

# Purdue University

## ADAMA Soybean Metolachlor Crop Safety - Tank Mixed with Roundup

Trial ID: 14S-THP-CTS-59      Protocol ID: 14S-THP-CTS-59  
 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  
**State/Prov.:** IN  
**Postal Code:** 47909      **E-mail:** jayyoung@purdue.edu  
**Country:** USA      United States  
**Phone No.:** 765-538-3422  
**Fax No.:** 765-538-3423

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** Asgrow 2933      **Description:** RR2  
**BBCH Scale:** BSOY      **Planting Date:** May-23-2014  
**Planting Method:** SEEDED seeded      **Rate, Unit:** 130000 S/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 30 IN  
**Seed Bed:** FINE fine  
**Soil Moisture:** DRY dry      **Emergence Date:** May-29-2014

### Pest Description

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

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

**Pest 3 Type:** W    **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters

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

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## Soil Description

**Description Name:** TPAC - Field 4B  
**% OM:** 2.9      **Texture:** SIL      silt loam  
**pH:** 6.2      **Soil Name:** Toronto-Millbrook  
**CEC:** 13.3

## Application Description

	A	B	C
<b>Application Date:</b>	Jun-6-2014	Jun-18-2014	Jun-26-2014
<b>Time of Day:</b>	AM	AM	AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	EAPOCR	MIPOCR	LAPOCR
<b>Application Placement:</b>	FOLIAR	FOLIAR	FOLIAR
<b>Air Temperature, Unit:</b>	72 F	68 F	68 F
<b>% Relative Humidity:</b>	66	70	82
<b>Wind Velocity, Unit:</b>	4.5 mph	5.4 mph	1.5 mph
<b>Wind Direction:</b>	S	SW	NE
<b>Dew Presence (Y/N):</b>	Y yes	N no	Y yes
<b>Soil Temperature, Unit:</b>	70 F	70 F	78 F
<b>Soil Moisture:</b>	Moist	Dry	Moist
<b>% Cloud Cover:</b>	0	40	100

## Crop Stage At Each Application

	A	B	C
<b>Crop 1 Code, BBCH Scale:</b>	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	V1	V3	V5

## Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Height Minimum, Maximum:</b>	1 2	1 4	3 30
<b>Density, Unit:</b>	2 YD2	1 YD2	2 FT2
<b>Pest 2 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Height Minimum, Maximum:</b>	1 2	1 3	1 12
<b>Density, Unit:</b>	6 FT2	3 FT2	6 FT2
<b>Pest 3 Code, Type, Scale:</b>	CHEAL W	CHEAL W	CHEAL W
<b>Height Minimum, Maximum:</b>			1 12
<b>Density, Unit:</b>			3 YD2

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## Application Equipment

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

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## ADAMA Soybean Metolachlor Crop Safety - Tank Mixed with Roundup

Trial ID: 14S-THP-CTS-59      Protocol ID: 14S-THP-CTS-59  
 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 Stage	Appl Code	Appl Description	Amt to Measure	Product	Rep 1	2	3	4
1	Untreated Check												101	405	703	907
2	Parallel (7.8 EC)	7.8 LBA/GAL	EC	20.7 oz ai/a	1.33 pt/a			EAPOCR A	V1		20.73 ml/mx		103	307	603	905
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			EAPOCR A	V1		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			EAPOCR A	V1		6.249 ml/mx					
3	Parallel (7.8 EC)	7.8 LBA/GAL	EC	20.7 oz ai/a	1.33 pt/a			MIPOCR B	V3		20.73 ml/mx		105	501	701	1007
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			MIPOCR B	V3		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			MIPOCR B	V3		6.249 ml/mx					
4	Parallel (7.8 EC)	7.8 LBA/GAL	EC	20.7 oz ai/a	1.33 pt/a			LAPOCR C	V5		20.73 ml/mx		107	403	605	1001
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			LAPOCR C	V5		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			LAPOCR C	V5		6.249 ml/mx					
5	Dual II Magnum (7.64 EC)	7.64 LBA/GAL	EC	20.7 oz ai/a	1.33 pt/a			EAPOCR A	V1		21.17 ml/mx		201	507	803	1003
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			EAPOCR A	V1		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			EAPOCR A	V1		6.249 ml/mx					
6	Dual II Magnum (7.64 EC)	7.64 LBA/GAL	EC	20.7 oz ai/a	1.33 pt/a			MIPOCR B	V3		21.17 ml/mx		203	407	601	903
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			MIPOCR B	V3		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			MIPOCR B	V3		6.249 ml/mx					
7	Dual II Magnum (7.64 EC)	7.64 LBA/GAL	EC	20.7 oz ai/a	1.33 pt/a			LAPOCR C	V5		21.17 ml/mx		205	305	707	805
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			LAPOCR C	V5		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			LAPOCR C	V5		6.249 ml/mx					
8	Pummel (5.25 ME)	5.25 LBA/GAL	ME	20.7 oz ai/a	2 pt/a			EAPOCR A	V1		30.8 ml/mx		207	505	607	901
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			EAPOCR A	V1		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			EAPOCR A	V1		6.249 ml/mx					
9	Pummel (5.25 ME)	5.25 LBA/GAL	ME	20.7 oz ai/a	2 pt/a			MIPOCR B	V3		30.8 ml/mx		301	401	705	807
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			MIPOCR B	V3		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			MIPOCR B	V3		6.249 ml/mx					
10	Pummel (5.25 ME)	5.25 LBA/GAL	ME	20.7 oz ai/a	2 pt/a			LAPOCR C	V5		30.8 ml/mx		303	503	801	1005
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			LAPOCR C	V5		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			LAPOCR C	V5		6.249 ml/mx					
11	Vice (5.4 EC)	5.4 LBA/GAL	EC	25.2 oz ai/a	2.33 pt/a			EAPOCR A	V1		36.45 ml/mx		102	308	708	1002
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			EAPOCR A	V1		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			EAPOCR A	V1		6.249 ml/mx					
12	Vice (5.4 EC)	5.4 LBA/GAL	EC	25.2 oz ai/a	2.33 pt/a			MIPOCR B	V3		36.45 ml/mx		104	408	702	904
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			MIPOCR B	V3		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			MIPOCR B	V3		6.249 ml/mx					
13	Vice (5.4 EC)	5.4 LBA/GAL	EC	25.2 oz ai/a	2.33 pt/a			LAPOCR C	V5		36.45 ml/mx		106	406	602	902
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			LAPOCR C	V5		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			LAPOCR C	V5		6.249 ml/mx					
14	Prefix (5.29 EC)	5.29 LBA/GAL	EC	24.7 oz ai/a	2.33 pt/a			EAPOCR A	V1		36.47 ml/mx		108	306	604	908
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			EAPOCR A	V1		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			EAPOCR A	V1		6.249 ml/mx					
15	Prefix (5.29 EC)	5.29 LBA/GAL	EC	24.7 oz ai/a	2.33 pt/a			MIPOCR B	V3		36.47 ml/mx		202	506	608	808
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			MIPOCR B	V3		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			MIPOCR B	V3		6.249 ml/mx					
16	Prefix (5.29 EC)	5.29 LBA/GAL	EC	24.7 oz ai/a	2.33 pt/a			LAPOCR C	V5		36.47 ml/mx		204	404	704	806
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			LAPOCR C	V5		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			LAPOCR C	V5		6.249 ml/mx					
17	Warrant (3 SC)	3 LBA/GAL	SC	24 oz ai/a	2 qt/a			EAPOCR A	V1		62.49 ml/mx		206	402	804	906
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL	SL	18 oz ae/a	32 oz/a			EAPOCR A	V1		31.25 ml/mx					
	NIS	100 %	SL	0.25 % v/v	0.25 % v/v			EAPOCR A	V1		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
18	Warrant (3 SC)	3 LBA/GAL		SC	24 oz ai/a		2 qt/a			MIPOCR B	V3		62.49 ml/mx		208	504	706	1006
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	18 oz ae/a		32 oz/a			MIPOCR B	V3		31.25 ml/mx					
	NIS	100 %		SL	0.25 % v/v		0.25 % v/v			MIPOCR B	V3		6.249 ml/mx					
19	Warrant (3 SC)	3 LBA/GAL		SC	24 oz ai/a		2 qt/a			LAPOCR C	V5		62.49 ml/mx		302	508	802	1004
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	18 oz ae/a		32 oz/a			LAPOCR C	V5		31.25 ml/mx					
	NIS	100 %		SL	0.25 % v/v		0.25 % v/v			LAPOCR C	V5		6.249 ml/mx					
20	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	18 oz ae/a		32 oz/a			EAPOCR A	V1		31.25 ml/mx		304	502	606	1008
	NIS	100 %		SL	0.25 % v/v		0.25 % v/v			EAPOCR A	V1		6.249 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	18 oz ae/a		32 oz/a			MIPOCR B	V3		31.25 ml/mx					
	NIS	100 %		SL	0.25 % v/v		0.25 % v/v			MIPOCR B	V3		6.249 ml/mx					
	Roundup PowerMax 4.5 SL	4.5 LBAE/GAL		SL	18 oz ae/a		32 oz/a			LAPOCR C	V5		31.25 ml/mx					
NIS	100 %		SL	0.25 % v/v		0.25 % v/v			LAPOCR C	V5		6.249 ml/mx						

Sort Order: Treatment

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## ADAMA Soybean Metolachlor Crop Safety - Tank Mixed with Roundup

Trial ID: 14S-THP-CTS-59      Protocol ID: 14S-THP-CTS-59  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
 Sponsor Contact: ADAMA - Dario Narvaez

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	3 DAT A	3 DAT A	3 DAT A	7 DAT A	7 DAT A	7 DAT A	7 DAT A		
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014		
Rating Type	PHYNEC	PHYLMA	PHYCHL	PHYLMA	PHYSTU	PHYNEC	PHYCHL		
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	V1	V1	V1	V3	V3	V3	V3		
Days After First/Last Applic.	3 3	3 3	3 3	7 7	7 7	7 7	7 7		
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	21 DP-1	21 DP-1	21 DP-1	21 DP-1		
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6	7
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
		703	0.0	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	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Parallel (7.8 EC)	20.7 oz ai/a	A 103	10.0	10.0	7.0	13.0	3.0	10.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A 307	10.0	10.0	5.0	15.0	3.0	10.0	0.0
NIS	0.25 % v/v	A 603	12.0	10.0	5.0	13.0	3.0	13.0	0.0
		905	10.0	12.0	5.0	17.0	3.0	12.0	0.0
		Mean =	10.5	10.5	5.5	14.5	3.0	11.3	0.0
3 Parallel (7.8 EC)	20.7 oz ai/a	B 105							
Roundup PowerMax 4.5 SL	18 oz ae/a	B 501							
NIS	0.25 % v/v	B 701							
		1007							
		Mean =	.	.	.	.	.	.	.
4 Parallel (7.8 EC)	20.7 oz ai/a	C 107							
Roundup PowerMax 4.5 SL	18 oz ae/a	C 403							
NIS	0.25 % v/v	C 605							
		1001							
		Mean =	.	.	.	.	.	.	.
5 Dual II Magnum (7.64 EC)	20.7 oz ai/a	A 201	15.0	15.0	5.0	15.0	7.0	15.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A 507	13.0	10.0	5.0	22.0	5.0	16.0	0.0
NIS	0.25 % v/v	A 803	12.0	10.0	5.0	17.0	7.0	15.0	0.0
		1003	12.0	14.0	0.0	17.0	5.0	10.0	0.0
		Mean =	13.0	12.3	3.8	17.8	6.0	14.0	0.0
6 Dual II Magnum (7.64 EC)	20.7 oz ai/a	B 203							
Roundup PowerMax 4.5 SL	18 oz ae/a	B 407							
NIS	0.25 % v/v	B 601							
		903							
		Mean =	.	.	.	.	.	.	.

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Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT A	3 DAT A	3 DAT A	7 DAT A	7 DAT A	7 DAT A	7 DAT A			
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014			
Rating Type	PHYNEC	PHYLMA	PHYCHL	PHYLMA	PHYSTU	PHYNEC	PHYCHL			
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	V1	V1	V1	V3	V3	V3	V3			
Days After First/Last Applic.	3 3	3 3	3 3	7 7	7 7	7 7	7 7			
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	21 DP-1	21 DP-1	21 DP-1	21 DP-1			
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	1	2	3	4	5	6	7
7 Dual II Magnum (7.64 EC)	20.7 oz ai/a	C	205							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	305							
NIS	0.25 % v/v	C	707							
			805							
			Mean =	.	.	.	.	.	.	.
8 Pummel (5.25 ME)	20.7 oz ai/a	A	207	10.0	10.0	10.0	5.0	0.0	10.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	505	7.0	7.0	10.0	7.0	0.0	7.0	0.0
NIS	0.25 % v/v	A	607	10.0	7.0	7.0	7.0	0.0	7.0	0.0
			901	10.0	10.0	7.0	7.0	0.0	10.0	5.0
			Mean =	9.3	8.5	8.5	6.5	0.0	8.5	1.3
9 Pummel (5.25 ME)	20.7 oz ai/a	B	301							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	401							
NIS	0.25 % v/v	B	705							
			807							
			Mean =	.	.	.	.	.	.	.
10 Pummel (5.25 ME)	20.7 oz ai/a	C	303							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	503							
NIS	0.25 % v/v	C	801							
			1005							
			Mean =	.	.	.	.	.	.	.
11 Vice (5.4 EC)	25.2 oz ai/a	A	102	15.0	12.0	5.0	17.0	10.0	10.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	308	20.0	17.0	0.0	21.0	7.0	10.0	0.0
NIS	0.25 % v/v	A	708	15.0	25.0	0.0	25.0	12.0	17.0	0.0
			1002	25.0	17.0	0.0	18.0	10.0	12.0	0.0
			Mean =	18.8	17.8	1.3	20.3	9.8	12.3	0.0
12 Vice (5.4 EC)	25.2 oz ai/a	B	104							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	408							
NIS	0.25 % v/v	B	702							
			904							
			Mean =	.	.	.	.	.	.	.
13 Vice (5.4 EC)	25.2 oz ai/a	C	106							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	406							
NIS	0.25 % v/v	C	602							
			902							
			Mean =	.	.	.	.	.	.	.
14 Prefix (5.29 EC)	24.7 oz ai/a	A	108	15.0	12.0	5.0	15.0	10.0	10.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	306	15.0	15.0	0.0	16.0	5.0	10.0	0.0
NIS	0.25 % v/v	A	604	30.0	17.0	0.0	30.0	20.0	20.0	0.0
			908	10.0	15.0	0.0	20.0	7.0	10.0	0.0
			Mean =	17.5	14.8	1.3	20.3	10.5	12.5	0.0

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT A	3 DAT A	3 DAT A	7 DAT A	7 DAT A	7 DAT A	7 DAT A			
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014			
Rating Type	PHYNEC	PHYLMA	PHYCHL	PHYLMA	PHYSTU	PHYNEC	PHYCHL			
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	V1	V1	V1	V3	V3	V3	V3			
Days After First/Last Applic.	3 3	3 3	3 3	7 7	7 7	7 7	7 7			
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	21 DP-1	21 DP-1	21 DP-1	21 DP-1			
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	1	2	3	4	5	6	7
15 Prefix (5.29 EC)	24.7 oz ai/a	B	202							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	506							
NIS	0.25 % v/v	B	608							
			808							
			Mean =	.	.	.	.	.	.	.
16 Prefix (5.29 EC)	24.7 oz ai/a	C	204							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	404							
NIS	0.25 % v/v	C	704							
			806							
			Mean =	.	.	.	.	.	.	.
17 Warrant (3 SC)	24 oz ai/a	A	206	0.0	4.0	0.0	5.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	402	0.0	7.0	5.0	7.0	0.0	0.0	0.0
NIS	0.25 % v/v	A	804	0.0	3.0	6.0	8.0	3.0	0.0	0.0
			906	0.0	10.0	3.0	10.0	0.0	0.0	0.0
			Mean =	0.0	6.0	3.5	7.5	0.8	0.0	0.0
18 Warrant (3 SC)	24 oz ai/a	B	208							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	504							
NIS	0.25 % v/v	B	706							
			1006							
			Mean =	.	.	.	.	.	.	.
19 Warrant (3 SC)	24 oz ai/a	C	302							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	508							
NIS	0.25 % v/v	C	802							
			1004							
			Mean =	.	.	.	.	.	.	.
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	304	3.0	3.0	0.0	0.0	0.0	0.0	3.0
NIS	0.25 % v/v	A	502	3.0	3.0	0.0	3.0	0.0	0.0	3.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	606	0.0	5.0	0.0	3.0	0.0	0.0	0.0
NIS	0.25 % v/v	B	1008	0.0	0.0	3.0	5.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
			Mean =	1.5	2.8	0.8	2.8	0.0	0.0	1.5



# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	14 DAT A	14 DAT A	14 DAT A	14 DAT A	21 DAT A	21 DAT A	21 DAT A			
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	V3	V3	V3	V3	V5	V5	V5			
Days After First/Last Applic.	14 2	14 2	14 2	14 2	20 8	20 8	20 8			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1			
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1			
Trt Treatment	Rate	Appl	Plot	8	9	10	11	12	13	14
No. Name	Rate Unit	Code	Plot							
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
			703	0.0	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	0.0
			Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Parallel (7.8 EC)	20.7 oz ai/a	A	103	0.0	5.0	0.0	0.0	0.0	4.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	307	0.0	5.0	0.0	0.0	0.0	4.0	0.0
NIS	0.25 % v/v	A	603	3.0	10.0	0.0	0.0	3.0	2.0	0.0
			905	0.0	7.0	0.0	0.0	0.0	5.0	0.0
			Mean =	0.8	6.8	0.0	0.0	0.8	3.8	0.0
3 Parallel (7.8 EC)	20.7 oz ai/a	B	105							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	501							
NIS	0.25 % v/v	B	701							
			1007							
			Mean =	.	.	.	.	.	.	.
4 Parallel (7.8 EC)	20.7 oz ai/a	C	107							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	403							
NIS	0.25 % v/v	C	605							
			1001							
			Mean =	.	.	.	.	.	.	.
5 Dual II Magnum (7.64 EC)	20.7 oz ai/a	A	201	10.0	6.0	0.0	0.0	7.0	8.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	507	0.0	7.0	0.0	5.0	0.0	3.0	0.0
NIS	0.25 % v/v	A	803	0.0	10.0	0.0	5.0	3.0	4.0	0.0
			1003	0.0	8.0	0.0	3.0	0.0	4.0	0.0
			Mean =	2.5	7.8	0.0	3.3	2.5	4.8	0.0
6 Dual II Magnum (7.64 EC)	20.7 oz ai/a	B	203							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	407							
NIS	0.25 % v/v	B	601							
			903							
			Mean =	.	.	.	.	.	.	.

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	14 DAT A	14 DAT A	14 DAT A	14 DAT A	21 DAT A	21 DAT A	21 DAT A			
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	V3	V3	V3	V3	V5	V5	V5			
Days After First/Last Applic.	14 2	14 2	14 2	14 2	20 8	20 8	20 8			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1			
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	8	9	10	11	12	13	14
7 Dual II Magnum (7.64 EC)	20.7 oz ai/a	C	205							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	305							
NIS	0.25 % v/v	C	707							
			805							
			Mean =	.	.	.	.	.	.	.
8 Pummel (5.25 ME)	20.7 oz ai/a	A	207	5.0	0.0	0.0	0.0	6.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	505	0.0	5.0	0.0	0.0	3.0	3.0	0.0
NIS	0.25 % v/v	A	607	3.0	3.0	0.0	0.0	5.0	3.0	0.0
			901	7.0	5.0	3.0	0.0	3.0	0.0	0.0
			Mean =	3.8	3.3	0.8	0.0	4.3	1.5	0.0
9 Pummel (5.25 ME)	20.7 oz ai/a	B	301							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	401							
NIS	0.25 % v/v	B	705							
			807							
			Mean =	.	.	.	.	.	.	.
10 Pummel (5.25 ME)	20.7 oz ai/a	C	303							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	503							
NIS	0.25 % v/v	C	801							
			1005							
			Mean =	.	.	.	.	.	.	.
11 Vice (5.4 EC)	25.2 oz ai/a	A	102	7.0	10.0	10.0	0.0	10.0	7.0	6.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	308	5.0	10.0	0.0	5.0	7.0	3.0	0.0
NIS	0.25 % v/v	A	708	13.0	7.0	10.0	5.0	5.0	3.0	0.0
			1002	7.0	14.0	0.0	3.0	7.0	2.0	0.0
			Mean =	8.0	10.3	5.0	3.3	7.3	3.8	1.5
12 Vice (5.4 EC)	25.2 oz ai/a	B	104							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	408							
NIS	0.25 % v/v	B	702							
			904							
			Mean =	.	.	.	.	.	.	.
13 Vice (5.4 EC)	25.2 oz ai/a	C	106							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	406							
NIS	0.25 % v/v	C	602							
			902							
			Mean =	.	.	.	.	.	.	.
14 Prefix (5.29 EC)	24.7 oz ai/a	A	108	7.0	6.0	0.0	3.0	10.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	306	9.0	10.0	0.0	3.0	7.0	3.0	0.0
NIS	0.25 % v/v	A	604	15.0	9.0	0.0	5.0	17.0	3.0	0.0
			908	5.0	8.0	0.0	5.0	3.0	3.0	0.0
			Mean =	9.0	8.3	0.0	4.0	9.3	2.3	0.0

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	14 DAT A	14 DAT A	14 DAT A	14 DAT A	21 DAT A	21 DAT A	21 DAT A			
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	V3	V3	V3	V3	V5	V5	V5			
Days After First/Last Applic.	14 2	14 2	14 2	14 2	20 8	20 8	20 8			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1			
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1			
Trt Treatment	Rate	Appl	Plot	8	9	10	11	12	13	14
No. Name	Rate Unit	Code								
15 Prefix (5.29 EC)	24.7 oz ai/a	B	202							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	506							
NIS	0.25 % v/v	B	608							
			808							
			Mean =	.	.	.	.	.	.	.
16 Prefix (5.29 EC)	24.7 oz ai/a	C	204							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	404							
NIS	0.25 % v/v	C	704							
			806							
			Mean =	.	.	.	.	.	.	.
17 Warrant (3 SC)	24 oz ai/a	A	206	0.0	6.0	0.0	0.0	0.0	4.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	A	402	0.0	5.0	0.0	3.0	0.0	3.0	0.0
NIS	0.25 % v/v	A	804	0.0	10.0	0.0	0.0	5.0	6.0	0.0
			906	0.0	11.0	0.0	0.0	3.0	5.0	0.0
			Mean =	0.0	8.0	0.0	0.8	2.0	4.5	0.0
18 Warrant (3 SC)	24 oz ai/a	B	208							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	504							
NIS	0.25 % v/v	B	706							
			1006							
			Mean =	.	.	.	.	.	.	.
19 Warrant (3 SC)	24 oz ai/a	C	302							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	508							
NIS	0.25 % v/v	C	802							
			1004							
			Mean =	.	.	.	.	.	.	.
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	304	5.0	0.0	15.0	0.0	7.0	8.0	5.0
NIS	0.25 % v/v	A	502	3.0	0.0	10.0	0.0	10.0	7.0	7.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	606	5.0	5.0	10.0	5.0	5.0	8.0	7.0
NIS	0.25 % v/v	B	1008	3.0	13.0	5.0	0.0	5.0	7.0	9.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
			Mean =	4.0	4.5	10.0	1.3	6.8	7.5	7.0

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT B	3 DAT B	3 DAT B	3 DAT B	7 DAT B	7 DAT B	7 DAT B			
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	V3	V3	V3	V3	V5	V5	V5			
Days After First/Last Applic.	14 2	14 2	14 2	14 2	20 8	20 8	20 8			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1			
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1			
Trt Treatment	Rate	Appl	Plot	15	16	17	18	19	20	21
No. Name	Rate Unit	Code	Plot							
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
			703	0.0	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	0.0
			Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Parallel (7.8 EC)	20.7 oz ai/a	A	103							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	307							
NIS	0.25 % v/v	A	603							
			905							
			Mean =	.	.	.	.	.	.	.
3 Parallel (7.8 EC)	20.7 oz ai/a	B	105	0.0	3.0	0.0	7.0	3.0	5.0	3.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	501	0.0	3.0	4.0	5.0	5.0	0.0	3.0
NIS	0.25 % v/v	B	701	3.0	0.0	4.0	0.0	5.0	4.0	3.0
			1007	0.0	0.0	3.0	6.0	0.0	0.0	3.0
			Mean =	0.8	1.5	2.8	4.5	3.3	2.3	3.0
4 Parallel (7.8 EC)	20.7 oz ai/a	C	107							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	403							
NIS	0.25 % v/v	C	605							
			1001							
			Mean =	.	.	.	.	.	.	.
5 Dual II Magnum (7.64 EC)	20.7 oz ai/a	A	201							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	507							
NIS	0.25 % v/v	A	803							
			1003							
			Mean =	.	.	.	.	.	.	.
6 Dual II Magnum (7.64 EC)	20.7 oz ai/a	B	203	0.0	5.0	8.0	0.0	5.0	7.0	7.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	407	0.0	3.0	8.0	0.0	0.0	7.0	5.0
NIS	0.25 % v/v	B	601	3.0	3.0	6.0	3.0	5.0	6.0	4.0
			903	0.0	5.0	7.0	3.0	3.0	7.0	5.0
			Mean =	0.8	4.0	7.3	1.5	3.3	6.8	5.3

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT B	3 DAT B	3 DAT B	3 DAT B	7 DAT B	7 DAT B	7 DAT B			
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	V3	V3	V3	V3	V5	V5	V5			
Days After First/Last Applic.	14 2	14 2	14 2	14 2	20 8	20 8	20 8			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1			
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	15	16	17	18	19	20	21
7 Dual II Magnum (7.64 EC)	20.7 oz ai/a	C	205							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	305							
NIS	0.25 % v/v	C	707							
			805							
			Mean =	.	.	.	.	.	.	.
8 Pummel (5.25 ME)	20.7 oz ai/a	A	207							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	505							
NIS	0.25 % v/v	A	607							
			901							
			Mean =	.	.	.	.	.	.	.
9 Pummel (5.25 ME)	20.7 oz ai/a	B	301	3.0	0.0	12.0	0.0	25.0	16.0	3.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	401	0.0	5.0	10.0	5.0	14.0	17.0	4.0
NIS	0.25 % v/v	B	705	3.0	0.0	15.0	0.0	20.0	15.0	3.0
			807	5.0	0.0	11.0	0.0	20.0	10.0	10.0
			Mean =	2.8	1.3	12.0	1.3	19.8	14.5	5.0
10 Pummel (5.25 ME)	20.7 oz ai/a	C	303							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	503							
NIS	0.25 % v/v	C	801							
			1005							
			Mean =	.	.	.	.	.	.	.
11 Vice (5.4 EC)	25.2 oz ai/a	A	102							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	308							
NIS	0.25 % v/v	A	708							
			1002							
			Mean =	.	.	.	.	.	.	.
12 Vice (5.4 EC)	25.2 oz ai/a	B	104	3.0	0.0	20.0	0.0	8.0	8.0	7.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	408	0.0	5.0	6.0	0.0	0.0	9.0	7.0
NIS	0.25 % v/v	B	702	5.0	5.0	13.0	3.0	6.0	12.0	9.0
			904	0.0	5.0	10.0	0.0	5.0	6.0	7.0
			Mean =	2.0	3.8	12.3	0.8	4.8	8.8	7.5
13 Vice (5.4 EC)	25.2 oz ai/a	C	106							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	406							
NIS	0.25 % v/v	C	602							
			902							
			Mean =	.	.	.	.	.	.	.
14 Prefix (5.29 EC)	24.7 oz ai/a	A	108							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	306							
NIS	0.25 % v/v	A	604							
			908							
			Mean =	.	.	.	.	.	.	.

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT B	3 DAT B	3 DAT B	3 DAT B	7 DAT B	7 DAT B	7 DAT B			
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	V3	V3	V3	V3	V5	V5	V5			
Days After First/Last Applic.	14 2	14 2	14 2	14 2	20 8	20 8	20 8			
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1			
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	15	16	17	18	19	20	21
15 Prefix (5.29 EC)	24.7 oz ai/a	B	202	0.0	5.0	17.0	5.0	7.0	11.0	7.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	506	3.0	3.0	9.0	0.0	3.0	6.0	5.0
NIS	0.25 % v/v	B	608	0.0	7.0	5.0	0.0	0.0	7.0	6.0
			808	0.0	4.0	6.0	7.0	0.0	9.0	5.0
			Mean =	0.8	4.8	9.3	3.0	2.5	8.3	5.8
16 Prefix (5.29 EC)	24.7 oz ai/a	C	204							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	404							
NIS	0.25 % v/v	C	704							
			806							
			Mean =	.	.	.	.	.	.	.
17 Warrant (3 SC)	24 oz ai/a	A	206							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	402							
NIS	0.25 % v/v	A	804							
			906							
			Mean =	.	.	.	.	.	.	.
18 Warrant (3 SC)	24 oz ai/a	B	208	0.0	5.0	0.0	0.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	504	0.0	2.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % v/v	B	706	0.0	5.0	0.0	0.0	0.0	0.0	0.0
			1006	0.0	5.0	0.0	5.0	0.0	0.0	0.0
			Mean =	0.0	4.3	0.0	1.3	0.0	0.0	0.0
19 Warrant (3 SC)	24 oz ai/a	C	302							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	508							
NIS	0.25 % v/v	C	802							
			1004							
			Mean =	.	.	.	.	.	.	.
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	304	5.0	0.0	15.0	0.0	7.0	8.0	5.0
NIS	0.25 % v/v	A	502	3.0	0.0	10.0	0.0	10.0	7.0	7.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	606	5.0	5.0	10.0	5.0	5.0	8.0	7.0
NIS	0.25 % v/v	B	1008	3.0	13.0	5.0	0.0	5.0	7.0	9.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
			Mean =	4.0	4.5	10.0	1.3	6.8	7.5	7.0

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	14 DAT B	14 DAT B	14 DAT B	14 DAT B	21 DAT B	21 DAT B	21 DAT B			
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-10-2014	Jul-10-2014	Jul-10-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	R1	R1	R1			
Days After First/Last Applic.	27 7	27 7	27 7	27 7	34 14	34 14	34 14			
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	41 DP-1	48 DP-1	48 DP-1	48 DP-1			
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	42 DE-1	42 DE-1	42 DE-1			
Trt Treatment	Rate	Appl	Plot	22	23	24	25	26	27	28
No. Name	Rate Unit	Code	Plot							
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
			703	0.0	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	0.0
			Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Parallel (7.8 EC)	20.7 oz ai/a	A	103							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	307							
NIS	0.25 % v/v	A	603							
			905							
			Mean =	.	.	.	.	.	.	.
3 Parallel (7.8 EC)	20.7 oz ai/a	B	105	2.0	0.0	0.0	0.0	0.0	2.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	501	0.0	0.0	0.0	0.0	0.0	3.0	0.0
NIS	0.25 % v/v	B	701	3.0	0.0	0.0	0.0	0.0	3.0	0.0
			1007	2.0	0.0	0.0	0.0	0.0	2.0	0.0
			Mean =	1.8	0.0	0.0	0.0	0.0	2.5	0.0
4 Parallel (7.8 EC)	20.7 oz ai/a	C	107							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	403							
NIS	0.25 % v/v	C	605							
			1001							
			Mean =	.	.	.	.	.	.	.
5 Dual II Magnum (7.64 EC)	20.7 oz ai/a	A	201							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	507							
NIS	0.25 % v/v	A	803							
			1003							
			Mean =	.	.	.	.	.	.	.
6 Dual II Magnum (7.64 EC)	20.7 oz ai/a	B	203	3.0	2.0	0.0	0.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	407	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % v/v	B	601	3.0	6.0	0.0	0.0	2.0	2.0	0.0
			903	0.0	4.0	3.0	0.0	0.0	0.0	0.0
			Mean =	1.5	3.0	0.8	0.0	0.5	0.5	0.0

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	14 DAT B	14 DAT B	14 DAT B	14 DAT B	21 DAT B	21 DAT B	21 DAT B			
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-10-2014	Jul-10-2014	Jul-10-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	R1	R1	R1			
Days After First/Last Applic.	27 7	27 7	27 7	27 7	34 14	34 14	34 14			
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	41 DP-1	48 DP-1	48 DP-1	48 DP-1			
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	42 DE-1	42 DE-1	42 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	22	23	24	25	26	27	28
7 Dual II Magnum (7.64 EC)	20.7 oz ai/a	C	205							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	305							
NIS	0.25 % v/v	C	707							
			805							
			Mean =	.	.	.	.	.	.	.
8 Pummel (5.25 ME)	20.7 oz ai/a	A	207							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	505							
NIS	0.25 % v/v	A	607							
			901							
			Mean =	.	.	.	.	.	.	.
9 Pummel (5.25 ME)	20.7 oz ai/a	B	301	60.0	15.0	10.0	0.0	60.0	15.0	9.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	401	40.0	15.0	7.0	0.0	50.0	17.0	5.0
NIS	0.25 % v/v	B	705	60.0	15.0	9.0	0.0	60.0	20.0	10.0
			807	50.0	10.0	10.0	0.0	60.0	17.0	10.0
			Mean =	52.5	13.8	9.0	0.0	57.5	17.3	8.5
10 Pummel (5.25 ME)	20.7 oz ai/a	C	303							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	503							
NIS	0.25 % v/v	C	801							
			1005							
			Mean =	.	.	.	.	.	.	.
11 Vice (5.4 EC)	25.2 oz ai/a	A	102							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	308							
NIS	0.25 % v/v	A	708							
			1002							
			Mean =	.	.	.	.	.	.	.
12 Vice (5.4 EC)	25.2 oz ai/a	B	104	10.0	5.0	0.0	0.0	5.0	1.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	408	4.0	3.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % v/v	B	702	6.0	9.0	0.0	0.0	7.0	6.0	0.0
			904	5.0	5.0	0.0	0.0	2.0	2.0	0.0
			Mean =	6.3	5.5	0.0	0.0	3.5	2.3	0.0
13 Vice (5.4 EC)	25.2 oz ai/a	C	106							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	406							
NIS	0.25 % v/v	C	602							
			902							
			Mean =	.	.	.	.	.	.	.
14 Prefix (5.29 EC)	24.7 oz ai/a	A	108							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	306							
NIS	0.25 % v/v	A	604							
			908							
			Mean =	.	.	.	.	.	.	.



# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	14 DAT B	14 DAT B	14 DAT B	14 DAT B	21 DAT B	21 DAT B	21 DAT B			
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-10-2014	Jul-10-2014	Jul-10-2014			
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC			
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	R1	R1	R1			
Days After First/Last Applic.	27 7	27 7	27 7	27 7	34 14	34 14	34 14			
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	41 DP-1	48 DP-1	48 DP-1	48 DP-1			
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	42 DE-1	42 DE-1	42 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	22	23	24	25	26	27	28
15 Prefix (5.29 EC)	24.7 oz ai/a	B	202	5.0	5.0	0.0	0.0	3.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	506	2.0	4.0	0.0	0.0	4.0	0.0	0.0
NIS	0.25 % v/v	B	608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			808	0.0	4.0	0.0	0.0	0.0	0.0	0.0
			Mean =	1.8	3.3	0.0	0.0	1.8	0.0	0.0
16 Prefix (5.29 EC)	24.7 oz ai/a	C	204							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	404							
NIS	0.25 % v/v	C	704							
			806							
			Mean =	.	.	.	.	.	.	.
17 Warrant (3 SC)	24 oz ai/a	A	206							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	402							
NIS	0.25 % v/v	A	804							
			906							
			Mean =	.	.	.	.	.	.	.
18 Warrant (3 SC)	24 oz ai/a	B	208	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	504	2.0	0.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % v/v	B	706	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			1006	3.0	0.0	0.0	0.0	0.0	0.0	0.0
			Mean =	1.3	0.0	0.0	0.0	0.0	0.0	0.0
19 Warrant (3 SC)	24 oz ai/a	C	302							
Roundup PowerMax 4.5 SL	18 oz ae/a	C	508							
NIS	0.25 % v/v	C	802							
			1004							
			Mean =	.	.	.	.	.	.	.
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	304	5.0	3.0	0.0	0.0	3.0	0.0	0.0
NIS	0.25 % v/v	A	502	4.0	0.0	0.0	0.0	5.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	606	3.0	0.0	0.0	0.0	1.0	0.0	0.0
NIS	0.25 % v/v	B	1008	3.0	0.0	0.0	0.0	3.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
			Mean =	3.8	0.8	0.0	0.0	3.0	0.0	0.0

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT C	3 DAT C	3 DAT C	3 DAT C	7 DAT C	7 DAT C	7 DAT C			
Rating Date	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014			
Rating Type	PHYSTU	PHYCHL	PHYNEC	PHYLMA	PHYSTU	PHYLMA	PHYNEC			
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	V6	V6	V6	V6	V8	V8	V8			
Days After First/Last Applic.	24 4	24 4	24 4	24 4	27 7	27 7	27 7			
Plant-Eval Interval	38 DP-1	38 DP-1	38 DP-1	38 DP-1	41 DP-1	41 DP-1	41 DP-1			
Days After Emergence	32 DE-1	32 DE-1	32 DE-1	32 DE-1	35 DE-1	35 DE-1	35 DE-1			
Trt Treatment	Rate	Appl	Plot	29	30	31	32	33	34	35
No. Name	Rate Unit	Code	Plot							
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
			703	0.0	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	0.0
			Mean =	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Parallel (7.8 EC)	20.7 oz ai/a	A	103							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	307							
NIS	0.25 % v/v	A	603							
			905							
			Mean =	.	.	.	.	.	.	.
3 Parallel (7.8 EC)	20.7 oz ai/a	B	105							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	501							
NIS	0.25 % v/v	B	701							
			1007							
			Mean =	.	.	.	.	.	.	.
4 Parallel (7.8 EC)	20.7 oz ai/a	C	107	0.0	0.0	1.0	0.0	0.0	0.0	1.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C	403	0.0	0.0	0.0	2.0	0.0	0.0	0.0
NIS	0.25 % v/v	C	605	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			1001	0.0	0.0	2.0	1.0	0.0	0.0	0.0
			Mean =	0.0	0.0	0.8	0.8	0.0	0.0	0.3
5 Dual II Magnum (7.64 EC)	20.7 oz ai/a	A	201							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	507							
NIS	0.25 % v/v	A	803							
			1003							
			Mean =	.	.	.	.	.	.	.
6 Dual II Magnum (7.64 EC)	20.7 oz ai/a	B	203							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	407							
NIS	0.25 % v/v	B	601							
			903							
			Mean =	.	.	.	.	.	.	.

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT C	3 DAT C	3 DAT C	3 DAT C	7 DAT C	7 DAT C	7 DAT C			
Rating Date	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014			
Rating Type	PHYSTU	PHYCHL	PHYNEC	PHYLMA	PHYSTU	PHYLMA	PHYNEC			
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	V6	V6	V6	V6	V8	V8	V8			
Days After First/Last Applic.	24 4	24 4	24 4	24 4	27 7	27 7	27 7			
Plant-Eval Interval	38 DP-1	38 DP-1	38 DP-1	38 DP-1	41 DP-1	41 DP-1	41 DP-1			
Days After Emergence	32 DE-1	32 DE-1	32 DE-1	32 DE-1	35 DE-1	35 DE-1	35 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	29	30	31	32	33	34	35
7 Dual II Magnum (7.64 EC)	20.7 oz ai/a	C	205	0.0	0.0	2.0	5.0	0.0	0.0	1.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C	305	0.0	0.0	5.0	3.0	0.0	3.0	2.0
NIS	0.25 % v/v	C	707	0.0	0.0	2.0	0.0	0.0	0.0	1.0
			805	0.0	0.0	2.0	5.0	0.0	5.0	0.0
			Mean =	0.0	0.0	2.8	3.3	0.0	2.0	1.0
8 Pummel (5.25 ME)	20.7 oz ai/a	A	207							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	505							
NIS	0.25 % v/v	A	607							
			901							
			Mean =	.	.	.	.	.	.	.
9 Pummel (5.25 ME)	20.7 oz ai/a	B	301							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	401							
NIS	0.25 % v/v	B	705							
			807							
			Mean =	.	.	.	.	.	.	.
10 Pummel (5.25 ME)	20.7 oz ai/a	C	303	0.0	0.0	1.0	1.0	0.0	2.0	1.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C	503	0.0	0.0	1.0	2.0	0.0	0.0	1.0
NIS	0.25 % v/v	C	801	0.0	0.0	0.0	5.0	0.0	3.0	0.0
			1005	0.0	0.0	2.0	0.0	2.0	0.0	1.0
			Mean =	0.0	0.0	1.0	2.0	0.5	1.3	0.8
11 Vice (5.4 EC)	25.2 oz ai/a	A	102							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	308							
NIS	0.25 % v/v	A	708							
			1002							
			Mean =	.	.	.	.	.	.	.
12 Vice (5.4 EC)	25.2 oz ai/a	B	104							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	408							
NIS	0.25 % v/v	B	702							
			904							
			Mean =	.	.	.	.	.	.	.
13 Vice (5.4 EC)	25.2 oz ai/a	C	106	5.0	7.0	5.0	3.0	5.0	4.0	3.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C	406	0.0	3.0	6.0	0.0	2.0	3.0	4.0
NIS	0.25 % v/v	C	602	0.0	5.0	4.0	2.0	3.0	5.0	5.0
			902	0.0	9.0	5.0	6.0	3.0	0.0	3.0
			Mean =	1.3	6.0	5.0	2.8	3.3	3.0	3.8
14 Prefix (5.29 EC)	24.7 oz ai/a	A	108							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	306							
NIS	0.25 % v/v	A	604							
			908							
			Mean =	.	.	.	.	.	.	.

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT C	3 DAT C	3 DAT C	3 DAT C	7 DAT C	7 DAT C	7 DAT C			
Rating Date	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014			
Rating Type	PHYSTU	PHYCHL	PHYNEC	PHYLMA	PHYSTU	PHYLMA	PHYNEC			
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	V6	V6	V6	V6	V8	V8	V8			
Days After First/Last Applic.	24 4	24 4	24 4	24 4	27 7	27 7	27 7			
Plant-Eval Interval	38 DP-1	38 DP-1	38 DP-1	38 DP-1	41 DP-1	41 DP-1	41 DP-1			
Days After Emergence	32 DE-1	32 DE-1	32 DE-1	32 DE-1	35 DE-1	35 DE-1	35 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	Plot	29	30	31	32	33	34	35
15 Prefix (5.29 EC)	24.7 oz ai/a	B	202							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	506							
NIS	0.25 % v/v	B	608							
			808							
			Mean =	.	.	.	.	.	.	.
16 Prefix (5.29 EC)	24.7 oz ai/a	C	204	0.0	0.0	9.0	2.0	0.0	3.0	7.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C	404	3.0	0.0	11.0	0.0	5.0	5.0	10.0
NIS	0.25 % v/v	C	704	5.0	5.0	10.0	5.0	5.0	4.0	7.0
			806	3.0	0.0	10.0	5.0	5.0	5.0	7.0
			Mean =	2.8	1.3	10.0	3.0	3.8	4.3	7.8
17 Warrant (3 SC)	24 oz ai/a	A	206							
Roundup PowerMax 4.5 SL	18 oz ae/a	A	402							
NIS	0.25 % v/v	A	804							
			906							
			Mean =	.	.	.	.	.	.	.
18 Warrant (3 SC)	24 oz ai/a	B	208							
Roundup PowerMax 4.5 SL	18 oz ae/a	B	504							
NIS	0.25 % v/v	B	706							
			1006							
			Mean =	.	.	.	.	.	.	.
19 Warrant (3 SC)	24 oz ai/a	C	302	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C	508	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % v/v	C	802	0.0	0.0	0.0	0.0	2.0	0.0	0.0
			1004	0.0	0.0	0.0	1.0	0.0	0.0	0.0
			Mean =	0.0	0.0	0.0	0.3	0.5	0.0	0.0
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	304	5.0	0.0	7.0	6.0	5.0	3.0	0.0
NIS	0.25 % v/v	A	502	5.0	0.0	0.0	4.0	4.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	B	606	0.0	0.0	4.0	3.0	3.0	0.0	0.0
NIS	0.25 % v/v	B	1008	0.0	0.0	5.0	5.0	3.0	0.0	0.0
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
			Mean =	2.5	0.0	4.0	4.5	3.8	0.8	0.0





# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	7 DAT C	14 DAT C	14 DAT C	14 DAT C	21 DAT C	21 DAT C	21 DAT C			
Rating Date	Jul-3-2014	Jul-10-2014	Jul-10-2014	Jul-10-2014	Jul-17-2014	Jul-17-2014	Jul-17-2014	Sep-30-2014		
Rating Type	PHYCHL	CI	PHYLMA	PHYNEC	PHYSTU	PHYCHL	PHYCHL	YIELD		
Rating Unit	%	%	%	%	%	%	%	bu/ac		
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	1		
Crop Stage Majority	V8	R1	R1	R1	R2	R2	R2			
Days After First/Last Applic.	27 7	34 14	34 14	34 14	41 21	41 21	41 21	116 96		
Plant-Eval Interval	41 DP-1	48 DP-1	48 DP-1	48 DP-1	55 DP-1	55 DP-1	55 DP-1	130 DP-1		
Days After Emergence	35 DE-1	42 DE-1	42 DE-1	42 DE-1	49 DE-1	49 DE-1	49 DE-1	124 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	36	37	38	39	40	41	42	
15 Prefix (5.29 EC)	24.7 oz ai/a	B	202						64.87*	
Roundup PowerMax 4.5 SL	18 oz ae/a	B	506						70.50	
NIS	0.25 % v/v	B	608						72.20	
			808						71.00	
			Mean =	.	.	.	.	.	69.64	
16 Prefix (5.29 EC)	24.7 oz ai/a	C	204	0.0	0.0	5.0	7.0	0.0	3.0	56.30
Roundup PowerMax 4.5 SL	18 oz ae/a	C	404	3.0	4.0	5.0	9.0	6.0	0.0	65.50
NIS	0.25 % v/v	C	704	6.0	5.0	7.0	8.0	5.0	0.0	68.20
			806	4.0	3.0	9.0	3.0	1.0	0.0	70.50
			Mean =	3.3	3.0	6.5	6.8	3.0	0.8	65.13
17 Warrant (3 SC)	24 oz ai/a	A	206							67.00
Roundup PowerMax 4.5 SL	18 oz ae/a	A	402							64.50
NIS	0.25 % v/v	A	804							68.60
			906							74.60
			Mean =	.	.	.	.	.	.	68.68
18 Warrant (3 SC)	24 oz ai/a	B	208							66.80
Roundup PowerMax 4.5 SL	18 oz ae/a	B	504							70.50
NIS	0.25 % v/v	B	706							72.70
			1006							80.10
			Mean =	.	.	.	.	.	.	72.53
19 Warrant (3 SC)	24 oz ai/a	C	302	0.0	0.0	3.0	0.0	4.0	0.0	54.90
Roundup PowerMax 4.5 SL	18 oz ae/a	C	508	0.0	0.0	0.0	0.0	0.0	0.0	64.80
NIS	0.25 % v/v	C	802	0.0	0.0	0.0	0.0	3.0	0.0	63.20
			1004	0.0	0.0	3.0	0.0	0.0	0.0	73.70
			Mean =	0.0	0.0	1.5	0.0	1.8	0.0	64.15
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	304	0.0	3.0	0.0	0.0	3.0	0.0	52.60
NIS	0.25 % v/v	A	502	0.0	5.0	0.0	0.0	5.0	0.0	62.50
Roundup PowerMax 4.5 SL	18 oz ae/a	B	606	0.0	1.0	0.0	0.0	2.0	0.0	72.00
NIS	0.25 % v/v	B	1008	0.0	3.0	0.0	0.0	0.0	0.0	76.00
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
			Mean =	0.0	3.0	0.0	0.0	2.5	0.0	65.78

# Purdue University

## ADAMA Soybean Metolachlor Crop Safety - Tank Mixed with Roundup

Trial ID: 14S-THP-CTS-59      Protocol ID: 14S-THP-CTS-59  
Location: Throckmorton      Study Director:  
Project ID:      Investigator: Dr. Bill Johnson  
Sponsor Contact: ADAMA - Dario Narvaez

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Type

PHYNEC = phytotoxicity - necrosis /burn

PHYLMA = phytotoxicity - leaf malformation

PHYCHL = phytotoxicity - chlorosis

PHYSTU = phytotoxicity - stunting

YIELD = yield

### Rating Unit

% = percent

bu/ac = bushels per acre

PLOT = total plot

### Plant-Eval Interval

17 DP-1 = 1 GLXMA May-23-2014

21 DP-1 = 1 GLXMA May-23-2014

28 DP-1 = 1 GLXMA May-23-2014

34 DP-1 = 1 GLXMA May-23-2014

41 DP-1 = 1 GLXMA May-23-2014

48 DP-1 = 1 GLXMA May-23-2014

38 DP-1 = 1 GLXMA May-23-2014

55 DP-1 = 1 GLXMA May-23-2014

130 DP-1 = 1 GLXMA May-23-2014



# Purdue University

## ADAMA Soybean Metolachlor Crop Safety - Tank Mixed with Roundup

Trial ID: 14S-THP-CTS-59      Protocol ID: 14S-THP-CTS-59  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
 Sponsor Contact: ADAMA - Dario Narvaez

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY			
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max			
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean			
Description	3 DAT A	3 DAT A	3 DAT A	7 DAT A	7 DAT A	7 DAT A	7 DAT A	14 DAT A			
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014	Jun-20-2014			
Rating Type	PHYNEC	PHYLMA	PHYCHL	PHYLMA	PHYSTU	PHYNEC	PHYCHL	PHYSTU			
Rating Unit	%	%	%	%	%	%	%	%			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1	1	1			
Crop Stage Majority	V1	V1	V1	V3	V3	V3	V3	V3			
Days After First/Last Applic.	3 3	3 3	3 3	7 7	7 7	7 7	7 7	14 2			
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	21 DP-1	21 DP-1	21 DP-1	21 DP-1	28 DP-1			
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1	22 DE-1			
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5	6	7	8
1	Untreated Check	0.0 c		0.0 c	0.0 f	0.0 c	0.0 d	0.0 c	0.0 c	0.0 a	0.0 c
2	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	10.5 b	10.5 bcd	5.5 b	14.5 b	3.0 bc	11.3 ab	0.0 a	0.8 c
3	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B								
4	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
5	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	13.0 ab	12.3 bc	3.8 bc	17.8 ab	6.0 b	14.0 a	0.0 a	2.5 bc
6	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B								
7	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
8	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	9.3 b	8.5 cd	8.5 a	6.5 c	0.0 c	8.5 b	1.3 a	3.8 abc
9	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B								
10	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
11	Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	18.8 a	17.8 a	1.3 c	20.3 a	9.8 a	12.3 ab	0.0 a	8.0 ab
12	Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	B B B								

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

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	3 DAT A	3 DAT A	3 DAT A	7 DAT A	7 DAT A	7 DAT A	7 DAT A	14 DAT A		
Rating Date	Jun-9-2014	Jun-9-2014	Jun-9-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014	Jun-13-2014	Jun-20-2014		
Rating Type	PHYNEC	PHYLMA	PHYCHL	PHYLMA	PHYSTU	PHYNEC	PHYCHL	PHYSTU		
Rating Unit	%	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Majority	V1	V1	V1	V3	V3	V3	V3	V3		
Days After First/Last Applic.	3 3	3 3	3 3	7 7	7 7	7 7	7 7	14 2		
Plant-Eval Interval	17 DP-1	17 DP-1	17 DP-1	21 DP-1	21 DP-1	21 DP-1	21 DP-1	28 DP-1		
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	15 DE-1	15 DE-1	15 DE-1	15 DE-1	22 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8
13 Vice (5.4 EC)	25.2 oz ai/a	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
14 Prefix (5.29 EC)	24.7 oz ai/a	A	17.5 a	14.8 ab	1.3 c	20.3 a	10.5 a	12.5 ab	0.0 a	9.0 a
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
15 Prefix (5.29 EC)	24.7 oz ai/a	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
16 Prefix (5.29 EC)	24.7 oz ai/a	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
17 Warrant (3 SC)	24 oz ai/a	A	0.0 c	6.0 de	3.5 bc	7.5 c	0.8 c	0.0 c	0.0 a	0.0 c
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
18 Warrant (3 SC)	24 oz ai/a	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
19 Warrant (3 SC)	24 oz ai/a	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	1.5 c	2.8 ef	0.8 c	2.8 cd	0.0 c	0.0 c	1.5 a	4.0 abc
NIS	0.25 % v/v	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
LSD (P=.05)			5.62	4.08	2.93	4.22	3.41	3.44	1.64	4.13
Standard Deviation			3.82	2.78	1.99	2.87	2.32	2.34	1.12	2.81
CV			43.34	30.64	65.06	25.65	61.79	31.98	324.66	80.15
Bartlett's X2			20.886	9.388	3.715	12.769	11.565	5.404	0.392	7.741
P(Bartlett's X2)			0.001*	0.153	0.715	0.047*	0.009*	0.248	0.531	0.171
Replicate F			0.277	0.568	1.060	2.961	2.716	1.866	0.427	1.663
Replicate Prob(F)			0.8413	0.6425	0.3871	0.0556	0.0706	0.1663	0.7360	0.2054
Treatment F			15.808	18.660	8.271	31.252	14.727	28.554	1.315	6.091
Treatment Prob(F)			0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.2916	0.0006

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	14 DAT A	14 DAT A	14 DAT A	21 DAT A	21 DAT A	21 DAT A	21 DAT A	3 DAT B	3 DAT B		
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014	Jun-20-2014	Jun-20-2014		
Rating Type	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC	PHYSTU	PHYSTU	PHYLMA		
Rating Unit	%	%	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Crop Stage Majority	V3	V3	V3	V5	V5	V5	V5	V3	V3		
Days After First/Last Applic.	14 2	14 2	14 2	20 8	20 8	20 8	20 8	14 2	14 2		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1	34 DP-1	28 DP-1	28 DP-1		
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1	28 DE-1	22 DE-1	22 DE-1		
Trt No.	Treatment	Rate	Appl								
	Name	Rate Unit	Code	9	10	11	12	13	14	15	16
1	Untreated Check			0.0 c	0.0 b	0.0 b	0.0 c	0.0 c	0.0 b	0.0 b	0.0 a
2	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	6.8 ab	0.0 b	0.0 b	0.8 c	3.8 b	0.0 b		
3	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B							0.8 b	1.5 a
4	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
5	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	7.8 ab	0.0 b	3.3 ab	2.5 bc	4.8 b	0.0 b		
6	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B							0.8 b	4.0 a
7	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
8	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	3.3 bc	0.8 b	0.0 b	4.3 abc	1.5 bc	0.0 b		
9	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B							2.8 ab	1.3 a
10	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
11	Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	A A A	10.3 a	5.0 b	3.3 ab	7.3 ab	3.8 b	1.5 b		
12	Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	B B B							2.0 ab	3.8 a

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	
Description	14 DAT A	14 DAT A	14 DAT A	21 DAT A	21 DAT A	21 DAT A	21 DAT A	3 DAT B	3 DAT B	
Rating Date	Jun-20-2014	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014	Jun-20-2014	Jun-20-2014	
Rating Type	PHYLMA	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC	PHYSTU	PHYSTU	PHYLMA	
Rating Unit	%	%	%	%	%	%	%	%	%	
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	
Number of Subsamples	1	1	1	1	1	1	1	1	1	
Crop Stage Majority	V3	V3	V3	V5	V5	V5	V5	V3	V3	
Days After First/Last Applic.	14 2	14 2	14 2	20 8	20 8	20 8	20 8	14 2	14 2	
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1	34 DP-1	28 DP-1	28 DP-1	
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1	28 DE-1	22 DE-1	22 DE-1	
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	9	10	11	12	13	14	15	16
13 Vice (5.4 EC)	25.2 oz ai/a	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
14 Prefix (5.29 EC)	24.7 oz ai/a	A	8.3 ab	0.0 b	4.0 a	9.3 a	2.3 bc	0.0 b		
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
15 Prefix (5.29 EC)	24.7 oz ai/a	B							0.8 b	4.8 a
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
16 Prefix (5.29 EC)	24.7 oz ai/a	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
17 Warrant (3 SC)	24 oz ai/a	A	8.0 ab	0.0 b	0.8 b	2.0 bc	4.5 b	0.0 b		
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
18 Warrant (3 SC)	24 oz ai/a	B							0.0 b	4.3 a
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
19 Warrant (3 SC)	24 oz ai/a	C								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	4.5 bc	10.0 a	1.3 ab	6.8 ab	7.5 a	7.0 a	4.0 a	4.5 a
NIS	0.25 % v/v	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
LSD (P=.05)			3.76	3.69	2.10	4.03	2.35	1.86	2.10	4.13
Standard Deviation			2.56	2.51	1.43	2.74	1.60	1.27	1.43	2.81
CV			41.98	127.42	91.45	66.93	45.71	119.09	103.77	93.51
Bartlett's X2			8.079	4.261	2.351	9.252	5.489	1.039	2.158	12.827
P(Bartlett's X2)			0.232	0.119	0.671	0.16	0.483	0.308	0.827	0.046*
Replicate F			3.940	1.303	3.286	1.825	0.293	0.286	2.006	0.582
Replicate Prob(F)			0.0224	0.2998	0.0409	0.1736	0.8300	0.8348	0.1440	0.6331
Treatment F			6.680	8.586	5.519	5.974	8.149	15.067	3.965	1.652
Treatment Prob(F)			0.0003	0.0001	0.0010	0.0006	0.0001	0.0001	0.0066	0.1757

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	3 DAT B	3 DAT B	7 DAT B	7 DAT B	7 DAT B	14 DAT B	14 DAT B	14 DAT B	14 DAT B		
Rating Date	Jun-20-2014	Jun-20-2014	Jun-26-2014	Jun-26-2014	Jun-26-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014		
Rating Type	PHYNEC	PHYCHL	PHYSTU	PHYLMA	PHYNEC	PHYSTU	PHYLMA	PHYNEC	PHYNEC		
Rating Unit	%	%	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1	1	1		
Crop Stage Majority	V3	V3	V5	V5	V5	V8	V8	V8	V8		
Days After First/Last Applic.	14 2	14 2	20 8	20 8	20 8	27 7	27 7	27 7	27 7		
Plant-Eval Interval	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1	41 DP-1	41 DP-1	41 DP-1	41 DP-1		
Days After Emergence	22 DE-1	22 DE-1	28 DE-1	28 DE-1	28 DE-1	35 DE-1	35 DE-1	35 DE-1	35 DE-1		
Trt No.	Treatment Name	Rate	Appl								
		Rate Unit	Code	17	18	19	20	21	22	23	24
1	Untreated Check	0.0 c		0.0 c	0.0 a	0.0 c	0.0 c	0.0 c	0.0 b	0.0 c	0.0 b
2	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
3	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	2.8 bc	4.5 a	3.3 bc	2.3 c	3.0 b	1.8 b	0.0 c	0.0 b
4	Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
5	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
6	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	7.3 ab	1.5 a	3.3 bc	6.8 b	5.3 ab	1.5 b	3.0 bc	0.8 b
7	Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
8	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
9	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	12.0 a	1.3 a	19.8 a	14.5 a	5.0 ab	52.5 a	13.8 a	9.0 a
10	Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C								
11	Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
12	Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	12.3 a	0.8 a	4.8 bc	8.8 b	7.5 a	6.3 b	5.5 b	0.0 b



# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	14 DAT B	21 DAT B	21 DAT B	21 DAT B	3 DAT C	3 DAT C	3 DAT C	3 DAT C		
Rating Date	Jul-3-2014	Jul-10-2014	Jul-10-2014	Jul-10-2014	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jun-30-2014		
Rating Type	PHYCHL	PHYSTU	PHYLMA	PHYNEC	PHYSTU	PHYCHL	PHYNEC	PHYLMA		
Rating Unit	%	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Majority	V8	R1	R1	R1	V6	V6	V6	V6		
Days After First/Last Applic.	27 7	34 14	34 14	34 14	24 4	24 4	24 4	24 4		
Plant-Eval Interval	41 DP-1	48 DP-1	48 DP-1	48 DP-1	38 DP-1	38 DP-1	38 DP-1	38 DP-1		
Days After Emergence	35 DE-1	42 DE-1	42 DE-1	42 DE-1	32 DE-1	32 DE-1	32 DE-1	32 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	25	26	27	28	29	30	31	32
1 Untreated Check			0.0 a	0.0 b	0.0 b	0.0 b	0.0 a	0.0 b	0.0 c	0.0 b
2 Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
3 Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	0.0 a	0.0 b	2.5 b	0.0 b				
4 Parallel (7.8 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C					0.0 a	0.0 b	0.8 c	0.8 ab
5 Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
6 Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	0.0 a	0.5 b	0.5 b	0.0 b				
7 Dual II Magnum (7.64 EC) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C					0.0 a	0.0 b	2.8 bc	3.3 ab
8 Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
9 Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	0.0 a	57.5 a	17.3 a	8.5 a				
10 Pummel (5.25 ME) Roundup PowerMax 4.5 SL NIS	20.7 oz ai/a 18 oz ae/a 0.25 % v/v	C C C					0.0 a	0.0 b	1.0 c	2.0 ab
11 Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	A A A								
12 Vice (5.4 EC) Roundup PowerMax 4.5 SL NIS	25.2 oz ai/a 18 oz ae/a 0.25 % v/v	B B B	0.0 a	3.5 b	2.3 b	0.0 b				

# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	14 DAT B	21 DAT B	21 DAT B	21 DAT B	3 DAT C	3 DAT C	3 DAT C	3 DAT C		
Rating Date	Jul-3-2014	Jul-10-2014	Jul-10-2014	Jul-10-2014	Jun-30-2014	Jun-30-2014	Jun-30-2014	Jun-30-2014		
Rating Type	PHYCHL	PHYSTU	PHYLMA	PHYNEC	PHYSTU	PHYCHL	PHYNEC	PHYLMA		
Rating Unit	%	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Majority	V8	R1	R1	R1	V6	V6	V6	V6		
Days After First/Last Applic.	27 7	34 14	34 14	34 14	24 4	24 4	24 4	24 4		
Plant-Eval Interval	41 DP-1	48 DP-1	48 DP-1	48 DP-1	38 DP-1	38 DP-1	38 DP-1	38 DP-1		
Days After Emergence	35 DE-1	42 DE-1	42 DE-1	42 DE-1	32 DE-1	32 DE-1	32 DE-1	32 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	25	26	27	28	29	30	31	32
13 Vice (5.4 EC)	25.2 oz ai/a	C					1.3 a	6.0 a	5.0 b	2.8 ab
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
14 Prefix (5.29 EC)	24.7 oz ai/a	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
15 Prefix (5.29 EC)	24.7 oz ai/a	B	0.0 a	1.8 b	0.0 b	0.0 b				
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
16 Prefix (5.29 EC)	24.7 oz ai/a	C					2.8 a	1.3 b	10.0 a	3.0 ab
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
17 Warrant (3 SC)	24 oz ai/a	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
18 Warrant (3 SC)	24 oz ai/a	B	0.0 a	0.0 b	0.0 b	0.0 b				
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
19 Warrant (3 SC)	24 oz ai/a	C					0.0 a	0.0 b	0.0 c	0.3 b
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	0.0 a	3.0 b	0.0 b	0.0 b	2.5 a	0.0 b	4.0 b	4.5 a
NIS	0.25 % v/v	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
LSD (P=.05)			0.00	3.46	1.60	1.24	2.33	1.90	2.00	2.62
Standard Deviation			0.00	2.35	1.09	0.84	1.59	1.29	1.36	1.78
CV			0.0	28.43	38.7	79.21	195.3	142.77	46.32	86.36
Bartlett's X2			0.0	8.167	6.687	0.0	0.329	0.003	9.72	8.905
P(Bartlett's X2)			.	0.086	0.083	.	0.848	0.956	0.084	0.179
Replicate F			0.000	0.682	3.553	1.000	0.480	0.716	0.473	0.985
Replicate Prob(F)			1.0000	0.5728	0.0319	0.4123	0.6997	0.5537	0.7046	0.4188
Treatment F			0.000	286.807	118.598	51.000	2.291	10.579	25.032	3.236
Treatment Prob(F)			1.0000	0.0001	0.0001	0.0001	0.0669	0.0001	0.0001	0.0172





# Purdue University

Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA		
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY		
Crop Scientific Name	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max	Glycine max		
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean		
Description	7 DAT C	7 DAT C	7 DAT C	7 DAT C	14 DAT C	14 DAT C	14 DAT C	21 DAT C		
Rating Date	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-3-2014	Jul-10-2014	Jul-10-2014	Jul-10-2014	Jul-17-2014		
Rating Type	PHYSTU	PHYLMA	PHYNEC	PHYCHL	CI	PHYLMA	PHYNEC	PHYSTU		
Rating Unit	%	%	%	%	%	%	%	%		
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Majority	V8	V8	V8	V8	R1	R1	R1	R2		
Days After First/Last Applic.	27 7	27 7	27 7	27 7	34 14	34 14	34 14	41 21		
Plant-Eval Interval	41 DP-1	41 DP-1	41 DP-1	41 DP-1	48 DP-1	48 DP-1	48 DP-1	55 DP-1		
Days After Emergence	35 DE-1	35 DE-1	35 DE-1	35 DE-1	42 DE-1	42 DE-1	42 DE-1	49 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	33	34	35	36	37	38	39	40
13 Vice (5.4 EC)	25.2 oz ai/a	C	3.3 a	3.0 ab	3.8 b	5.3 a	2.0 a	3.5 b	4.3 b	3.0 a
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
14 Prefix (5.29 EC)	24.7 oz ai/a	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
15 Prefix (5.29 EC)	24.7 oz ai/a	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
16 Prefix (5.29 EC)	24.7 oz ai/a	C	3.8 a	4.3 a	7.8 a	3.3 b	3.0 a	6.5 a	6.8 a	3.0 a
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
17 Warrant (3 SC)	24 oz ai/a	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	A								
NIS	0.25 % v/v	A								
18 Warrant (3 SC)	24 oz ai/a	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
19 Warrant (3 SC)	24 oz ai/a	C	0.5 b	0.0 b	0.0 c	0.0 c	0.0 a	1.5 bc	0.0 c	1.8 a
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	3.8 a	0.8 b	0.0 c	0.0 c	3.0 a	0.0 c	0.0 c	2.5 a
NIS	0.25 % v/v	A								
Roundup PowerMax 4.5 SL	18 oz ae/a	B								
NIS	0.25 % v/v	B								
Roundup PowerMax 4.5 SL	18 oz ae/a	C								
NIS	0.25 % v/v	C								
LSD (P=.05)			1.80	2.22	1.05	1.36	2.17	2.00	1.51	2.28
Standard Deviation			1.22	1.51	0.71	0.92	1.47	1.36	1.02	1.55
CV			83.26	107.4	42.15	86.83	120.98	63.92	74.44	105.74
Bartlett's X2			4.74	2.848	5.08	5.686	2.77	5.048	2.629	9.46
P(Bartlett's X2)			0.315	0.584	0.279	0.017*	0.597	0.41	0.105	0.092
Replicate F			0.188	0.050	1.565	0.636	0.628	0.858	0.477	1.464
Replicate Prob(F)			0.9033	0.9847	0.2276	0.5999	0.6052	0.4781	0.7015	0.2530
Treatment F			8.379	4.350	59.824	19.531	3.136	9.755	26.455	2.767
Treatment Prob(F)			0.0001	0.0040	0.0001	0.0001	0.0198	0.0001	0.0001	0.0333

## Purdue University

Crop Code		GLXMA	GLXMA
BBCH Scale		BSOY	BSOY
Crop Scientific Name		Glycine max	Glycine max
Crop Name		Soybean	Soybean
Description		21 DAT C	
Rating Date		Jul-17-2014	Sep-30-2014
Rating Type		PHYCHL	YIELD
Rating Unit		%	bu/ac
Sample Size, Unit		1 PLOT	
Number of Subsamples		1	1
Crop Stage Majority		R2	
Days After First/Last Applic.		41 21	116 96
Plant-Eval Interval		55 DP-1	130 DP-1
Days After Emergence		49 DE-1	124 DE-1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
1 Untreated Check		41	42
		0.0 a	66.05 a
2 Parallel (7.8 EC)	20.7 oz ai/a A		68.38 a
Roundup PowerMax 4.5 SL	18 oz ae/a A		
NIS	0.25 % v/v A		
3 Parallel (7.8 EC)	20.7 oz ai/a B		73.75 a
Roundup PowerMax 4.5 SL	18 oz ae/a B		
NIS	0.25 % v/v B		
4 Parallel (7.8 EC)	20.7 oz ai/a C	0.0 a	70.50 a
Roundup PowerMax 4.5 SL	18 oz ae/a C		
NIS	0.25 % v/v C		
5 Dual II Magnum (7.64 EC)	20.7 oz ai/a A		74.13 a
Roundup PowerMax 4.5 SL	18 oz ae/a A		
NIS	0.25 % v/v A		
6 Dual II Magnum (7.64 EC)	20.7 oz ai/a B		66.75 a
Roundup PowerMax 4.5 SL	18 oz ae/a B		
NIS	0.25 % v/v B		
7 Dual II Magnum (7.64 EC)	20.7 oz ai/a C	0.0 a	61.28 a
Roundup PowerMax 4.5 SL	18 oz ae/a C		
NIS	0.25 % v/v C		
8 Pummel (5.25 ME)	20.7 oz ai/a A		68.88 a
Roundup PowerMax 4.5 SL	18 oz ae/a A		
NIS	0.25 % v/v A		
9 Pummel (5.25 ME)	20.7 oz ai/a B		46.03 b
Roundup PowerMax 4.5 SL	18 oz ae/a B		
NIS	0.25 % v/v B		
10 Pummel (5.25 ME)	20.7 oz ai/a C	0.0 a	66.30 a
Roundup PowerMax 4.5 SL	18 oz ae/a C		
NIS	0.25 % v/v C		
11 Vice (5.4 EC)	25.2 oz ai/a A		59.80 a
Roundup PowerMax 4.5 SL	18 oz ae/a A		
NIS	0.25 % v/v A		
12 Vice (5.4 EC)	25.2 oz ai/a B		64.93 a
Roundup PowerMax 4.5 SL	18 oz ae/a B		
NIS	0.25 % v/v B		

# Purdue University

Crop Code		GLXMA	GLXMA
BBCH Scale		BSOY	BSOY
Crop Scientific Name		Glycine max	Glycine max
Crop Name		Soybean	Soybean
Description		21 DAT C	
Rating Date		Jul-17-2014	Sep-30-2014
Rating Type		PHYCHL	YIELD
Rating Unit		%	bu/ac
Sample Size, Unit		1 PLOT	
Number of Subsamples		1	1
Crop Stage Majority		R2	
Days After First/Last Applic.		41 21	116 96
Plant-Eval Interval		55 DP-1	130 DP-1
Days After Emergence		49 DE-1	124 DE-1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
13 Vice (5.4 EC)	25.2 oz ai/a	C	
Roundup PowerMax 4.5 SL	18 oz ae/a	C	
NIS	0.25 % v/v	C	
			0.0 a
			63.68 a
14 Prefix (5.29 EC)	24.7 oz ai/a	A	
Roundup PowerMax 4.5 SL	18 oz ae/a	A	
NIS	0.25 % v/v	A	
			65.90 a
15 Prefix (5.29 EC)	24.7 oz ai/a	B	
Roundup PowerMax 4.5 SL	18 oz ae/a	B	
NIS	0.25 % v/v	B	
			69.64 a
16 Prefix (5.29 EC)	24.7 oz ai/a	C	
Roundup PowerMax 4.5 SL	18 oz ae/a	C	
NIS	0.25 % v/v	C	
			0.8 a
			65.13 a
17 Warrant (3 SC)	24 oz ai/a	A	
Roundup PowerMax 4.5 SL	18 oz ae/a	A	
NIS	0.25 % v/v	A	
			68.68 a
18 Warrant (3 SC)	24 oz ai/a	B	
Roundup PowerMax 4.5 SL	18 oz ae/a	B	
NIS	0.25 % v/v	B	
			72.53 a
19 Warrant (3 SC)	24 oz ai/a	C	
Roundup PowerMax 4.5 SL	18 oz ae/a	C	
NIS	0.25 % v/v	C	
			0.0 a
			64.15 a
20 Roundup PowerMax 4.5 SL	18 oz ae/a	A	
NIS	0.25 % v/v	A	
Roundup PowerMax 4.5 SL	18 oz ae/a	B	
NIS	0.25 % v/v	B	
Roundup PowerMax 4.5 SL	18 oz ae/a	C	
NIS	0.25 % v/v	C	
			0.0 a
			65.78 a
LSD (P=.05)			0.78
Standard Deviation			0.53
CV			565.69
Bartlett's X2			0.0
P(Bartlett's X2)			.
Replicate F			1.000
Replicate Prob(F)			0.4123
Treatment F			1.000
Treatment Prob(F)			0.4586
			6.879
			0.0005
			3.389
			0.0002

# Purdue University

## ADAMA Soybean Metolachlor Crop Safety - Tank Mixed with Roundup

Trial ID: 14S-THP-CTS-59      Protocol ID: 14S-THP-CTS-59  
Location: Throckmorton      Study Director:  
Project ID:      Investigator: Dr. Bill Johnson  
Sponsor Contact: ADAMA - Dario Narvaez

### Crop Code

GLXMA, BSOY, Glycine max, = US

### Rating Type

PHYNEC = phytotoxicity - necrosis /burn

PHYLMA = phytotoxicity - leaf malformation

PHYCHL = phytotoxicity - chlorosis

PHYSTU = phytotoxicity - stunting

YIELD = yield

### Rating Unit

% = percent

bu/ac = bushels per acre

PLOT = total plot

### Plant-Eval Interval

17 DP-1 = 1 GLXMA May-23-2014

21 DP-1 = 1 GLXMA May-23-2014

28 DP-1 = 1 GLXMA May-23-2014

34 DP-1 = 1 GLXMA May-23-2014

41 DP-1 = 1 GLXMA May-23-2014

48 DP-1 = 1 GLXMA May-23-2014

38 DP-1 = 1 GLXMA May-23-2014

55 DP-1 = 1 GLXMA May-23-2014

130 DP-1 = 1 GLXMA May-23-2014