

# Purdue University

## ADAMA Soybean Demo Program Concepts

Trial ID: 14S-THP-CTS-56      Protocol ID: 14S-THP-CTS-56  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
 Sponsor Contact: ADAMA - Dario Narvaez

### General Trial Information

**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

**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 2933      **Description:** RR2  
**BBCH Scale:** BSOY      **Planting Date:** May-27-2014  
**Planting Method:** SEEDED seeded      **Rate, Unit:** 130000 S/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** DAMP damp      **Emergence Date:** Jun-2-2014

### Pest Description

**Pest 1 Type:** W    **Code:** IPOHE Ipomoea hederacea  
**Common Name:** Ivyleaf morningglory

**Pest 2 Type:** W    **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

**Pest 3 Type:** W    **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed

**Pest 4 Type:** W    **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

**Pest 5 Type:** W    **Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed

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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 <sup>2</sup>	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
Application Date:	May-27-2014	Jun-23-2014
Time of Day:	AM	AM
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	EAPOWE
Application Placement:	SOIL	FOLIAR
Air Temperature, Unit:	79 F	81 F
% Relative Humidity:	57	75
Wind Velocity, Unit:	8.9 mph	7 mph
Wind Direction:	SW	SW
Dew Presence (Y/N):	N no	Y yes
Soil Temperature, Unit:	78 F	80 F
Soil Moisture:	Dry	Dry
% Cloud Cover:	50	15

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	00	V4

Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale:	IPOHE W	IPOHE W
Height Minimum, Maximum:		1 5
Density, Unit:		2 YD2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W
Height Minimum, Maximum:		1 5
Density, Unit:		3 FT2
Pest 3 Code, Type, Scale:	AMBTR W	AMBTR W
Height Minimum, Maximum:		1 5
Density, Unit:		2 YD2
Pest 4 Code, Type, Scale:	CHEAL W	CHEAL W
Height Minimum, Maximum:		1 3
Density, Unit:		3 YD2
Pest 5 Code, Type, Scale:	AMARE W	AMARE W
Height Minimum, Maximum:		1 4
Density, Unit:		2 YD2

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## Application Equipment

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

Date	By	Notes
Jun-2-2014		No 7 DAT A rating. No weeds present and soybeans not emerged.

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Trial ID: 14S-THP-CTS-56      Protocol ID: 14S-THP-CTS-56  
 Location: Throckmorton      Study Director:  
 Project ID:                      Investigator: Dr. Bill Johnson  
    Sponsor Contact: ADAMA - Dario Narvaez

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	Other Rate	Other Rate	Growth Unit	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check											101	405	702	805
2	MANA 31304 (68.7 WDG )	68.7 %		WG	5.56 oz ai/a	8.1 oz/a		ATPLAN	A		7.576 g/mx	102	404	602	804
	Torment (2.5 SL)	2.5 LBA/GAL	SL		5 oz ai/a	1 pt/a		EAPOWE	B	28 DAP	15.62 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
3	MANA 31304 (68.7 WDG )	68.7 %		WG	5.56 oz ai/a	8.1 oz/a		ATPLAN	A		7.576 g/mx	104	502	704	901
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
4	MANA 31304 (68.7 WDG )	68.7 %		WG	5.56 oz ai/a	8.1 oz/a		ATPLAN	A		7.576 g/mx	105	402	605	904
	Pursuit	2 LBA/GAL	EC		1 oz ai/a	4 oz/a		EAPOWE	B	28 DAP	3.906 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
5	MANA 31304 (68.7 WDG )	68.7 %		WG	5.56 oz ai/a	8.1 oz/a		ATPLAN	A		7.576 g/mx	201	505	705	905
	Rumble (1.88 L)	1.88 LBA/GAL	L		3.76 oz ai/a	1 pt/a		EAPOWE	B	28 DAP	15.62 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
6	Pummel (5.25 ME)	5.25 LBA/GAL	ME		21 oz ai/a	2 pt/a		ATPLAN	A		31.25 ml/mx	202	501	802	1005
	Glory (75 DG)	75 %	WG		4.5 oz ai/a	6 oz/a		ATPLAN	A		5.617 g/mx				
	Vice (5.4 EC)	5.4 LBA/GAL	EC		24.3 oz ai/a	2.25 pt/a		EAPOWE	B	28 DAP	35.15 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
7	Pummel (5.25 ME)	5.25 LBA/GAL	ME		21 oz ai/a	2 pt/a		ATPLAN	A		31.25 ml/mx	204	401	601	902
	Glory (75 DG)	75 %	WG		4.5 oz ai/a	6 oz/a		ATPLAN	A		5.617 g/mx				
	Rumble (1.88 L)	1.88 LBA/GAL	L		6 oz ai/a	1.6 pt/a		EAPOWE	B	28 DAP	24.93 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
8	Pummel (5.25 ME)	5.25 LBA/GAL	ME		21 oz ai/a	2 pt/a		ATPLAN	A		31.25 ml/mx	205	305	604	1004
	Glory (75 DG)	75 %	WG		4.5 oz ai/a	6 oz/a		ATPLAN	A		5.617 g/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
9	MANA 25337 (55 WDG )	55 %		WG	2.34 oz ai/a	4.25 oz/a		ATPLAN	A		3.983 g/mx	301	304	701	1001
	Glory (75 DG)	75 %	WG		4.5 oz ai/a	6 oz/a		ATPLAN	A		5.617 g/mx				
	Vice (5.4 EC)	5.4 LBA/GAL	EC		24.3 oz ai/a	2.25 pt/a		EAPOWE	B	28 DAP	35.15 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
10	MANA 25337 (55 WDG )	55 %		WG	2.34 oz ai/a	4.25 oz/a		ATPLAN	A		3.983 g/mx	302	504	801	1002
	Glory (75 DG)	75 %	WG		4.5 oz ai/a	6 oz/a		ATPLAN	A		5.617 g/mx				
	Rumble (1.88 L)	1.88 LBA/GAL	L		6 oz ai/a	1.6 pt/a		EAPOWE	B	28 DAP	24.93 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
11	MANA 25337 (55 WDG )	55 %		WG	2.34 oz ai/a	4.25 oz/a		ATPLAN	A		3.983 g/mx	103	403	606	1006
	Glory (75 DG)	75 %	WG		4.5 oz ai/a	6 oz/a		ATPLAN	A		5.617 g/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				
12	MANA 25337 (55 WDG )	55 %		WG	2.34 oz ai/a	4.25 oz/a		ATPLAN	A		3.983 g/mx	106	306	706	903
	Glory (75 DG)	75 %	WG		4.5 oz ai/a	6 oz/a		ATPLAN	A		5.617 g/mx				
	Torment (2.5 SL)	2.5 LBA/GAL	SL		5 oz ai/a	1 pt/a		EAPOWE	B	28 DAP	15.62 ml/mx				
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL		18 oz ae/a	32 oz/a		EAPOWE	B	28 DAP	31.25 ml/mx				
	NIS	100 %	SL		0.25 % v/v	0.25 % v/v		EAPOWE	B	28 DAP	6.249 ml/mx				

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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 to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
13	Torment (2.5 SL)	2.5 LBA/GAL	SL	SL	5 oz ai/a		1 pt/a			ATPLAN	A		15.62 ml/mx		203	506	603	906
	Glory (75 DG)	75 %	WG	WG	4.5 oz ai/a		6 oz/a			ATPLAN	A		5.617 g/mx					
	Parallel (7.8 EC)	7.8 LBA/GAL	EC	EC	20.7 oz ai/a		1.33 pt/a			EAPOWE	B	28 DAP	20.73 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	SL	18 oz ae/a		32 oz/a			EAPOWE	B	28 DAP	31.25 ml/mx					
	NIS	100 %	SL	SL	0.25 % v/v		0.25 % v/v			EAPOWE	B	28 DAP	6.249 ml/mx					
14	Torment (2.5 SL)	2.5 LBA/GAL	SL	SL	5 oz ai/a		1 pt/a			ATPLAN	A		15.62 ml/mx		206	406	803	806
	Glory (75 DG)	75 %	WG	WG	4.5 oz ai/a		6 oz/a			ATPLAN	A		5.617 g/mx					
	Warrant (3 CS)	3 LBA/GAL	SC	SC	18 oz ai/a		3 pt/a			EAPOWE	B	28 DAP	46.87 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	SL	18 oz ae/a		32 oz/a			EAPOWE	B	28 DAP	31.25 ml/mx					
	NIS	100 %	SL	SL	0.25 % v/v		0.25 % v/v			EAPOWE	B	28 DAP	6.249 ml/mx					
15	Torment (2.5 SL)	2.5 LBA/GAL	SL	SL	5 oz ai/a		1 pt/a			ATPLAN	A		15.62 ml/mx		303	503	703	1003
	Glory (75 DG)	75 %	WG	WG	4.5 oz ai/a		6 oz/a			ATPLAN	A		5.617 g/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	SL	18 oz ae/a		32 oz/a			EAPOWE	B	28 DAP	31.25 ml/mx					
	NIS	100 %	SL	SL	0.25 % v/v		0.25 % v/v			EAPOWE	B	28 DAP	6.249 ml/mx					

Sort Order: Treatment

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Trial ID: 14S-THP-CTS-56      Protocol ID: 14S-THP-CTS-56  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
 Sponsor Contact: ADAMA - Dario Narvaez

Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	IPOHE	AMBTR	CHEAL	SETFA				
Pest Scientific Name	Ipomoea heder>	Ambrosia trifi>	Chenopodium al>	Setaria faberi				
Pest Name	Ivyleaf mornin>	Giant ragweed	Common lambsqu>	Giant foxtail				
Crop Code					GLXMA	GLXMA		
BBCH Scale					BSOY	BSOY		
Crop Scientific Name					Glycine max	Glycine max		
Crop Name					Soybean	Soybean		
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-30-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU		
Rating Unit	%	%	%	%		%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT		1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	VC	VC	VC	VC		V5		
Pest Stage Majority	1-2"	1-2"						
Pest Density, Unit	3 YD2	1 YD2						
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	34 7		
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	13 DP-1	13 DP-1	34 DP-1		
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	28 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
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
		702	0.0	0.0	0.0	0.0	0.0	0.0
		805	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 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 102	90.0	95.0	99.0	99.0	0.0	0.0
Torment (2.5 SL)	5 oz ai/a	B 404	99.0	99.0	99.0	90.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 602	99.0	99.0	99.0	99.0	0.0	0.0
NIS	0.25 % v/v	B 804	99.0	99.0	99.0	99.0	0.0	0.0
		Mean =	96.8	98.0	99.0	96.8	0.0	0.0
3 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 104	94.0	99.0	99.0	99.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 502	99.0	95.0	99.0	99.0	0.0	0.0
NIS	0.25 % v/v	B 704	97.0	99.0	99.0	98.0	0.0	0.0
		901	95.0	98.0	99.0	99.0	0.0	0.0
		Mean =	96.3	97.8	99.0	98.8	0.0	0.0
4 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 105	95.0	99.0	99.0	99.0	0.0	0.0
Pursuit	1 oz ai/a	B 402	95.0	98.0	99.0	99.0	0.0	0.0
NIS	0.25 % v/v	B 605	98.0	99.0	99.0	99.0	0.0	0.0
		904	95.0	99.0	99.0	99.0	0.0	0.0
		Mean =	95.8	98.8	99.0	99.0	0.0	0.0
5 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 201	90.0	90.0	99.0	99.0	0.0	3.0
Rumble (1.88 L)	3.76 oz ai/a	B 505	99.0	99.0	99.0	97.0	0.0	0.0
NIS	0.25 % v/v	B 705	80.0	99.0	99.0	99.0	0.0	3.0
		905	99.0	99.0	99.0	97.0	0.0	0.0
		Mean =	92.0	96.8	99.0	98.0	0.0	1.5

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Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	IPOHE	AMBTR	CHEAL	SETFA		
Pest Scientific Name	Ipomoea hederata>	Ambrosia trifida>	Chenopodium album>	Setaria faberii>		
Pest Name	Ivyleaf morningglow	Giant ragweed	Common lambsquarters	Giant foxtail		
Crop Code					GLXMA	GLXMA
BBCH Scale					BSOY	BSOY
Crop Scientific Name					Glycine max	Glycine max
Crop Name					Soybean	Soybean
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-30-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU
Rating Unit	%	%	%	%		%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT		1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	VC	VC	VC	VC		V5
Pest Stage Majority	1-2"	1-2"				
Pest Density, Unit	3 YD2	1 YD2				
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	34 7
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	13 DP-1	13 DP-1	34 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	28 DE-1
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
6 Pummel (5.25 ME)	21 oz ai/a	A 202	90.0	95.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 501	99.0	99.0	99.0	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 802	99.0	99.0	99.0	98.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1005	97.0	97.0	99.0	99.0
NIS	0.25 % v/v	B				
		Mean =	96.3	97.5	99.0	98.8
7 Pummel (5.25 ME)	21 oz ai/a	A 204	80.0	95.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 401	95.0	95.0	99.0	99.0
Rumble (1.88 L)	6 oz ai/a	B 601	99.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 902	99.0	95.0	99.0	99.0
NIS	0.25 % v/v	B				
		Mean =	93.3	96.0	99.0	99.0
8 Pummel (5.25 ME)	21 oz ai/a	A 205	80.0	95.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 305	90.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 604	98.0	98.0	99.0	98.0
NIS	0.25 % v/v	B 1004	95.0	99.0	99.0	95.0
		Mean =	90.8	97.8	99.0	97.8
9 MANA 25337 (55 WDG )	2.34 oz ai/a	A 301	98.0	99.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 304	99.0	95.0	99.0	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 701	70.0	99.0	99.0	90.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1001	99.0	93.0	99.0	99.0
NIS	0.25 % v/v	B				
		Mean =	91.5	96.5	99.0	96.8
10 MANA 25337 (55 WDG )	2.34 oz ai/a	A 302	99.0	98.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 504	98.0	99.0	99.0	99.0
Rumble (1.88 L)	6 oz ai/a	B 801	95.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1002	97.0	97.0	99.0	99.0
NIS	0.25 % v/v	B				
		Mean =	97.3	98.3	99.0	99.0
11 MANA 25337 (55 WDG )	2.34 oz ai/a	A 103	90.0	98.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 403	99.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 606	97.0	99.0	99.0	99.0
NIS	0.25 % v/v	B 1006	99.0	99.0	99.0	99.0
		Mean =	96.3	98.8	99.0	99.0

# Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed		
Pest Code	IPOHE	AMBTR	CHEAL	SETFA		
Pest Scientific Name	Ipomoea heder>	Ambrosia trifl>	Chenopodium al>	Setaria faberi		
Pest Name	Ivyleaf mornin>	Giant ragweed	Common lambsqu>	Giant foxtail		
Crop Code					GLXMA	GLXMA
BBCH Scale					BSOY	BSOY
Crop Scientific Name					Glycine max	Glycine max
Crop Name					Soybean	Soybean
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-30-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU
Rating Unit	%	%	%	%		%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT		1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	VC	VC	VC	VC		V5
Pest Stage Majority	1-2"	1-2"				
Pest Density, Unit	3 YD2	1 YD2				
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	34 7
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	13 DP-1	13 DP-1	34 DP-1
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	28 DE-1
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
12 MANA 25337 (55 WDG )	2.34 oz ai/a	A 106	80.0	99.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 306	99.0	98.0	99.0	99.0
Torment (2.5 SL)	5 oz ai/a	B 706	99.0	98.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 903	99.0	99.0	99.0	99.0
NIS	0.25 % v/v	B				
		Mean =	94.3	98.5	99.0	99.0
13 Torment (2.5 SL)	5 oz ai/a	A 203	85.0	99.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 506	99.0	95.0	99.0	99.0
Parallel (7.8 EC)	20.7 oz ai/a	B 603	98.0	98.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 906	99.0	99.0	99.0	90.0
NIS	0.25 % v/v	B				
		Mean =	95.3	97.8	99.0	96.8
14 Torment (2.5 SL)	5 oz ai/a	A 206	90.0	99.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 406	99.0	99.0	99.0	99.0
Warrant (3 CS)	18 oz ai/a	B 803	99.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 806	98.0	99.0	99.0	99.0
NIS	0.25 % v/v	B				
		Mean =	96.5	99.0	99.0	99.0
15 Torment (2.5 SL)	5 oz ai/a	A 303	98.0	98.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 503	99.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 703	95.0	99.0	99.0	98.0
NIS	0.25 % v/v	B 1003	99.0	99.0	99.0	95.0
		Mean =	97.8	98.8	99.0	97.8



# Purdue University

Pest Type				W Weed SETFA	W Weed AMBTR	W Weed AMARE			
Pest Code				Setaria faberi	Ambrosia trifi>	Amaranthus ret>			
Pest Scientific Name				Giant foxtail	Giant ragweed	Redroot pigweed			
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-30-2014	Jun-30-2014	Jun-30-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014			
Rating Type	PHYNEC	PHYLMA	PHYCHL	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V5	V5	V5	V8	V8	V8			
Pest Stage Majority									
Pest Density, Unit									
Days After First/Last Applic.	34 7	34 7	34 7	43 16	43 16	43 16			
Plant-Eval Interval	34 DP-1	34 DP-1	34 DP-1	43 DP-1	43 DP-1	43 DP-1			
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	37 DE-1	37 DE-1	37 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
			702	0.0	0.0	0.0	0.0	0.0	0.0
			805	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 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	102	3.0	3.0	2.0	87.0	89.0	99.0
Torment (2.5 SL)	5 oz ai/a	B	404	5.0	0.0	0.0	70.0	86.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	602	0.0	4.0	0.0	92.0	86.0	99.0
NIS	0.25 % v/v	B	804	3.0	5.0	0.0	89.0	86.0	99.0
			Mean =	2.8	3.0	0.5	84.5	86.8	99.0
3 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	104	1.0	0.0	0.0	98.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	502	0.0	0.0	0.0	98.0	87.0	99.0
NIS	0.25 % v/v	B	704	0.0	0.0	0.0	97.0	95.0	99.0
			901	0.0	4.0	0.0	97.0	95.0	99.0
			Mean =	0.3	1.0	0.0	97.5	94.0	99.0
4 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	105	0.0	0.0	0.0	87.0	75.0	99.0
Pursuit	1 oz ai/a	B	402	0.0	0.0	0.0	95.0	85.0	99.0
NIS	0.25 % v/v	B	605	0.0	0.0	0.0	94.0	83.0	99.0
			904	0.0	0.0	0.0	93.0	90.0	99.0
			Mean =	0.0	0.0	0.0	92.3	83.3	99.0
5 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	201	6.0	8.0	0.0	80.0	84.0	99.0
Rumble (1.88 L)	3.76 oz ai/a	B	505	3.0	4.0	3.0	85.0	84.0	99.0
NIS	0.25 % v/v	B	705	3.0	5.0	3.0	88.0	94.0	99.0
			905	5.0	8.0	6.0	85.0	99.0	99.0
			Mean =	4.3	6.3	3.0	84.5	90.3	99.0

# Purdue University

Pest Type				W Weed SETFA	W Weed AMBTR	W Weed AMARE		
Pest Code				Setaria faberi	Ambrosia trifida	Amaranthus retrofractus		
Pest Scientific Name				Giant foxtail	Giant ragweed	Redroot pigweed		
Pest Name								
Crop Code	GLXMA	GLXMA	GLXMA					
BCH Scale	BSOY	BSOY	BSOY					
Crop Scientific Name	Glycine max	Glycine max	Glycine max					
Crop Name	Soybean	Soybean	Soybean					
Rating Date	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014		
Rating Type	PHYNEC	PHYLMA	PHYCHL	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	V5	V5	V5	V8	V8	V8		
Pest Stage Majority								
Pest Density, Unit								
Days After First/Last Applic.	34 7	34 7	34 7	43 16	43 16	43 16		
Plant-Eval Interval	34 DP-1	34 DP-1	34 DP-1	43 DP-1	43 DP-1	43 DP-1		
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	37 DE-1	37 DE-1	37 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12
6 Pummel (5.25 ME)	21 oz ai/a	A 202	7.0	10.0	0.0	95.0	89.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 501	8.0	8.0	0.0	99.0	85.0	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 802	6.0	7.0	9.0	95.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1005	6.0	6.0	10.0	99.0	99.0	99.0
NIS	0.25 % v/v	B						
		Mean =	6.8	7.8	4.8	97.0	93.0	99.0
7 Pummel (5.25 ME)	21 oz ai/a	A 204	7.0	15.0	0.0	99.0	95.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 401	7.0	10.0	5.0	99.0	99.0	99.0
Rumble (1.88 L)	6 oz ai/a	B 601	5.0	8.0	4.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 902	5.0	9.0	9.0	99.0	99.0	99.0
NIS	0.25 % v/v	B						
		Mean =	6.0	10.5	4.5	99.0	98.0	99.0
8 Pummel (5.25 ME)	21 oz ai/a	A 205	0.0	0.0	0.0	99.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 305	0.0	0.0	0.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 604	0.0	0.0	0.0	99.0	92.0	99.0
NIS	0.25 % v/v	B 1004	0.0	0.0	0.0	99.0	99.0	99.0
		Mean =	0.0	0.0	0.0	99.0	97.3	99.0
9 MANA 25337 (55 WDG )	2.34 oz ai/a	A 301	10.0	8.0	0.0	99.0	98.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 304	9.0	15.0	5.0	99.0	99.0	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 701	8.0	15.0	0.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1001	10.0	4.0	0.0	99.0	90.0	99.0
NIS	0.25 % v/v	B						
		Mean =	9.3	10.5	1.3	99.0	96.5	99.0
10 MANA 25337 (55 WDG )	2.34 oz ai/a	A 302	5.0	8.0	4.0	99.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 504	5.0	5.0	7.0	99.0	99.0	99.0
Rumble (1.88 L)	6 oz ai/a	B 801	5.0	10.0	5.0	99.0	87.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1002	5.0	9.0	7.0	98.0	93.0	99.0
NIS	0.25 % v/v	B						
		Mean =	5.0	8.0	5.8	98.8	94.5	99.0
11 MANA 25337 (55 WDG )	2.34 oz ai/a	A 103	0.0	0.0	0.0	98.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 403	0.0	0.0	0.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 606	0.0	2.0	0.0	98.0	99.0	99.0
NIS	0.25 % v/v	B 1006	0.0	3.0	0.0	95.0	99.0	99.0
		Mean =	0.0	1.3	0.0	97.5	99.0	99.0

# Purdue University

Pest Type				W Weed	W Weed	W Weed		
Pest Code				SETFA	AMBTR	AMARE		
Pest Scientific Name				Setaria faberi	Ambrosia trifida	Amaranthus retrofractus		
Pest Name				Giant foxtail	Giant ragweed	Redroot pigweed		
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-30-2014	Jun-30-2014	Jun-30-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014		
Rating Type	PHYNEC	PHYLMA	PHYCHL	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	V5	V5	V5	V8	V8	V8		
Pest Stage Majority								
Pest Density, Unit								
Days After First/Last Applic.	34 7	34 7	34 7	43 16	43 16	43 16		
Plant-Eval Interval	34 DP-1	34 DP-1	34 DP-1	43 DP-1	43 DP-1	43 DP-1		
Days After Emergence	28 DE-1	28 DE-1	28 DE-1	37 DE-1	37 DE-1	37 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12
12 MANA 25337 (55 WDG )	2.34 oz ai/a	A 106	5.0	6.0	0.0	95.0	97.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 306	0.0	5.0	7.0	99.0	99.0	99.0
Torment (2.5 SL)	5 oz ai/a	B 706	0.0	6.0	7.0	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 903	3.0	5.0	5.0	92.0	87.0	99.0
NIS	0.25 % v/v	B						
Mean =			2.0	5.5	4.8	96.3	95.5	99.0
13 Torment (2.5 SL)	5 oz ai/a	A 203	5.0	0.0	0.0	99.0	93.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 506	3.0	0.0	0.0	99.0	86.0	99.0
Parallel (7.8 EC)	20.7 oz ai/a	B 603	6.0	0.0	0.0	99.0	87.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 906	4.0	3.0	0.0	99.0	99.0	99.0
NIS	0.25 % v/v	B						
Mean =			4.5	0.8	0.0	99.0	91.3	99.0
14 Torment (2.5 SL)	5 oz ai/a	A 206	0.0	0.0	0.0	99.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 406	0.0	0.0	0.0	99.0	99.0	99.0
Warrant (3 CS)	18 oz ai/a	B 803	0.0	0.0	0.0	99.0	92.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 806	0.0	3.0	0.0	99.0	99.0	99.0
NIS	0.25 % v/v	B						
Mean =			0.0	0.8	0.0	99.0	97.3	99.0
15 Torment (2.5 SL)	5 oz ai/a	A 303	5.0	2.0	0.0	95.0	87.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 503	0.0	0.0	0.0	99.0	80.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 703	0.0	0.0	0.0	99.0	99.0	99.0
NIS	0.25 % v/v	B 1003	0.0	0.0	0.0	99.0	97.0	99.0
Mean =			1.3	0.5	0.0	98.0	90.8	99.0

# Purdue University

Pest Type	W Weed	W Weed					W Weed		
Pest Code	CHEAL	IPOHE					SETFA		
Pest Scientific Name	Chenopodium al>	Ipomoea heder>					Setaria faberi		
Pest Name	Common lambsqu>	lvyleaf mornin>					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			
Rating Date	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-22-2014		
Rating Type	CONTRO	CONTRO	PHYSTU	PHYLMA	PHYNEC	PHYCHL	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority	V8	V8	V8	V8	V8	V8			
Pest Stage Majority							34		
Pest Density, Unit							8 FT2		
Days After First/Last Applic.	43 16	43 16	43 16	43 16	43 16	43 16	56 29		
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	56 DP-1		
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	50 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	13	14	15	16	17	18	19
1 Untreated Check		101	0.0	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	0.0
		702	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		805	0.0	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	0.0
2 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 102	95.0	60.0	0.0	3.0	0.0	0.0	94.0
Torment (2.5 SL)	5 oz ai/a	B 404	99.0	99.0	0.0	3.0	0.0	0.0	85.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 602	99.0	99.0	0.0	2.0	0.0	0.0	90.0
NIS	0.25 % v/v	B 804	99.0	99.0	0.0	3.0	0.0	0.0	92.0
		Mean =	98.0	89.3	0.0	2.8	0.0	0.0	90.3
3 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 104	99.0	78.0	0.0	0.0	0.0	0.0	97.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 502	99.0	85.0	0.0	0.0	0.0	0.0	99.0
NIS	0.25 % v/v	B 704	99.0	85.0	0.0	0.0	0.0	0.0	95.0
		901	99.0	85.0	0.0	0.0	0.0	0.0	95.0
		Mean =	99.0	83.3	0.0	0.0	0.0	0.0	96.5
4 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 105	93.0	40.0	0.0	0.0	0.0	0.0	90.0
Pursuit	1 oz ai/a	B 402	99.0	40.0	0.0	0.0	0.0	0.0	93.0
NIS	0.25 % v/v	B 605	90.0	80.0	0.0	0.0	0.0	0.0	94.0
		904	75.0	40.0	0.0	0.0	0.0	0.0	93.0
		Mean =	89.3	50.0	0.0	0.0	0.0	0.0	92.5
5 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 201	99.0	90.0	0.0	5.0	3.0	5.0	85.0
Rumble (1.88 L)	3.76 oz ai/a	B 505	99.0	99.0	0.0	3.0	0.0	0.0	80.0
NIS	0.25 % v/v	B 705	90.0	60.0	0.0	5.0	0.0	0.0	90.0
		905	80.0	99.0	0.0	5.0	3.0	5.0	90.0
		Mean =	92.0	87.0	0.0	4.5	1.5	2.5	86.3

# Purdue University

Pest Type	W Weed	W Weed				W Weed			
Pest Code	CHEAL	IPOHE				SETFA			
Pest Scientific Name	Chenopodium al>	Ipomoea heder>				Setaria faberi			
Pest Name	Common lambsqu>	Ivyleaf mornin>				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			
Rating Date	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014			
Rating Type	CONTRO	CONTRO	PHYSTU	PHYLMA	PHYNEC	PHYCHL			
Rating Unit	%	%	%	%	%	%			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V8	V8	V8	V8	V8	V8			
Pest Stage Majority									
Pest Density, Unit						34			
Days After First/Last Applic.	43 16	43 16	43 16	43 16	43 16	43 16			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1			
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1			
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	13	14	15	16			
			17	18	19				
6 Pummel (5.25 ME)	21 oz ai/a	A 202	99.0	90.0	5.0	6.0	0.0	0.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 501	99.0	85.0	5.0	10.0	0.0	0.0	97.0
Vice (5.4 EC)	24.3 oz ai/a	B 802	99.0	99.0	5.0	7.0	0.0	3.0	94.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1005	99.0	97.0	0.0	5.0	0.0	0.0	93.0
NIS	0.25 % v/v	B							
Mean =			99.0	92.8	3.8	7.0	0.0	0.8	95.8
7 Pummel (5.25 ME)	21 oz ai/a	A 204	99.0	95.0	5.0	2.0	2.0	0.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 401	99.0	97.0	3.0	5.0	3.0	5.0	99.0
Rumble (1.88 L)	6 oz ai/a	B 601	99.0	99.0	0.0	2.0	0.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 902	99.0	99.0	0.0	0.0	0.0	0.0	99.0
NIS	0.25 % v/v	B							
Mean =			99.0	97.5	2.0	2.3	1.3	1.3	99.0
8 Pummel (5.25 ME)	21 oz ai/a	A 205	99.0	92.0	0.0	0.0	0.0	0.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 305	99.0	93.0	0.0	0.0	0.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 604	99.0	95.0	0.0	0.0	0.0	0.0	99.0
NIS	0.25 % v/v	B 1004	99.0	95.0	0.0	2.0	0.0	0.0	99.0
Mean =			99.0	93.8	0.0	0.5	0.0	0.0	99.0
9 MANA 25337 (55 WDG )	2.34 oz ai/a	A 301	99.0	98.0	10.0	8.0	3.0	3.0	98.0
Glory (75 DG)	4.5 oz ai/a	A 304	99.0	99.0	3.0	6.0	5.0	5.0	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 701	99.0	98.0	5.0	4.0	0.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1001	99.0	99.0	0.0	5.0	0.0	0.0	99.0
NIS	0.25 % v/v	B							
Mean =			99.0	98.5	4.5	5.8	2.0	2.0	98.8
10 MANA 25337 (55 WDG )	2.34 oz ai/a	A 302	99.0	97.0	5.0	6.0	0.0	0.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 504	99.0	95.0	2.0	0.0	0.0	0.0	99.0
Rumble (1.88 L)	6 oz ai/a	B 801	99.0	99.0	3.0	5.0	3.0	5.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1002	99.0	99.0	0.0	5.0	5.0	5.0	98.0
NIS	0.25 % v/v	B							
Mean =			99.0	97.5	2.5	4.0	2.0	2.5	98.8
11 MANA 25337 (55 WDG )	2.34 oz ai/a	A 103	99.0	90.0	0.0	0.0	0.0	0.0	97.0
Glory (75 DG)	4.5 oz ai/a	A 403	99.0	99.0	0.0	0.0	0.0	0.0	96.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 606	99.0	94.0	0.0	0.0	0.0	0.0	99.0
NIS	0.25 % v/v	B 1006	99.0	99.0	0.0	0.0	0.0	0.0	97.0
Mean =			99.0	95.5	0.0	0.0	0.0	0.0	97.3

# Purdue University

Pest Type	W Weed	W Weed				W Weed			
Pest Code	CHEAL	IPOHE				SETFA			
Pest Scientific Name	Chenopodium al>	Ipomoea heder>				Setaria faberi			
Pest Name	Common lambsqu>	Ivyleaf mornin>				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			
Rating Date	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014			
Rating Type	CONTRO	CONTRO	PHYSTU	PHYLMA	PHYNEC	PHYCHL			
Rating Unit	%	%	%	%	%	%			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V8	V8	V8	V8	V8	V8			
Pest Stage Majority									
Pest Density, Unit						34			
Days After First/Last Applic.	43 16	43 16	43 16	43 16	43 16	43 16			
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1			
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1			
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	13	14	15	16			
			17	18	19				
12 MANA 25337 (55 WDG )	2.34 oz ai/a	A 106	99.0	95.0	2.0	6.0	3.0	0.0	95.0
Glory (75 DG)	4.5 oz ai/a	A 306	99.0	99.0	4.0	3.0	0.0	0.0	99.0
Torment (2.5 SL)	5 oz ai/a	B 706	99.0	99.0	0.0	2.0	0.0	3.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 903	99.0	95.0	0.0	4.0	0.0	0.0	92.0
NIS	0.25 % v/v	B							
		Mean =	99.0	97.0	1.5	3.8	0.8	0.8	96.3
13 Torment (2.5 SL)	5 oz ai/a	A 203	99.0	85.0	2.0	0.0	0.0	0.0	98.0
Glory (75 DG)	4.5 oz ai/a	A 506	99.0	99.0	0.0	0.0	0.0	0.0	99.0
Parallel (7.8 EC)	20.7 oz ai/a	B 603	99.0	95.0	5.0	0.0	0.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 906	99.0	99.0	0.0	0.0	0.0	0.0	99.0
NIS	0.25 % v/v	B							
		Mean =	99.0	94.5	1.8	0.0	0.0	0.0	98.8
14 Torment (2.5 SL)	5 oz ai/a	A 206	99.0	85.0	0.0	0.0	0.0	0.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 406	99.0	99.0	0.0	0.0	0.0	0.0	99.0
Warrant (3 CS)	18 oz ai/a	B 803	99.0	99.0	0.0	0.0	0.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 806	99.0	99.0	3.0	0.0	0.0	0.0	99.0
NIS	0.25 % v/v	B							
		Mean =	99.0	95.5	0.8	0.0	0.0	0.0	99.0
15 Torment (2.5 SL)	5 oz ai/a	A 303	99.0	94.0	0.0	3.0	0.0	0.0	95.0
Glory (75 DG)	4.5 oz ai/a	A 503	99.0	99.0	0.0	0.0	0.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 703	99.0	95.0	3.0	0.0	0.0	0.0	99.0
NIS	0.25 % v/v	B 1003	99.0	99.0	0.0	2.0	0.0	0.0	99.0
		Mean =	99.0	96.8	0.8	1.3	0.0	0.0	98.0

# Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed		W Weed		
Pest Code	AMBTR	ABUTH	IPOHE	CHEAL		SETFA		
Pest Scientific Name	Ambrosia trifi>	Abutilon theop>	Ipomoea heder>	Chenopodium ai>		Setaria faberi		
Pest Name	Giant ragweed	Velvetleaf	Ivyleaf mornin>	Common lambsqu>		Giant foxtail		
Crop Code					GLXMA			
BBCH Scale					BSOY			
Crop Scientific Name					Glycine max			
Crop Name					Soybean			
Rating Date	Jul-22-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014	Aug-25-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYSTU	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority								
Pest Stage Majority	48	36	24	34				
Pest Density, Unit	3 YD2	1 YD2	3 YD2	1 YD2		5 FT2		
Days After First/Last Applic.	56 29	56 29	56 29	56 29	56 29	90 63		
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	90 DP-1		
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	50 DE-1	50 DE-1	84 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	20	21	22	23	24	25
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
		702	0.0	0.0	0.0	0.0	0.0	0.0
		805	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 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 102	90.0	99.0	80.0	99.0	0.0	85.0
Torment (2.5 SL)	5 oz ai/a	B 404	85.0	99.0	99.0	99.0	0.0	90.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 602	86.0	99.0	99.0	99.0	0.0	92.0
NIS	0.25 % v/v	B 804	89.0	99.0	99.0	99.0	0.0	85.0
		Mean =	87.5	99.0	94.3	99.0	0.0	88.0
3 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 104	99.0	99.0	85.0	99.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 502	93.0	99.0	90.0	99.0	0.0	99.0
NIS	0.25 % v/v	B 704	94.0	99.0	93.0	99.0	0.0	95.0
		901	95.0	99.0	99.0	99.0	0.0	95.0
		Mean =	95.3	99.0	91.8	99.0	0.0	97.0
4 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 105	85.0	99.0	80.0	99.0	0.0	90.0
Pursuit	1 oz ai/a	B 402	87.0	99.0	60.0	99.0	0.0	95.0
NIS	0.25 % v/v	B 605	77.0	99.0	99.0	99.0	0.0	99.0
		904	85.0	99.0	60.0	87.0	0.0	95.0
		Mean =	83.5	99.0	74.8	96.0	0.0	94.8
5 MANA 31304 (68.7 WDG )	5.56 oz ai/a	A 201	80.0	99.0	70.0	99.0	0.0	85.0
Rumble (1.88 L)	3.76 oz ai/a	B 505	85.0	99.0	99.0	99.0	0.0	70.0
NIS	0.25 % v/v	B 705	89.0	99.0	85.0	90.0	0.0	85.0
		905	87.0	99.0	99.0	85.0	0.0	85.0
		Mean =	85.3	99.0	88.3	93.3	0.0	81.3

# Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	ABUTH	IPOHE	CHEAL	SETFA			
Pest Scientific Name	Ambrosia trifi>	Abutilon theop>	Ipomoea heder>	Chenopodium al>	Setaria faberi			
Pest Name	Giant ragweed	Velvetleaf	Ivyleaf mornin>	Common lambsqu>	Giant foxtail			
Crop Code					GLXMA			
BBCH Scale					BSOY			
Crop Scientific Name					Glycine max			
Crop Name					Soybean			
Rating Date	Jul-22-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014	Aug-25-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYSTU	CONTRO		
Rating Unit	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority								
Pest Stage Majority	48	36	24	34				
Pest Density, Unit	3 YD2	1 YD2	3 YD2	1 YD2		5 FT2		
Days After First/Last Applic.	56 29	56 29	56 29	56 29	56 29	90 63		
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1	90 DP-1		
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	50 DE-1	50 DE-1	84 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	20	21	22	23	24	25
6 Pummel (5.25 ME)	21 oz ai/a	A 202	87.0	99.0	95.0	99.0	2.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 501	87.0	99.0	85.0	99.0	2.0	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 802	99.0	99.0	96.0	99.0	4.0	95.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1005	99.0	99.0	99.0	99.0	0.0	90.0
NIS	0.25 % v/v	B						
		Mean =	93.0	99.0	93.8	99.0	2.0	95.8
7 Pummel (5.25 ME)	21 oz ai/a	A 204	93.0	99.0	85.0	99.0	2.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 401	99.0	99.0	97.0	99.0	3.0	99.0
Rumble (1.88 L)	6 oz ai/a	B 601	99.0	99.0	99.0	99.0	2.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 902	99.0	99.0	99.0	99.0	2.0	99.0
NIS	0.25 % v/v	B						
		Mean =	97.5	99.0	95.0	99.0	2.3	99.0
8 Pummel (5.25 ME)	21 oz ai/a	A 205	99.0	99.0	87.0	99.0	0.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 305	99.0	99.0	95.0	99.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 604	99.0	99.0	99.0	99.0	2.0	99.0
NIS	0.25 % v/v	B 1004	99.0	99.0	97.0	99.0	0.0	99.0
		Mean =	99.0	99.0	94.5	99.0	0.5	99.0
9 MANA 25337 (55 WDG )	2.34 oz ai/a	A 301	95.0	99.0	97.0	99.0	5.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 304	99.0	99.0	99.0	99.0	2.0	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 701	99.0	99.0	97.0	99.0	5.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1001	92.0	99.0	99.0	99.0	2.0	99.0
NIS	0.25 % v/v	B						
		Mean =	96.3	99.0	98.0	99.0	3.5	99.0
10 MANA 25337 (55 WDG )	2.34 oz ai/a	A 302	99.0	99.0	99.0	99.0	2.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 504	99.0	99.0	95.0	99.0	2.0	97.0
Rumble (1.88 L)	6 oz ai/a	B 801	90.0	99.0	98.0	99.0	3.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1002	95.0	99.0	96.0	99.0	0.0	99.0
NIS	0.25 % v/v	B						
		Mean =	95.8	99.0	97.0	99.0	1.8	98.5
11 MANA 25337 (55 WDG )	2.34 oz ai/a	A 103	95.0	99.0	90.0	99.0	0.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 403	99.0	99.0	99.0	99.0	0.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 606	99.0	99.0	99.0	99.0	0.0	99.0
NIS	0.25 % v/v	B 1006	99.0	99.0	99.0	99.0	0.0	95.0
		Mean =	98.0	99.0	96.8	99.0	0.0	98.0



# Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	ABUTH	IPOHE	CHEAL	SETFA
Pest Scientific Name	Ambrosia trifi>	Abutilon theop>	Ipomoea heder>	Chenopodium al>	Setaria faberi
Pest Name	Giant ragweed	Velvetleaf	Ivyleaf mornin>	Common lambsqu>	Giant foxtail
Crop Code					GLXMA
BBCH Scale					BSOY
Crop Scientific Name					Glycine max
Crop Name					Soybean
Rating Date	Jul-22-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYSTU
Rating Unit	%	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Majority					
Pest Stage Majority	48	36	24	34	
Pest Density, Unit	3 YD2	1 YD2	3 YD2	1 YD2	5 FT2
Days After First/Last Applic.	56 29	56 29	56 29	56 29	90 63
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	90 DP-1
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	50 DE-1	84 DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	20	21	22
12 MANA 25337 (55 WDG )	2.34 oz ai/a	A 106	95.0	99.0	95.0
Glory (75 DG)	4.5 oz ai/a	A 306	99.0	99.0	99.0
Torment (2.5 SL)	5 oz ai/a	B 706	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 903	87.0	99.0	99.0
NIS	0.25 % v/v	B			
		Mean =	95.0	99.0	98.0
13 Torment (2.5 SL)	5 oz ai/a	A 203	99.0	99.0	80.0
Glory (75 DG)	4.5 oz ai/a	A 506	87.0	99.0	99.0
Parallel (7.8 EC)	20.7 oz ai/a	B 603	95.0	99.0	98.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 906	99.0	99.0	99.0
NIS	0.25 % v/v	B			
		Mean =	95.0	99.0	94.0
14 Torment (2.5 SL)	5 oz ai/a	A 206	99.0	99.0	83.0
Glory (75 DG)	4.5 oz ai/a	A 406	99.0	99.0	99.0
Warrant (3 CS)	18 oz ai/a	B 803	99.0	99.0	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 806	99.0	99.0	99.0
NIS	0.25 % v/v	B			
		Mean =	99.0	99.0	95.0
15 Torment (2.5 SL)	5 oz ai/a	A 303	90.0	99.0	99.0
Glory (75 DG)	4.5 oz ai/a	A 503	89.0	99.0	93.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 703	99.0	99.0	98.0
NIS	0.25 % v/v	B 1003	97.0	99.0	99.0
		Mean =	93.8	99.0	97.3

# Purdue University

Pest Type				W Weed	W Weed		
Pest Code				AMBTR	CHEAL		
Pest Scientific Name				Ambrosia trifi>	Chenopodium al>		
Pest Name				Giant ragweed	Common lambsqu>		
Crop Code						GLXMA	
BBCH Scale						BSOY	
Crop Scientific Name						Glycine max	
Crop Name						Soybean	
Rating Date				Aug-25-2014	Aug-25-2014	Oct-22-2014	
Rating Type				CONTRO	CONTRO	YIELD	
Rating Unit				%	%	bu/ac	
Sample Size, Unit				1 PLOT	1 PLOT		
Number of Subsamples				1	1	1	
Crop Stage Majority							
Pest Stage Majority							
Pest Density, Unit				3 YD2	1 YD2		
Days After First/Last Applic.				90 63	90 63	148 121	
Plant-Eval Interval				90 DP-1	90 DP-1	148 DP-1	
Days After Emergence				84 DE-1	84 DE-1	142 DE-1	
Trt No.	Treatment Name	Rate	Appl Code	Plot	26	27	28
1	Untreated Check			101	0.0	0.0	39.77*
				405	0.0	0.0	39.60
				702	0.0	0.0	37.90
				805	0.0	0.0	38.50
				Mean =	0.0	0.0	38.94
2	MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	102	87.0	99.0	55.80
	Torment (2.5 SL)	5 oz ai/a	B	404	80.0	99.0	45.00
	Roundup PowerMax 4.5 SL	18 oz ae/a	B	602	85.0	99.0	66.00
	NIS	0.25 % v/v	B	804	91.0	99.0	60.70
				Mean =	85.8	99.0	56.88
3	MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	104	99.0	99.0	71.90
	Roundup PowerMax 4.5 SL	18 oz ae/a	B	502	93.0	99.0	57.90
	NIS	0.25 % v/v	B	704	95.0	99.0	56.50
				901	94.0	99.0	78.50
				Mean =	95.3	99.0	66.20
4	MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	105	85.0	99.0	65.60
	Pursuit	1 oz ai/a	B	402	87.0	99.0	65.60
	NIS	0.25 % v/v	B	605	75.0	99.0	67.00
				904	85.0	85.0	64.60
				Mean =	83.0	95.5	65.70
5	MANA 31304 (68.7 WDG )	5.56 oz ai/a	A	201	75.0	99.0	68.20
	Rumble (1.88 L)	3.76 oz ai/a	B	505	85.0	99.0	57.80
	NIS	0.25 % v/v	B	705	90.0	92.0	53.90
				905	87.0	80.0	74.80
				Mean =	84.3	92.5	63.68

# Purdue University

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	
Pest Name	Giant ragweed	Common lambsqu>	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Aug-25-2014	Aug-25-2014	Oct-22-2014
Rating Type	CONTRO	CONTRO	YIELD
Rating Unit	%	%	bu/ac
Sample Size, Unit	1 PLOT	1 PLOT	
Number of Subsamples	1	1	1
Crop Stage Majority			
Pest Stage Majority			
Pest Density, Unit	3 YD2	1 YD2	
Days After First/Last Applic.	90 63	90 63	148 121
Plant-Eval Interval	90 DP-1	90 DP-1	148 DP-1
Days After Emergence	84 DE-1	84 DE-1	142 DE-1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	
			26
			27
			28
6 Pummel (5.25 ME)	21 oz ai/a	A 202	87.0
Glory (75 DG)	4.5 oz ai/a	A 501	80.0
Vice (5.4 EC)	24.3 oz ai/a	B 802	87.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1005	87.0
NIS	0.25 % v/v	B	
		Mean =	85.3
7 Pummel (5.25 ME)	21 oz ai/a	A 204	90.0
Glory (75 DG)	4.5 oz ai/a	A 401	99.0
Rumble (1.88 L)	6 oz ai/a	B 601	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 902	99.0
NIS	0.25 % v/v	B	
		Mean =	96.8
8 Pummel (5.25 ME)	21 oz ai/a	A 205	99.0
Glory (75 DG)	4.5 oz ai/a	A 305	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 604	99.0
NIS	0.25 % v/v	B 1004	99.0
		Mean =	99.0
9 MANA 25337 (55 WDG )	2.34 oz ai/a	A 301	93.0
Glory (75 DG)	4.5 oz ai/a	A 304	99.0
Vice (5.4 EC)	24.3 oz ai/a	B 701	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1001	90.0
NIS	0.25 % v/v	B	
		Mean =	95.3
10 MANA 25337 (55 WDG )	2.34 oz ai/a	A 302	99.0
Glory (75 DG)	4.5 oz ai/a	A 504	99.0
Rumble (1.88 L)	6 oz ai/a	B 801	95.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 1002	92.0
NIS	0.25 % v/v	B	
		Mean =	96.3
11 MANA 25337 (55 WDG )	2.34 oz ai/a	A 103	99.0
Glory (75 DG)	4.5 oz ai/a	A 403	99.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B 606	99.0
NIS	0.25 % v/v	B 1006	99.0
		Mean =	99.0

# Purdue University

Pest Type	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	
Pest Name	Giant ragweed	Common lambsqu>	
Crop Code			GLXMA
BBCH Scale			BSOY
Crop Scientific Name			Glycine max
Crop Name			Soybean
Rating Date	Aug-25-2014	Aug-25-2014	Oct-22-2014
Rating Type	CONTRO	CONTRO	YIELD
Rating Unit	%	%	bu/ac
Sample Size, Unit	1 PLOT	1 PLOT	
Number of Subsamples	1	1	1
Crop Stage Majority			
Pest Stage Majority			
Pest Density, Unit	3 YD2	1 YD2	
Days After First/Last Applic.	90 63	90 63	148 121
Plant-Eval Interval	90 DP-1	90 DP-1	148 DP-1
Days After Emergence	84 DE-1	84 DE-1	142 DE-1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code Plot	26 27 28
12 MANA 25337 (55 WDG )	2.34 oz ai/a	A 106	99.0 99.0 88.80
Glory (75 DG)	4.5 oz ai/a	A 306	94.0 99.0 75.20
Torment (2.5 SL)	5 oz ai/a	B 706	99.0 99.0 76.10
Roundup PowerMax 4.5 SL	18 oz ae/a	B 903	90.0 99.0 64.50
NIS	0.25 % v/v	B	
		Mean =	95.5 99.0 76.15
13 Torment (2.5 SL)	5 oz ai/a	A 203	99.0 99.0 68.30
Glory (75 DG)	4.5 oz ai/a	A 506	90.0 99.0 71.70
Parallel (7.8 EC)	20.7 oz ai/a	B 603	99.0 99.0 67.80
Roundup PowerMax 4.5 SL	18 oz ae/a	B 906	99.0 99.0 83.70
NIS	0.25 % v/v	B	
		Mean =	96.8 99.0 72.88
14 Torment (2.5 SL)	5 oz ai/a	A 206	99.0 99.0 84.30
Glory (75 DG)	4.5 oz ai/a	A 406	99.0 99.0 79.10
Warrant (3 CS)	18 oz ai/a	B 803	93.0 99.0 68.10
Roundup PowerMax 4.5 SL	18 oz ae/a	B 806	93.0 99.0 80.60
NIS	0.25 % v/v	B	
		Mean =	96.0 99.0 78.03
15 Torment (2.5 SL)	5 oz ai/a	A 303	80.0 99.0 67.70
Glory (75 DG)	4.5 oz ai/a	A 503	92.0 99.0 61.50
Roundup PowerMax 4.5 SL	18 oz ae/a	B 703	99.0 99.0 57.00
NIS	0.25 % v/v	B 1003	99.0 99.0 83.60
		Mean =	92.5 99.0 67.45

# Purdue University

## ADAMA Soybean Demo Program Concepts

Trial ID: 14S-THP-CTS-56      Protocol ID: 14S-THP-CTS-56  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
                                  Sponsor Contact: ADAMA - Dario Narvaez

### Pest Type

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

### Pest Code

IPOHE, Ipomoea hederacea, = US  
 AMBTR, Ambrosia trifida, = US  
 CHEAL, Chenopodium album, = US  
 SETFA, Setaria faberi, = US  
 AMARE, Amaranthus retroflexus, = US  
 ABUTH, Abutilon theophrasti, = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Type

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

### Rating Unit

% = percent  
 bu/ac = bushels per acre

PLOT = total plot

### Pest Stage Majority

34 = 4 visibly extended internode; G 4 node stage  
 48 = G 4 First awns visible; V Constant new development of young plants - vegetative reproductive organs reach final size  
 36 = 6 visibly extended internode; G 6 node stage  
 24 = 4 side shoots visible; G 4 tillers visible

YD2 = per square yard

FT2 = per square foot

### Plant-Eval Interval

13 DP-1 = 1 GLXMA May-27-2014  
 34 DP-1 = 1 GLXMA May-27-2014  
 43 DP-1 = 1 GLXMA May-27-2014  
 56 DP-1 = 1 GLXMA May-27-2014  
 90 DP-1 = 1 GLXMA May-27-2014  
 148 DP-1 = 1 GLXMA May-27-2014

# Purdue University

## ADAMA Soybean Demo Program Concepts

Trial ID: 14S-THP-CTS-56      Protocol ID: 14S-THP-CTS-56  
 Location: Throckmorton      Study Director:  
 Project ID:                      Investigator: Dr. Bill Johnson  
    Sponsor Contact: ADAMA - Dario Narvaez

Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	IPOHE	AMBTR	CHEAL	SETFA					
Pest Scientific Name	Ipomoea hederata>	Ambrosia trifida>	Chenopodium albidum>	Setaria faberii>					
Pest Name	Ivyleaf mornin>	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-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-30-2014	Jun-30-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU	PHYNEC		
Rating Unit	%	%	%	%		%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT		1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority	VC	VC	VC	VC		V5	V5		
Pest Stage Majority	1-2"	1-2"							
Pest Density, Unit	3 YD2	1 YD2							
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	34 7	34 7		
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	13 DP-1	13 DP-1	34 DP-1	34 DP-1		
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	28 DE-1	28 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	1	2	3	4	5	6	7
1 Untreated Check			0.0 b	0.0 b	0.0 b	0.0 b	0.0 a	0.0 b	0.0 f
2 MANA 31304 (68.7 WDG ) Tormet (2.5 SL) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 5 oz ai/a B 18 oz ae/a B 0.25 % v/v B		96.8 a	98.0 a	99.0 a	96.8 a	0.0 a	0.0 b	2.8 de
3 MANA 31304 (68.7 WDG ) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 18 oz ae/a B 0.25 % v/v B		96.3 a	97.8 a	99.0 a	98.8 a	0.0 a	0.0 b	0.3 f
4 MANA 31304 (68.7 WDG ) Pursuit NIS	5.56 oz ai/a A 1 oz ai/a B 0.25 % v/v B		95.8 a	98.8 a	99.0 a	99.0 a	0.0 a	0.0 b	0.0 f
5 MANA 31304 (68.7 WDG ) Rumble (1.88 L) NIS	5.56 oz ai/a A 3.76 oz ai/a B 0.25 % v/v B		92.0 a	96.8 a	99.0 a	98.0 a	0.0 a	1.5 b	4.3 cd
6 Pummel (5.25 ME) Glory (75 DG) Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 24.3 oz ai/a B 18 oz ae/a B 0.25 % v/v B		96.3 a	97.5 a	99.0 a	98.8 a	0.0 a	2.0 b	6.8 b
7 Pummel (5.25 ME) Glory (75 DG) Rumble (1.88 L) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 6 oz ai/a B 18 oz ae/a B 0.25 % v/v B		93.3 a	96.0 a	99.0 a	99.0 a	0.0 a	5.3 a	6.0 bc
8 Pummel (5.25 ME) Glory (75 DG) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 18 oz ae/a B 0.25 % v/v B		90.8 a	97.8 a	99.0 a	97.8 a	0.0 a	0.8 b	0.0 f

Means followed by same letter do not significantly differ (P=0.05, 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	IPOHE	AMBTR	CHEAL	SETFA						
Pest Scientific Name	Ipomoea hederata	Ambrosia trifida	Chenopodium album	Setaria faberii						
Pest Name	Ivyleaf morning	Giant ragweed	Common lambsquarters	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-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-30-2014	Jun-30-2014			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	PHYSTU	PHYNEC			
Rating Unit	%	%	%	%		%	%			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT		1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority	VC	VC	VC	VC		V5	V5			
Pest Stage Majority	1-2"	1-2"								
Pest Density, Unit	3 YD2	1 YD2								
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13	34 7	34 7			
Plant-Eval Interval	13 DP-1	13 DP-1	13 DP-1	13 DP-1	13 DP-1	34 DP-1	34 DP-1			
Days After Emergence	7 DE-1	7 DE-1	7 DE-1	7 DE-1	7 DE-1	28 DE-1	28 DE-1			
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5	6	7
9	MANA 25337 (55 WDG)	2.34 oz ai/a	A	91.5 a	96.5 a	99.0 a	96.8 a	0.0 a	7.0 a	9.3 a
	Glory (75 DG)	4.5 oz ai/a	A							
	Vice (5.4 EC)	24.3 oz ai/a	B							
	Roundup PowerMax 4.5 SL	18 oz ae/a	B							
	NIS	0.25 % v/v	B							
10	MANA 25337 (55 WDG)	2.34 oz ai/a	A	97.3 a	98.3 a	99.0 a	99.0 a	0.0 a	0.8 b	5.0 bc
	Glory (75 DG)	4.5 oz ai/a	A							
	Rumble (1.88 L)	6 oz ai/a	B							
	Roundup PowerMax 4.5 SL	18 oz ae/a	B							
	NIS	0.25 % v/v	B							
11	MANA 25337 (55 WDG)	2.34 oz ai/a	A	96.3 a	98.8 a	99.0 a	99.0 a	0.0 a	0.0 b	0.0 f
	Glory (75 DG)	4.5 oz ai/a	A							
	Roundup PowerMax 4.5 SL	18 oz ae/a	B							
	NIS	0.25 % v/v	B							
12	MANA 25337 (55 WDG)	2.34 oz ai/a	A	94.3 a	98.5 a	99.0 a	99.0 a	0.0 a	1.5 b	2.0 ef
	Glory (75 DG)	4.5 oz ai/a	A							
	Torment (2.5 SL)	5 oz ai/a	B							
	Roundup PowerMax 4.5 SL	18 oz ae/a	B							
	NIS	0.25 % v/v	B							
13	Torment (2.5 SL)	5 oz ai/a	A	95.3 a	97.8 a	99.0 a	96.8 a	0.0 a	0.8 b	4.5 cd
	Glory (75 DG)	4.5 oz ai/a	A							
	Parallel (7.8 EC)	20.7 oz ai/a	B							
	Roundup PowerMax 4.5 SL	18 oz ae/a	B							
	NIS	0.25 % v/v	B							
14	Torment (2.5 SL)	5 oz ai/a	A	96.5 a	99.0 a	99.0 a	99.0 a	0.0 a	0.0 b	0.0 f
	Glory (75 DG)	4.5 oz ai/a	A							
	Warrant (3 CS)	18 oz ai/a	B							
	Roundup PowerMax 4.5 SL	18 oz ae/a	B							
	NIS	0.25 % v/v	B							
15	Torment (2.5 SL)	5 oz ai/a	A	97.8 a	98.8 a	99.0 a	97.8 a	0.0 a	1.3 b	1.3 ef
	Glory (75 DG)	4.5 oz ai/a	A							
	Roundup PowerMax 4.5 SL	18 oz ae/a	B							
	NIS	0.25 % v/v	B							
LSD (P=.05)				8.36	2.61	0.00	3.09	0.00	2.34	1.65
Standard Deviation				5.85	1.82	0.00	2.16	0.00	1.64	1.16
CV				6.6	2.0	0.0	2.36	0.0	118.38	41.3
Bartlett's X2				29.304	29.214	0.0	23.334	0.0	4.52	10.258
P(Bartlett's X2)				0.006*	0.004*	.	0.001*	.	0.807	0.247
Replicate F				5.231	2.123	0.000	0.896	0.000	1.630	3.822
Replicate Prob(F)				0.0037	0.1117	1.0000	0.4513	1.0000	0.1967	0.0165
Treatment F				70.854	768.119	0.000	550.216	0.000	6.351	26.925
Treatment Prob(F)				0.0001	0.0001	1.0000	0.0001	1.0000	0.0001	0.0001

# Purdue University

Pest Type			W Weed SETFA	W Weed AMBTR	W Weed AMARE	W Weed CHEAL	W Weed IPOHE		
Pest Code			Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Chenopodium al>	Ipomoea heder>		
Pest Scientific Name			Giant foxtail	Giant ragweed	Redroot pigweed	Common lambsqu>	Ivyleaf mornin>		
Pest Name									
Crop Code	GLXMA	GLXMA							
BBCH Scale	BSOY	BSOY							
Crop Scientific Name	Glycine max	Glycine max							
Crop Name	Soybean	Soybean							
Rating Date	Jun-30-2014	Jun-30-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014		
Rating Type	PHYLMA	PHYCHL	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority	V5	V5	V8	V8	V8	V8	V8		
Pest Stage Majority									
Pest Density, Unit									
Days After First/Last Applic.	34 7	34 7	43 16	43 16	43 16	43 16	43 16		
Plant-Eval Interval	34 DP-1	34 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1		
Days After Emergence	28 DE-1	28 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	8	9	10	11	12	13	14
1 Untreated Check			0.0 d	0.0 b	0.0 c	0.0 c	0.0 b	0.0 c	0.0 c
2 MANA 31304 (68.7 WDG ) Torment (2.5 SL) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 5 oz ai/a B 18 oz ae/a B 0.25 % v/v B	A B B B	3.0 cd	0.5 b	84.5 b	86.8 ab	99.0 a	98.0 a	89.3 a
3 MANA 31304 (68.7 WDG ) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 18 oz ae/a B 0.25 % v/v B	A B B	1.0 d	0.0 b	97.5 a	94.0 ab	99.0 a	99.0 a	83.3 a
4 MANA 31304 (68.7 WDG ) Pursuit NIS	5.56 oz ai/a A 1 oz ai/a B 0.25 % v/v B	A B B	0.0 d	0.0 b	92.3 a	83.3 b	99.0 a	89.3 b	50.0 b
5 MANA 31304 (68.7 WDG ) Rumble (1.88 L) NIS	5.56 oz ai/a A 3.76 oz ai/a B 0.25 % v/v B	A B B	6.3 abc	3.0 ab	84.5 b	90.3 ab	99.0 a	92.0 ab	87.0 a
6 Pummel (5.25 ME) Glory (75 DG) Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 24.3 oz ai/a B 18 oz ae/a B 0.25 % v/v B	A A B B B	7.8 ab	4.8 ab	97.0 a	93.0 ab	99.0 a	99.0 a	92.8 a
7 Pummel (5.25 ME) Glory (75 DG) Rumble (1.88 L) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 6 oz ai/a B 18 oz ae/a B 0.25 % v/v B	A A B B B	10.5 a	4.5 ab	99.0 a	98.0 a	99.0 a	99.0 a	97.5 a
8 Pummel (5.25 ME) Glory (75 DG) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 18 oz ae/a B 0.25 % v/v B	A A B B	0.0 d	0.0 b	99.0 a	97.3 a	99.0 a	99.0 a	93.8 a



## Purdue University

Pest Type			W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed AMARE Amaranthus ret> Redroot pigweed	W Weed CHEAL Chenopodium al> Common lambsqu>	W Weed IPOHE Ipomoea heder> lyleaf mornin>			
Pest Code										
Pest Scientific Name										
Pest Name										
Crop Code	GLXMA	GLXMA								
BBCH Scale	BSOY	BSOY								
Crop Scientific Name	Glycine max	Glycine max								
Crop Name	Soybean	Soybean								
Rating Date	Jun-30-2014	Jun-30-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014			
Rating Type	PHYLMA	PHYCHL	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority	V5	V5	V8	V8	V8	V8	V8			
Pest Stage Majority										
Pest Density, Unit										
Days After First/Last Applic.	34 7	34 7	43 16	43 16	43 16	43 16	43 16			
Plant-Eval Interval	34 DP-1	34 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1			
Days After Emergence	28 DE-1	28 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1	37 DE-1			
Trt No.	Treatment	Rate	Appl							
	Name	Rate Unit	Code	8	9	10	11			
				12	13	14				
9	MANA 25337 (55 WDG ) Glory (75 DG) Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	2.34 oz ai/a 4.5 oz ai/a 24.3 oz ai/a 18 oz ae/a 0.25 % v/v	A A B B B	10.5 a	1.3 b	99.0 a	96.5 a	99.0 a	99.0 a	98.5 a
10	MANA 25337 (55 WDG ) Glory (75 DG) Rumble (1.88 L) Roundup PowerMax 4.5 SL NIS	2.34 oz ai/a 4.5 oz ai/a 6 oz ai/a 18 oz ae/a 0.25 % v/v	A A B B B	8.0 ab	5.8 a	98.8 a	94.5 ab	99.0 a	99.0 a	97.5 a
11	MANA 25337 (55 WDG ) Glory (75 DG) Roundup PowerMax 4.5 SL NIS	2.34 oz ai/a 4.5 oz ai/a 18 oz ae/a 0.25 % v/v	A A B B	1.3 d	0.0 b	97.5 a	99.0 a	99.0 a	99.0 a	95.5 a
12	MANA 25337 (55 WDG ) Glory (75 DG) Torment (2.5 SL) Roundup PowerMax 4.5 SL NIS	2.34 oz ai/a 4.5 oz ai/a 5 oz ai/a 18 oz ae/a 0.25 % v/v	A A B B B	5.5 bc	4.8 ab	96.3 a	95.5 a	99.0 a	99.0 a	97.0 a
13	Torment (2.5 SL) Glory (75 DG) Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	5 oz ai/a 4.5 oz ai/a 20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A B B B	0.8 d	0.0 b	99.0 a	91.3 ab	99.0 a	99.0 a	94.5 a
14	Torment (2.5 SL) Glory (75 DG) Warrant (3 CS) Roundup PowerMax 4.5 SL NIS	5 oz ai/a 4.5 oz ai/a 18 oz ai/a 18 oz ae/a 0.25 % v/v	A A B B B	0.8 d	0.0 b	99.0 a	97.3 a	99.0 a	99.0 a	95.5 a
15	Torment (2.5 SL) Glory (75 DG) Roundup PowerMax 4.5 SL NIS	5 oz ai/a 4.5 oz ai/a 18 oz ae/a 0.25 % v/v	A A B B	0.5 d	0.0 b	98.0 a	90.8 ab	99.0 a	99.0 a	96.8 a
LSD (P=.05)				3.09	2.93	4.48	7.43	0.00	4.95	12.77
Standard Deviation				2.16	2.05	3.14	5.20	0.00	3.46	8.94
CV				58.22	125.52	3.51	5.97	0.0	3.79	10.57
Bartlett's X2				18.809	9.425	32.147	12.756	0.0	5.911	62.572
P(Bartlett's X2)				0.065	0.151	0.001*	0.387	.	0.052	0.001*
Replicate F				0.507	2.733	0.856	0.863	0.000	1.878	2.394
Replicate Prob(F)				0.6798	0.0556	0.4714	0.4677	1.0000	0.1479	0.0818
Treatment F				13.402	4.706	258.787	88.763	0.000	215.503	34.674
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

# Purdue University

Pest Type					W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed ABUTH Abutilon theop> Velvetleaf		
Pest Code									
Pest Scientific Name									
Pest Name									
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA					
BBCB Scale	BSOY	BSOY	BSOY	BSOY					
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max					
Crop Name	Soybean	Soybean	Soybean	Soybean					
Rating Date	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014		
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority	V8	V8	V8	V8					
Pest Stage Majority					34	48	36		
Pest Density, Unit					8 FT2	3 YD2	1 YD2		
Days After First/Last Applic.	43 16	43 16	43 16	43 16	56 29	56 29	56 29		
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	56 DP-1	56 DP-1	56 DP-1		
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	50 DE-1	50 DE-1	50 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	15	16	17	18	19	20	21
1 Untreated Check			0.0 b	0.0 e	0.0 a	0.0 a	0.0 e	0.0 d	0.0 b
2 MANA 31304 (68.7 WDG ) Torment (2.5 SL) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 5 oz ai/a B 18 oz ae/a B 0.25 % v/v B		0.0 b	2.8 cde	0.0 a	0.0 a	90.3 c	87.5 bc	99.0 a
3 MANA 31304 (68.7 WDG ) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 18 oz ae/a B 0.25 % v/v B		0.0 b	0.0 e	0.0 a	0.0 a	96.5 ab	95.3 ab	99.0 a
4 MANA 31304 (68.7 WDG ) Pursuit NIS	5.56 oz ai/a A 1 oz ai/a B 0.25 % v/v B		0.0 b	0.0 e	0.0 a	0.0 a	92.5 bc	83.5 c	99.0 a
5 MANA 31304 (68.7 WDG ) Rumble (1.88 L) NIS	5.56 oz ai/a A 3.76 oz ai/a B 0.25 % v/v B		0.0 b	4.5 bc	1.5 a	2.5 a	86.3 d	85.3 c	99.0 a
6 Pummel (5.25 ME) Glory (75 DG) Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 24.3 oz ai/a B 18 oz ae/a B 0.25 % v/v B		3.8 ab	7.0 a	0.0 a	0.8 a	95.8 ab	93.0 ab	99.0 a
7 Pummel (5.25 ME) Glory (75 DG) Rumble (1.88 L) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 6 oz ai/a B 18 oz ae/a B 0.25 % v/v B		2.0 ab	2.3 cde	1.3 a	1.3 a	99.0 a	97.5 a	99.0 a
8 Pummel (5.25 ME) Glory (75 DG) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 18 oz ae/a B 0.25 % v/v B		0.0 b	0.5 e	0.0 a	0.0 a	99.0 a	99.0 a	99.0 a

# Purdue University

Pest Type					W Weed SETFA Setaria faberi Giant foxtail	W Weed AMBTR Ambrosia trifi> Giant ragweed	W Weed ABUTH Abutilon theop> Velvetleaf		
Pest Code									
Pest Scientific Name									
Pest Name									
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					
Rating Date	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-9-2014	Jul-22-2014	Jul-22-2014	Jul-22-2014		
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority	V8	V8	V8	V8					
Pest Stage Majority					34	48	36		
Pest Density, Unit					8 FT2	3 YD2	1 YD2		
Days After First/Last Applic.	43 16	43 16	43 16	43 16	56 29	56 29	56 29		
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	56 DP-1	56 DP-1	56 DP-1		
Days After Emergence	37 DE-1	37 DE-1	37 DE-1	37 DE-1	50 DE-1	50 DE-1	50 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	15	16	17	18	19	20	21
9 MANA 25337 (55 WDG)	2.34 oz ai/a	A	4.5 a	5.8 ab	2.0 a	2.0 a	98.8 a	96.3 ab	99.0 a
Glory (75 DG)	4.5 oz ai/a	A							
Vice (5.4 EC)	24.3 oz ai/a	B							
Roundup PowerMax 4.5 SL	18 oz ae/a	B							
NIS	0.25 % v/v	B							
10 MANA 25337 (55 WDG)	2.34 oz ai/a	A	2.5 ab	4.0 bc	2.0 a	2.5 a	98.8 a	95.8 ab	99.0 a
Glory (75 DG)	4.5 oz ai/a	A							
Rumble (1.88 L)	6 oz ai/a	B							
Roundup PowerMax 4.5 SL	18 oz ae/a	B							
NIS	0.25 % v/v	B							
11 MANA 25337 (55 WDG)	2.34 oz ai/a	A	0.0 b	0.0 e	0.0 a	0.0 a	97.3 a	98.0 a	99.0 a
Glory (75 DG)	4.5 oz ai/a	A							
Roundup PowerMax 4.5 SL	18 oz ae/a	B							
NIS	0.25 % v/v	B							
12 MANA 25337 (55 WDG)	2.34 oz ai/a	A	1.5 ab	3.8 bcd	0.8 a	0.8 a	96.3 ab	95.0 ab	99.0 a
Glory (75 DG)	4.5 oz ai/a	A							
Torment (2.5 SL)	5 oz ai/a	B							
Roundup PowerMax 4.5 SL	18 oz ae/a	B							
NIS	0.25 % v/v	B							
13 Torment (2.5 SL)	5 oz ai/a	A	1.8 ab	0.0 e	0.0 a	0.0 a	98.8 a	95.0 ab	99.0 a
Glory (75 DG)	4.5 oz ai/a	A							
Parallel (7.8 EC)	20.7 oz ai/a	B							
Roundup PowerMax 4.5 SL	18 oz ae/a	B							
NIS	0.25 % v/v	B							
14 Torment (2.5 SL)	5 oz ai/a	A	0.8 ab	0.0 e	0.0 a	0.0 a	99.0 a	99.0 a	99.0 a
Glory (75 DG)	4.5 oz ai/a	A							
Warrant (3 CS)	18 oz ai/a	B							
Roundup PowerMax 4.5 SL	18 oz ae/a	B							
NIS	0.25 % v/v	B							
15 Torment (2.5 SL)	5 oz ai/a	A	0.8 ab	1.3 de	0.0 a	0.0 a	98.0 a	93.8 ab	99.0 a
Glory (75 DG)	4.5 oz ai/a	A							
Roundup PowerMax 4.5 SL	18 oz ae/a	B							
NIS	0.25 % v/v	B							
LSD (P=.05)			2.42	1.90	1.65	2.20	3.15	5.68	0.00
Standard Deviation			1.69	1.33	1.16	1.54	2.20	3.97	0.00
CV			145.08	62.92	231.56	237.31	2.46	4.53	0.0
Bartlett's X2			4.906	9.013	1.451	2.35	27.651	8.189	0.0
P(Bartlett's X2)			0.671	0.341	0.835	0.799	0.002*	0.696	.
Replicate F			2.753	0.987	0.547	0.044	0.402	0.387	0.000
Replicate Prob(F)			0.0543	0.4083	0.6529	0.9874	0.7520	0.7628	1.0000
Treatment F			3.050	12.823	1.838	1.543	518.657	154.674	0.000
Treatment Prob(F)			0.0026	0.0001	0.0645	0.1378	0.0001	0.0001	1.0000

## Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	IPHOE	CHEAL		SETFA	AMBTR	CHEAL			
Pest Scientific Name	Ipomoea hederata>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name	Ivyleaf mornin>	Common lambsqu>		Giant foxtail	Giant ragweed	Common lambsqu>			
Crop Code			GLXMA				GLXMA		
BBCB Scale			BSOY				BSOY		
Crop Scientific Name			Glycine max				Glycine max		
Crop Name			Soybean				Soybean		
Rating Date	Jul-22-2014	Jul-22-2014	Jul-22-2014	Aug-25-2014	Aug-25-2014	Aug-25-2014	Oct-22-2014		
Rating Type	CONTRO	CONTRO	PHYSTU	CONTRO	CONTRO	CONTRO	YIELD		
Rating Unit	%	%	%	%	%	%	bu/ac		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority									
Pest Stage Majority	24	34							
Pest Density, Unit	3 YD2	1 YD2		5 FT2	3 YD2	1 YD2			
Days After First/Last Applic.	56 29	56 29	56 29	90 63	90 63	90 63	148 121		
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	90 DP-1	90 DP-1	90 DP-1	148 DP-1		
Days After Emergence	50 DE-1	50 DE-1	50 DE-1	84 DE-1	84 DE-1	84 DE-1	142 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	22	23	24	25	26	27	28
1 Untreated Check	0.0 c		0.0 b	0.0 c	0.0 d	0.0 d	0.0 b	38.94 c	
2 MANA 31304 (68.7 WDG ) Torment (2.5 SL) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 5 oz ai/a B 18 oz ae/a B 0.25 % v/v B		94.3 a	99.0 a	0.0 c	88.0 b	85.8 bc	99.0 a	56.88 b
3 MANA 31304 (68.7 WDG ) Roundup PowerMax 4.5 SL NIS	5.56 oz ai/a A 18 oz ae/a B 0.25 % v/v B		91.8 a	99.0 a	0.0 c	97.0 a	95.3 a	99.0 a	66.20 ab
4 MANA 31304 (68.7 WDG ) Pursuit NIS	5.56 oz ai/a A 1 oz ai/a B 0.25 % v/v B		74.8 b	96.0 a	0.0 c	94.8 a	83.0 c	95.5 a	65.70 ab
5 MANA 31304 (68.7 WDG ) Rumble (1.88 L) NIS	5.56 oz ai/a A 3.76 oz ai/a B 0.25 % v/v B		88.3 a	93.3 a	0.0 c	81.3 c	84.3 bc	92.5 a	63.68 ab
6 Pummel (5.25 ME) Glory (75 DG) Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 24.3 oz ai/a B 18 oz ae/a B 0.25 % v/v B		93.8 a	99.0 a	2.0 b	95.8 a	85.3 bc	99.0 a	67.79 ab
7 Pummel (5.25 ME) Glory (75 DG) Rumble (1.88 L) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 6 oz ai/a B 18 oz ae/a B 0.25 % v/v B		95.0 a	99.0 a	2.3 b	99.0 a	96.8 a	99.0 a	65.23 ab
8 Pummel (5.25 ME) Glory (75 DG) Roundup PowerMax 4.5 SL NIS	21 oz ai/a A 4.5 oz ai/a A 18 oz ae/a B 0.25 % v/v B		94.5 a	99.0 a	0.5 bc	99.0 a	99.0 a	99.0 a	71.90 ab



# Purdue University

## ADAMA Soybean Demo Program Concepts

Trial ID: 14S-THP-CTS-56      Protocol ID: 14S-THP-CTS-56  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
                                  Sponsor Contact: ADAMA - Dario Narvaez

### Pest Type

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

### Pest Code

IPOHE, Ipomoea hederacea, = US  
 AMBTR, Ambrosia trifida, = US  
 CHEAL, Chenopodium album, = US  
 SETFA, Setaria faberi, = US  
 AMARE, Amaranthus retroflexus, = US  
 ABUTH, Abutilon theophrasti, = US

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Type

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

### Rating Unit

% = percent  
 bu/ac = bushels per acre

PLOT = total plot

### Pest Stage Majority

34 = 4 visibly extended internode; G 4 node stage  
 48 = G 4 First awns visible; V Constant new development of young plants - vegetative reproductive organs reach final size  
 36 = 6 visibly extended internode; G 6 node stage  
 24 = 4 side shoots visible; G 4 tillers visible

YD2 = per square yard

FT2 = per square foot

### Plant-Eval Interval

13 DP-1 = 1 GLXMA May-27-2014  
 34 DP-1 = 1 GLXMA May-27-2014  
 43 DP-1 = 1 GLXMA May-27-2014  
 56 DP-1 = 1 GLXMA May-27-2014  
 90 DP-1 = 1 GLXMA May-27-2014  
 148 DP-1 = 1 GLXMA May-27-2014