	A	1.3 a	49.0 ab	88.8 a	22.5 a	96.8 a	0.0 a	0.0 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
16 Pursuit	1 oz ai/a	A	1.3 a	65.3 a	96.5 a	43.8 a	99.0 a	1.5 a	0.8 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
17 Valor SX (51 WG)	0.9 oz ai/a	A	1.8 a	74.5 a	53.8 b	35.0 a	98.0 a	2.5 a	0.0 a
Classic	0.31 oz ai/a	A							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
18 Authority Assist (4 SC)	4 oz ai/a	A	0.5 a	70.5 a	95.3 a	45.0 a	99.0 a	1.3 a	0.8 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
19 Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	0.5 a	55.8 a	23.8 c	20.0 a	93.3 a	0.0 a	0.0 a
AMS - Liquid	8.5 lb ai/100 gal	B							
20 Canopy	0.234 lb ai/a	A	2.5 a	86.5 a	89.3 a	82.5 a	98.5 a	2.0 a	0.8 a
Glory 75DF	0.234 lb ai/a	A							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
LSD (P=.05)			2.45	37.12	20.28	48.72	4.08	3.74	1.90
Standard Deviation			1.73	26.25	14.34	34.45	2.88	2.64	1.34
CV			155.51	39.35	17.44	69.49	3.11	126.7	214.92
Bartlett's X2			35.995	30.876	111.718	16.968	42.798	9.545	3.724
P(Bartlett's X2)			0.011*	0.03*	0.001*	0.525	0.001*	0.922	0.929
Replicate F			1.018	1.865	2.927	1.851	7.012	1.098	1.967
Replicate Prob(F)			0.3917	0.1459	0.0414	0.1482	0.0004	0.3576	0.1291
Treatment F			0.567	2.561	13.451	1.854	230.473	1.765	1.320
Treatment Prob(F)			0.9142	0.0033	0.0001	0.0380	0.0001	0.0511	0.2077

Purdue University

Pest Type		W Weed	W Weed	W Weed			W Weed			
Pest Code		SETFA	AMBTR	CHEAL			SETFA			
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Chenopodium album			Setaria faberi			
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu			Giant foxtail			
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	Jun-21-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-23-2013			
Rating Type	PHYCHL	CONTRO	CONTRO	CONTRO	PHYLMA	PHYCHL	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Pest Stage Majority		28 IN	48 IN	30 IN			40 IN			
Pest Density, Unit		10 FT2	5 YD2	4 YD2			18 FT2			
Assessed By	MW	MW	MW	MW	MW	MW	MW			
Days After First/Last Applic.	36 36	53 17	53 17	53 17	53 17	53 17	68 32			
Plant-Eval Interval	36 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1	68 DP-1			
Days After Emergence	30 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1	62 DE-1			
Trt No.	Treatment	Rate	Appl	8	9	10	11	12	13	14
No.	Name	Rate Unit	Code							
1	Untreated Check			0.0 a	0.0 b	0.0 b	0.0 c	0.0 a	0.0 a	0.0 b
2	Vice (5.4 EC)	21.6 oz ai/a	A	0.8 a	98.0 a	86.3 a	98.0 a	8.3 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
3	Prefix (5.29 EC)	21.6 oz ai/a	A	0.0 a	99.0 a	79.5 a	97.0 a	10.0 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
4	Tailwind (6.5 EC)	16.3 oz ai/a	A	2.5 a	99.0 a	72.5 a	95.5 a	4.8 a	2.5 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
5	Boundary (6.5 EC)	16.3 oz ai/a	A	1.3 a	99.0 a	71.3 a	95.8 a	1.3 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
6	MANA 25337 (55 WG)	1.76 oz ai/a	A	1.5 a	98.0 a	83.5 a	98.0 a	8.3 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
7	MANA 25337 (55 WG)	2.34 oz ai/a	A	3.8 a	99.0 a	81.0 a	99.0 a	5.8 a	1.3 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	Pummel (5.25 ME)	0.98 lb ai/a	A	0.0 a	99.0 a	74.3 a	99.0 a	2.5 a	0.0 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	Pummel (5.25 ME)	1.31 lb ai/a	A	0.0 a	99.0 a	73.8 a	99.0 a	4.5 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
10	Torment (2.5 SL)	3.75 oz ai/a	A	1.8 a	95.8 a	77.8 a	99.0 a	2.8 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							
11	Torment (2.5 SL)	5 oz ai/a	A	0.0 a	98.5 a	77.5 a	96.8 a	3.3 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	AMS - Liquid	8.5 lb ai/100 gal	B							

Purdue University

Pest Type		W Weed	W Weed	W Weed		W Weed					
Pest Code		SETFA	AMBTR	CHEAL		SETFA					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>		Setaria faberi					
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>		Giant foxtail					
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	Jun-21-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013	Jul-8-2013					
Rating Type	PHYCHL	CONTRO	CONTRO	CONTRO	PHYLMA	PHYCHL					
Rating Unit	%	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1	1					
Pest Stage Majority		28 IN	48 IN	30 IN		40 IN					
Pest Density, Unit		10 FT2	5 YD2	4 YD2		18 FT2					
Assessed By	MW	MW	MW	MW	MW	MW					
Days After First/Last Applic.	36 36	53 17	53 17	53 17	53 17	53 17					
Plant-Eval Interval	36 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1	53 DP-1					
Days After Emergence	30 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1					
Trt No.	Treatment Name	Rate	Unit	Appl Code	8	9	10	11	12	13	14
12	Torment (2.5 SL)	3.75 oz ai/a	A		0.8 a	96.3 a	81.5 a	99.0 a	3.3 a	0.0 a	99.0 a
	Sharpen 2.85 SC	0.356 oz ai/a	A								
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
13	Optil (68 WG)	1.36 oz ai/a	A		0.0 a	98.5 a	73.8 a	90.8 ab	4.0 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
14	Warrant (3 CS)	1.13 lb ai/a	A		0.0 a	99.0 a	58.0 a	99.0 a	2.8 a	0.0 a	99.0 a
	Glory 75DF	0.188 lb ai/a	A								
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
15	Outflank (51 WG)	1.02 oz ai/a	A		0.0 a	98.0 a	63.0 a	98.0 a	0.8 a	0.8 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
16	Pursuit	1 oz ai/a	A		0.8 a	99.0 a	75.0 a	99.0 a	3.3 a	0.8 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
17	Valor SX (51 WG)	0.9 oz ai/a	A		1.8 a	98.0 a	70.0 a	99.0 a	3.8 a	0.0 a	99.0 a
	Classic	0.31 oz ai/a	A								
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
18	Authority Assist (4 SC)	4 oz ai/a	A		1.3 a	97.0 a	57.5 a	99.0 a	2.0 a	0.0 a	99.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
19	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B		0.0 a	96.5 a	67.5 a	87.5 b	1.3 a	0.0 a	99.0 a
	AMS - Liquid	8.5 lb ai/100 gal	B								
20	Canopy	0.234 lb ai/a	A		1.3 a	99.0 a	70.8 a	98.5 a	2.5 a	0.0 a	99.0 a
	Glory 75DF	0.234 lb ai/a	A								
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
	AMS - Liquid	8.5 lb ai/100 gal	B								
LSD (P=.05)		2.64	2.68	23.31	4.85	5.92	1.38	0.00			
Standard Deviation		1.87	1.89	16.48	3.43	4.18	0.97	0.00			
CV		216.75	2.03	23.64	3.71	111.92	371.18	0.0			
Bartlett's X2		5.791	11.563	9.794	22.065	30.7	1.985	0.0			
P(Bartlett's X2)		0.832	0.239	0.938	0.009*	0.031*	0.576	.			
Replicate F		1.100	0.209	2.532	0.200	1.399	1.102	0.000			
Replicate Prob(F)		0.3565	0.8896	0.0660	0.8963	0.2524	0.3560	1.0000			
Treatment F		1.216	539.243	4.837	163.805	1.560	1.676	0.000			
Treatment Prob(F)		0.2780	0.0001	0.0001	0.0001	0.0998	0.0686	1.0000			

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	CHEAL	AMBTR	IPHOE	CHEAL			
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ambrosia trifi>	Ipomoea heder>	Chenopodium al>			
Pest Name	Giant ragweed	Common lambsqu>	Giant ragweed	Ivyleaf mornin>	Common lambsqu>			
Crop Code						GLXMA		
BBCB Scale						BSOY		
Crop Scientific Name						Glycine max		
Crop Name						Soybean		
Rating Date	Jul-23-2013	Jul-23-2013	Sep-24-2013	Sep-24-2013	Sep-24-2013	Sep-25-2013		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	YIELD		
Rating Unit	%	%	%	%	%	bu/ac		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority	60 IN	42 IN						
Pest Density, Unit	6 YD2	3 YD2						
Assessed By	MW	MW						
Days After First/Last Applic.	68 32	68 32	131 95	131 95	131 95	132 96		
Plant-Eval Interval	68 DP-1	68 DP-1	131 DP-1	131 DP-1	131 DP-1	132 DP-1		
Days After Emergence	62 DE-1	62 DE-1	125 DE-1	125 DE-1	125 DE-1	126 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	15	16	17	18	19	20
1 Untreated Check			0.0 b	0.0 b	0.0 b	0.0 c	0.0 b	41.75 b
2 Vice (5.4 EC)	21.6 oz ai/a	A	87.3 a	99.0 a	91.8 a	99.0 a	98.5 a	85.35 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
3 Prefix (5.29 EC)	21.6 oz ai/a	A	90.0 a	99.0 a	95.8 a	99.0 a	99.0 a	93.20 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
4 Tailwind (6.5 EC)	16.3 oz ai/a	A	81.0 a	99.0 a	94.3 a	96.8 a	95.5 a	69.13 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
5 Boundary (6.5 EC)	16.3 oz ai/a	A	86.0 a	99.0 a	92.8 a	99.0 a	98.0 a	70.40 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
6 MANA 25337 (55 WG)	1.76 oz ai/a	A	88.3 a	99.0 a	88.8 a	99.0 a	99.0 a	78.90 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
7 MANA 25337 (55 WG)	2.34 oz ai/a	A	91.5 a	99.0 a	97.3 a	99.0 a	99.0 a	90.50 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
8 Pummel (5.25 ME)	0.98 lb ai/a	A	87.0 a	99.0 a	91.5 a	99.0 a	99.0 a	97.90 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
9 Pummel (5.25 ME)	1.31 lb ai/a	A	91.3 a	99.0 a	96.8 a	99.0 a	99.0 a	91.33 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
10 Torment (2.5 SL)	3.75 oz ai/a	A	91.8 a	99.0 a	95.3 a	91.8 a	99.0 a	90.13 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
11 Torment (2.5 SL)	5 oz ai/a	A	84.0 a	99.0 a	91.5 a	99.0 a	99.0 a	81.68 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	CHEAL	AMBTR	IPHOE	CHEAL			
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Ambrosia trifi>	Ipomoea heder>	Chenopodium al>			
Pest Name	Giant ragweed	Common lambsqu>	Giant ragweed	Ivyleaf mornin>	Common lambsqu>			
Crop Code						GLXMA		
BBCH Scale						BSOY		
Crop Scientific Name						Glycine max		
Crop Name						Soybean		
Rating Date	Jul-23-2013	Jul-23-2013	Sep-24-2013	Sep-24-2013	Sep-24-2013	Sep-25-2013		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	YIELD		
Rating Unit	%	%	%	%	%	bu/ac		
Number of Subsamples	1	1	1	1	1	1		
Pest Stage Majority	60 IN	42 IN						
Pest Density, Unit	6 YD2	3 YD2						
Assessed By	MW	MW						
Days After First/Last Applic.	68 32	68 32	131 95	131 95	131 95	132 96		
Plant-Eval Interval	68 DP-1	68 DP-1	131 DP-1	131 DP-1	131 DP-1	132 DP-1		
Days After Emergence	62 DE-1	62 DE-1	125 DE-1	125 DE-1	125 DE-1	126 DE-1		
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate		
No. Name	Unit	Unit	Unit	Unit	Unit	Unit		
Appl Code								
12 Torment (2.5 SL)	3.75 oz ai/a	A	94.3 a	99.0 a	95.8 a	99.0 a	99.0 a	88.58 a
Sharpen 2.85 SC	0.356 oz ai/a	A						
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
13 Optil (68 WG)	1.36 oz ai/a	A	85.3 a	99.0 a	95.5 a	99.0 a	97.5 a	82.43 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
14 Warrant (3 CS)	1.13 lb ai/a	A	70.8 a	99.0 a	79.8 a	99.0 a	99.0 a	75.63 a
Glory 75DF	0.188 lb ai/a	A						
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
15 Outflank (51 WG)	1.02 oz ai/a	A	81.3 a	99.0 a	95.5 a	99.0 a	99.0 a	78.03 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
16 Pursuit	1 oz ai/a	A	88.3 a	99.0 a	97.0 a	99.0 a	99.0 a	76.20 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
17 Valor SX (51 WG)	0.9 oz ai/a	A	88.5 a	99.0 a	91.0 a	99.0 a	99.0 a	86.55 a
Classic	0.31 oz ai/a	A						
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
18 Authority Assist (4 SC)	4 oz ai/a	A	75.8 a	99.0 a	85.8 a	99.0 a	99.0 a	90.35 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
19 Roundup PowerMax 4.5 SL	0.77 lb ae/a	B	82.3 a	99.0 a	86.8 a	69.5 b	96.5 a	80.40 a
AMS - Liquid	8.5 lb ai/100 gal	B						
20 Canopy	0.234 lb ai/a	A	84.3 a	99.0 a	93.8 a	99.0 a	99.0 a	86.93 a
Glory 75DF	0.234 lb ai/a	A						
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B						
AMS - Liquid	8.5 lb ai/100 gal	B						
LSD (P=.05)			20.81	0.00	13.93	11.72	2.61	18.798
Standard Deviation			14.71	0.00	9.85	8.28	1.85	13.292
CV			18.07	0.0	11.22	8.99	1.97	16.26
Bartlett's X2			17.378	0.0	63.908	8.881	12.205	31.762
P(Bartlett's X2)			0.497	.	0.001*	0.012*	0.016*	0.033*
Replicate F			1.726	0.000	2.399	1.268	0.567	1.294
Replicate Prob(F)			0.1718	1.0000	0.0773	0.2939	0.6387	0.2856
Treatment F			7.371	0.000	18.423	29.994	570.945	3.330
Treatment Prob(F)			0.0001	1.0000	0.0001	0.0001	0.0001	0.0003

Purdue University

MANA Soybean Concepts - Pre Program

Trial ID: 13S-THP-CTS-54 Protocol ID: 13S-THP-CTS-54
 Location: Throckmorton Study Director:
 Project ID: 13-HER-CR-49-2612013-5 Investigator: Dr. Bill Johnson
 Sponsor Contact: MANA Crop Protection

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

AMBTR, Ambrosia trifida, = US
 SETFA, Setaria faberi, = US
 CHEAL, Chenopodium album, = US
 IPOHE, Ipomoea hederacea, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

PHYGEN = phytotoxicity - general / injury
 CONTRO = control / burndown or knockdown
 PHYLMA = phytotoxicity - leaf malformation
 PHYNEC = phytotoxicity - necrosis /burn
 PHYCHL = phytotoxicity - chlorosis
 YIELD = yield

Rating Unit

% = percent
 bu/ac = bushels per acre

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

20 DP-1 = 1 GLXMA May-16-2013
 36 DP-1 = 1 GLXMA May-16-2013
 53 DP-1 = 1 GLXMA May-16-2013
 68 DP-1 = 1 GLXMA May-16-2013
 131 DP-1 = 1 GLXMA May-16-2013
 132 DP-1 = 1 GLXMA May-16-2013