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2014/CADET/MARVEL/ROUNDUP/SOYBEAN/EARLY POSTEMERGENCE/

Trial ID: 14S-THP-CTS-51-2 Protocol ID: 14S-THP-CTS-51-2
 Location: Throckmorton Study Director:
 Project ID: FULT.SOY.14.JPR.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

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-7-2014
Planting Method: SEEDED seeded **Rate, Unit:** 130000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Seed Bed: FINE fine
Soil Moisture: DRY dry **Emergence Date:** May-13-2014

Pest Description

Pest 1 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed
Pest 2 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail
Pest 3 Type: W **Code:** ABUTH Abutilon theophrasti
Common Name: velvetleaf
Pest 4 Type: W **Code:** IPOHE Ipomoea hederacea
Common Name: Ivyleaf morningglory

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT **Experimental Unit:** 1 PLOT plot
Plot Area, Unit: 300 FT2 **Tillage Type:** 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
Application Date:	May-8-2014	May-30-2014
Time of Day:	AM	AM
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	EAPOWE
Application Placement:	SOIL	FOLIAR
Air Temperature, Unit:	74 F	76 F
% Relative Humidity:	62	48
Wind Velocity, Unit:	10 mph	5.7 mph
Wind Direction:	SW	NE
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	64 F	78 F
Soil Moisture:	Dry	Dry
% Cloud Cover:	15	10

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	11

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W
Height Minimum, Maximum:		1 4
Density, Unit:		4 YD2
Pest 2 Code, Type, Scale:	SETFA W	SETFA W
Height Minimum, Maximum:		1 3
Density, Unit:		7 FT2
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W
Height Minimum, Maximum:		1 2
Density, Unit:		2 YD2
Pest 4 Code, Type, Scale:	IPOHE W	IPOHE W
Height Minimum, Maximum:		1 2
Density, Unit:		1 YD2

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Application Equipment

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

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2014/CADET/MARVEL/ROUNDUP/SOYBEAN/EARLY POSTEMERGENCE/

Trial ID: 14S-THP-CTS-51-2 Protocol ID: 14S-THP-CTS-51-2
 Location: Throckmorton Study Director:
 Project ID: FULT.SOY.14.JPR.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

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	2	3	4
1	Untreated Check														101	405	702	805
2	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		102	404	602	804
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
3	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		104	502	704	901
	CADET	0.91 LB/GAL		EC	0.068 oz ai/a		0.6 oz/a			EAPOWE	B	1-3" weeds	0.5837 ml/mx					
	COC	100 %		SL	1 % v/v		1 % v/v			EAPOWE	B	1-3" weeds	25.0 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
4	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		105	402	605	904
	CADET	0.91 LB/GAL		EC	0.102 oz ai/a		0.9 oz/a			EAPOWE	B	1-3" weeds	0.8756 ml/mx					
	COC	100 %		SL	1 % v/v		1 % v/v			EAPOWE	B	1-3" weeds	25.0 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
5	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		201	505	705	905
	MARVEL	3 LB/GAL		SC	2.72 oz ai/a		7.25 oz/a			EAPOWE	B	1-3" weeds	7.083 ml/mx					
	COC	100 %		SL	1 % v/v		1 % v/v			EAPOWE	B	1-3" weeds	25.0 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
6	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		202	501	802	1005
	MARVEL	3 LB/GAL		SC	2.72 oz ai/a		7.25 oz/a			EAPOWE	B	1-3" weeds	7.083 ml/mx					
	NIS	100 %		SL	0.25 % v/v		0.25 % v/v			EAPOWE	B	1-3" weeds	6.249 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
7	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		204	401	601	902
	MARVEL	3 LB/GAL		SC	2.72 oz ai/a		7.25 oz/a			EAPOWE	B	1-3" weeds	7.083 ml/mx					
	NIS	100 %		SL	0.125 % v/v		0.125 % v/v			EAPOWE	B	1-3" weeds	3.125 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
8	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		205	305	604	1004
	FIRST RATE	0.84 %W/W		WG	0.00252 oz ai/a		0.3 oz/a			EAPOWE	B	1-3" weeds	0.2808 g/mx					
	COC	100 %W/W		SL	1 % v/v		1 % v/v			EAPOWE	B	1-3" weeds	25.0 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
9	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		301	304	701	1001
	ACCOLADE	0.8 %W/W		WG	0.0072 oz ai/a		0.9 oz/a			EAPOWE	B	1-3" weeds	0.8425 g/mx					
	COC	100 %W/W		SL	1 % v/v		1 % v/v			EAPOWE	B	1-3" weeds	25.0 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
10	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		302	504	801	1002
	ACCOLADE	0.8 %W/W		WG	0.00096 oz ai/a		0.12 oz/a			EAPOWE	B	1-3" weeds	0.1123 g/mx					
	FIRST RATE	0.84 %W/W		WG	0.3 oz/a		0.3 oz/a			EAPOWE	B	1-3" weeds	0.2808 g/mx					
	COC	100 %W/W		SL	1 % v/v		1 % v/v			EAPOWE	B	1-3" weeds	25.0 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 ml/mx					
11	DUAL II MAGNUM	7.64 LB/GAL		EC	11.5 oz ai/a		12 oz/a			ATPLAN	A		11.76 ml/mx		103	403	606	1006
	CADET	0.91 LB/GAL		EC	0.068 oz ai/a		0.6 oz/a			EAPOWE	B	1-3" weeds	0.5837 ml/mx					
	FIRST RATE	0.84 %W/W		WG	0.00252 oz ai/a		0.3 oz/a			EAPOWE	B	1-3" weeds	0.2808 g/mx					
	COC	100 %W/W		SL	1 % v/v		1 % v/v			EAPOWE	B	1-3" weeds	25.0 ml/mx					
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a			EAPOWE	B	1-3" weeds	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal			EAPOWE	B	1-3" weeds	62.49 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	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2	Rep 3	Rep 4
12	ANTHEM	2.15 LB/GAL		SE	1.61 oz ai/a		6 oz/a		EAPOWE B		1-3" weeds	5.85 ml/mx	106	306	706	903
	ACCOLADE	0.8 %W/W		WG	0.00096 oz ai/a		0.12 oz/a		EAPOWE B		1-3" weeds	0.1123 g/mx				
	FIRST RATE	0.84 %W/W		WG	0.00252 oz ai/a		0.3 oz/a		EAPOWE B		1-3" weeds	0.2808 g/mx				
	COC	100 %W/W		SL	1 % v/v		1 % v/v		EAPOWE B		1-3" weeds	25.0 ml/mx				
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a		EAPOWE B		1-3" weeds	31.25 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		EAPOWE B		1-3" weeds	62.49 ml/mx				
13	ANTHEM	2.15 LB/GAL		SE	1.61 oz ai/a		6 oz/a		EAPOWE B		1-3" weeds	5.85 ml/mx	203	506	603	906
	ACCOLADE	0.8 %W/W		WG	0.00096 oz ai/a		0.12 oz/a		EAPOWE B		1-3" weeds	0.1123 g/mx				
	FIRST RATE	0.84 %W/W		WG	0.00252 oz ai/a		0.3 oz/a		EAPOWE B		1-3" weeds	0.2808 g/mx				
	COC	100 %W/W		SL	1 % v/v		1 % v/v		EAPOWE B		1-3" weeds	25.0 ml/mx				
	SELECT MAX	0.97 LB/GAL		EC	12 oz/a		12 oz/a		EAPOWE B		1-3" weeds	11.72 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		EAPOWE B		1-3" weeds	62.49 ml/mx				
14	ANTHEM	2.15 LB/GAL		SE	1.61 oz ai/a		6 oz/a		EAPOWE B		1-3" weeds	5.85 ml/mx	206	406	803	806
	BASAGRAN	4 LBA/GAL		SL	6 oz ai/a		12 oz/a		EAPOWE B		1-3" weeds	11.72 ml/mx				
	FIRST RATE	0.84 %W/W		WG	0.00252 oz ai/a		0.3 oz/a		EAPOWE B		1-3" weeds	0.2808 g/mx				
	COC	100 %W/W		SL	1 % v/v		1 % v/v		EAPOWE B		1-3" weeds	25.0 ml/mx				
	SELECT MAX	0.97 LB/GAL		EC	12 oz/a		12 oz/a		EAPOWE B		1-3" weeds	11.72 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		EAPOWE B		1-3" weeds	62.49 ml/mx				
15	ANTHEM	2.15 LB/GAL		SE	1.61 oz ai/a		6 oz/a		EAPOWE B		1-3" weeds	5.85 ml/mx	303	503	703	1003
	FIRST RATE	0.84 %W/W		WG	0.00252 oz ai/a		0.3 oz/a		EAPOWE B		1-3" weeds	0.2808 g/mx				
	COC	100 %W/W		SL	1 % v/v		1 % v/v		EAPOWE B		1-3" weeds	25.0 ml/mx				
	ROUNDUP POWERMAX	5.5 LB/GAL		SL	22 oz ai/a		32 oz/a		EAPOWE B		1-3" weeds	31.25 ml/mx				
	AMS - Liquid	3.4 LB/GAL		SL	8.5 lb ai/100 gal		10 qt/100 gal		EAPOWE B		1-3" weeds	62.49 ml/mx				

Sort Order: Treatment

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2014/CADET/MARVEL/ROUNDUP/SOYBEAN/EARLY POSTEMERGENCE/

Trial ID: 14S-THP-CTS-51-2 Protocol ID: 14S-THP-CTS-51-2
 Location: Throckmorton Study Director:
 Project ID: FULT.SOY.14.JPR.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

Pest Type	W Weed	W Weed	W Weed	W Weed						
Pest Code	SETFA	AMBTR	ABUTH	CHEAL						
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Chenopodium ai>						
Pest Name	Giant foxtail	Giant ragweed	velvetleaf	Common lambsqu>						
Crop Code					GLXMA	GLXMA				
BBCH Scale					BSOY	BSOY				
Crop Scientific Name					Glycine max	Glycine max				
Crop Name					Soybean	Soybean				
Rating Date	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL	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				
Crop Stage Majority	V2	V2	V2	V2	V2	V2				
Pest Stage Majority	1-2"	1-4"	1-3"	1-2"						
Pest Density, Unit	7 FT2	2 YD2	1 YD2	1 YD2						
Days After First/Last Applic.	29 7	29 7	29 7	29 7	29 7	29 7				
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1				
Days After Emergence	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 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 DUAL II MAGNUM	11.5 oz ai/a	A		102	99.0	70.0	99.0	99.0	10.0	5.0
ROUNDUP POWERMAX	22 oz ai/a	B		404	99.0	99.0	99.0	99.0	6.0	3.0
AMS - Liquid	8.5 lb ai/100 gal	B		602	99.0	99.0	99.0	99.0	7.0	3.0
				804	99.0	99.0	99.0	99.0	4.0	3.0
				Mean =	99.0	91.8	99.0	99.0	6.8	3.5
3 DUAL II MAGNUM	11.5 oz ai/a	A		104	99.0	60.0	99.0	99.0	5.0	7.0
CADET	0.068 oz ai/a	B		502	99.0	95.0	99.0	99.0	3.0	7.0
COC	1 % v/v	B		704	99.0	98.0	99.0	99.0	4.0	7.0
ROUNDUP POWERMAX	22 oz ai/a	B		901	99.0	80.0	99.0	99.0	5.0	8.0
AMS - Liquid	8.5 lb ai/100 gal	B								
				Mean =	99.0	83.3	99.0	99.0	4.3	7.3
4 DUAL II MAGNUM	11.5 oz ai/a	A		105	99.0	75.0	99.0	99.0	8.0	7.0
CADET	0.102 oz ai/a	B		402	99.0	99.0	99.0	99.0	0.0	10.0
COC	1 % v/v	B		605	99.0	95.0	99.0	99.0	5.0	4.0
ROUNDUP POWERMAX	22 oz ai/a	B		904	99.0	95.0	99.0	99.0	6.0	9.0
AMS - Liquid	8.5 lb ai/100 gal	B								
				Mean =	99.0	91.0	99.0	99.0	4.8	7.5
5 DUAL II MAGNUM	11.5 oz ai/a	A		201	99.0	95.0	99.0	99.0	0.0	7.0
MARVEL	2.72 oz ai/a	B		505	99.0	99.0	99.0	99.0	6.0	11.0
COC	1 % v/v	B		705	99.0	98.0	99.0	99.0	4.0	11.0
ROUNDUP POWERMAX	22 oz ai/a	B		905	99.0	97.0	99.0	99.0	6.0	10.0
AMS - Liquid	8.5 lb ai/100 gal	B								
				Mean =	99.0	97.3	99.0	99.0	4.0	9.8

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Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	ABUTH	CHEAL					
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Chenopodium al>					
Pest Name	Giant foxtail	Giant ragweed	velvetleaf	Common lambsqu>					
Crop Code					GLXMA	GLXMA			
BBCB Scale					BSOY	BSOY			
Crop Scientific Name					Glycine max	Glycine max			
Crop Name					Soybean	Soybean			
Rating Date	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL	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			
Crop Stage Majority	V2	V2	V2	V2	V2	V2			
Pest Stage Majority	1-2"	1-4"	1-3"	1-2"					
Pest Density, Unit	7 FT2	2 YD2	1 YD2	1 YD2					
Days After First/Last Applic.	29 7	29 7	29 7	29 7	29 7	29 7			
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1			
Days After Emergence	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1			
Trt Treatment	Rate	Appl							
No. Name	Rate	Code	Plot	1	2	3	4	5	6
6 DUAL II MAGNUM	11.5 oz ai/a	A	202	99.0	97.0	99.0	99.0	3.0	10.0
MARVEL	2.72 oz ai/a	B	501	99.0	99.0	99.0	99.0	0.0	10.0
NIS	0.25 % v/v	B	802	99.0	97.0	99.0	99.0	0.0	5.0
ROUNDUP POWERMAX	22 oz ai/a	B	1005	99.0	99.0	99.0	99.0	3.0	9.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	98.0	99.0	99.0	1.5	8.5
7 DUAL II MAGNUM	11.5 oz ai/a	A	204	99.0	80.0	99.0	99.0	7.0	12.0
MARVEL	2.72 oz ai/a	B	401	99.0	99.0	99.0	99.0	0.0	8.0
NIS	0.125 % v/v	B	601	99.0	95.0	99.0	99.0	0.0	7.0
ROUNDUP POWERMAX	22 oz ai/a	B	902	99.0	97.0	99.0	99.0	4.0	7.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	92.8	99.0	99.0	2.8	8.5
8 DUAL II MAGNUM	11.5 oz ai/a	A	205	99.0	95.0	99.0	99.0	7.0	4.0
FIRST RATE	0.00252 oz ai/a	B	305	99.0	95.0	99.0	99.0	8.0	5.0
COC	1 % v/v	B	604	99.0	90.0	99.0	99.0	3.0	2.0
ROUNDUP POWERMAX	22 oz ai/a	B	1004	99.0	80.0	99.0	99.0	5.0	6.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	90.0	99.0	99.0	5.8	4.3
9 DUAL II MAGNUM	11.5 oz ai/a	A	301	99.0	99.0	99.0	99.0	5.0	3.0
ACCOLADE	0.0072 oz ai/a	B	304	99.0	99.0	99.0	99.0	7.0	3.0
COC	1 % v/v	B	701	99.0	95.0	99.0	99.0	3.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	1001	99.0	85.0	99.0	99.0	10.0	3.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	94.5	99.0	99.0	6.3	2.3
10 DUAL II MAGNUM	11.5 oz ai/a	A	302	99.0	95.0	99.0	99.0	4.0	7.0
ACCOLADE	0.00096 oz ai/a	B	504	99.0	97.0	99.0	99.0	5.0	3.0
FIRST RATE	0.3 oz/a	B	801	99.0	70.0	99.0	99.0	5.0	4.0
COC	1 % v/v	B	1002	99.0	97.0	99.0	99.0	0.0	3.0
ROUNDUP POWERMAX	22 oz ai/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	89.8	99.0	99.0	3.5	4.3
11 DUAL II MAGNUM	11.5 oz ai/a	A	103	99.0	65.0	99.0	99.0	3.0	3.0
CADET	0.068 oz ai/a	B	403	99.0	95.0	99.0	99.0	7.0	5.0
FIRST RATE	0.00252 oz ai/a	B	606	99.0	97.0	99.0	99.0	3.0	3.0
COC	1 % v/v	B	1006	99.0	97.0	99.0	99.0	4.0	4.0
ROUNDUP POWERMAX	22 oz ai/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	88.5	99.0	99.0	4.3	3.8

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Pest Type	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	ABUTH	CHEAL					
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Chenopodium al>					
Pest Name	Giant foxtail	Giant ragweed	velvetleaf	Common lambsqu>					
Crop Code					GLXMA	GLXMA			
BBCB Scale					BSOY	BSOY			
Crop Scientific Name					Glycine max	Glycine max			
Crop Name					Soybean	Soybean			
Rating Date	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL	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			
Crop Stage Majority	V2	V2	V2	V2	V2	V2			
Pest Stage Majority	1-2"	1-4"	1-3"	1-2"					
Pest Density, Unit	7 FT2	2 YD2	1 YD2	1 YD2					
Days After First/Last Applic.	29 7	29 7	29 7	29 7	29 7	29 7			
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1			
Days After Emergence	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1			
Trt Treatment	Rate	Appl							
No. Name	Rate	Code	Plot	1	2	3	4	5	6
12 ANTHEM	1.61 oz ai/a	B	106	99.0	80.0	99.0	99.0	7.0	15.0
ACCOLADE	0.00096 oz ai/a	B	306	99.0	97.0	99.0	99.0	7.0	15.0
FIRST RATE	0.00252 oz ai/a	B	706	99.0	97.0	99.0	99.0	8.0	15.0
COC	1 % v/v	B	903	99.0	90.0	99.0	99.0	6.0	15.0
ROUNDUP POWERMAX	22 oz ai/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	91.0	99.0	99.0	7.0	15.0
13 ANTHEM	1.61 oz ai/a	B	203	99.0	60.0	99.0	99.0	10.0	15.0
ACCOLADE	0.00096 oz ai/a	B	506	70.0	97.0	99.0	99.0	8.0	15.0
FIRST RATE	0.00252 oz ai/a	B	603	99.0	99.0	99.0	99.0	7.0	15.0
COC	1 % v/v	B	906	99.0	85.0	99.0	99.0	8.0	15.0
SELECT MAX	12 oz/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	91.8	85.3	99.0	99.0	8.3	15.0
14 ANTHEM	1.61 oz ai/a	B	206	90.0	97.0	99.0	99.0	7.0	15.0
BASAGRAN	6 oz ai/a	B	406	95.0	97.0	99.0	99.0	7.0	15.0
FIRST RATE	0.00252 oz ai/a	B	803	99.0	98.0	99.0	99.0	7.0	15.0
COC	1 % v/v	B	806	98.0	98.0	99.0	99.0	8.0	15.0
SELECT MAX	12 oz/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	95.5	97.5	99.0	99.0	7.3	15.0
15 ANTHEM	1.61 oz ai/a	B	303	99.0	60.0	99.0	99.0	9.0	15.0
FIRST RATE	0.00252 oz ai/a	B	503	99.0	90.0	99.0	99.0	7.0	15.0
COC	1 % v/v	B	703	99.0	97.0	99.0	99.0	8.0	15.0
ROUNDUP POWERMAX	22 oz ai/a	B	1003	99.0	99.0	99.0	99.0	6.0	15.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	99.0	86.5	99.0	99.0	7.5	15.0

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Pest Type				W Weed	W Weed	W Weed			
Pest Code				SETFA	AMBTR	CHEAL			
Pest Scientific Name				Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name				Giant foxtail	Giant ragweed	Common lambsqu>			
Crop Code	GLXMA	GLXMA							GLXMA
BBCH Scale	BSOY	BSOY							BSOY
Crop Scientific Name	Glycine max	Glycine max							Glycine max
Crop Name	Soybean	Soybean							Soybean
Rating Date	Jun-6-2014	Jun-6-2014		Jun-16-2014	Jun-16-2014	Jun-16-2014			Jun-16-2014
Rating Type	PHYSTU	PHYLMA		CONTRO	CONTRO	CONTRO			PHYSTU
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	V2	V2		V2	V2	V2			V2
Pest Stage Majority				5"	10"	3"			
Pest Density, Unit				10 FT2	7 YD2	2 FT2			
Days After First/Last Applic.	29 7	29 7		39 17	39 17	39 17			39 17
Plant-Eval Interval	30 DP-1	30 DP-1		40 DP-1	40 DP-1	40 DP-1			40 DP-1
Days After Emergence	24 DE-1	24 DE-1		34 DE-1	34 DE-1	34 DE-1			34 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 DUAL II MAGNUM	11.5 oz ai/a	A	102	5.0	5.0	95.0	60.0	80.0	7.0
ROUNDUP POWERMAX	22 oz ai/a	B	404	5.0	3.0	95.0	83.0	95.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B	602	0.0	3.0	99.0	67.0	99.0	0.0
			804	3.0	5.0	99.0	83.0	99.0	0.0
			Mean =	3.3	4.0	97.0	73.3	93.3	1.8
3 DUAL II MAGNUM	11.5 oz ai/a	A	104	3.0	8.0	99.0	65.0	99.0	0.0
CADET	0.068 oz ai/a	B	502	0.0	7.0	99.0	55.0	99.0	0.0
COC	1 % v/v	B	704	3.0	7.0	99.0	75.0	90.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	901	7.0	7.0	99.0	80.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	3.3	7.3	99.0	68.8	96.8	0.0
4 DUAL II MAGNUM	11.5 oz ai/a	A	105	5.0	9.0	99.0	60.0	99.0	5.0
CADET	0.102 oz ai/a	B	402	3.0	15.0	99.0	82.0	99.0	3.0
COC	1 % v/v	B	605	7.0	6.0	99.0	82.0	99.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	904	5.0	7.0	99.0	83.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	5.0	9.3	99.0	76.8	99.0	2.0
5 DUAL II MAGNUM	11.5 oz ai/a	A	201	3.0	10.0	97.0	85.0	90.0	0.0
MARVEL	2.72 oz ai/a	B	505	7.0	10.0	99.0	85.0	90.0	5.0
COC	1 % v/v	B	705	5.0	8.0	97.0	83.0	99.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	905	5.0	10.0	97.0	92.0	70.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	5.0	9.5	97.5	86.3	87.3	1.3

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Pest Type				W Weed	W Weed	W Weed			
Pest Code				SETFA	AMBTR	CHEAL			
Pest Scientific Name				Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name				Giant foxtail	Giant ragweed	Common lambsqu>			
Crop Code	GLXMA	GLXMA							GLXMA
BBCH Scale	BSOY	BSOY							BSOY
Crop Scientific Name	Glycine max	Glycine max							Glycine max
Crop Name	Soybean	Soybean							Soybean
Rating Date	Jun-6-2014	Jun-6-2014		Jun-16-2014	Jun-16-2014	Jun-16-2014			Jun-16-2014
Rating Type	PHYSTU	PHYLMA		CONTRO	CONTRO	CONTRO			PHYSTU
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	V2	V2		V2	V2	V2			V2
Pest Stage Majority				5"	10"	3"			
Pest Density, Unit				10 FT2	7 YD2	2 FT2			
Days After First/Last Applic.	29 7	29 7		39 17	39 17	39 17			39 17
Plant-Eval Interval	30 DP-1	30 DP-1		40 DP-1	40 DP-1	40 DP-1			40 DP-1
Days After Emergence	24 DE-1	24 DE-1		34 DE-1	34 DE-1	34 DE-1			34 DE-1
Trt Treatment	Rate	Appl							
No. Name	Rate	Code	Plot	7	8	9	10	11	12
6 DUAL II MAGNUM	11.5 oz ai/a	A	202	5.0	15.0	99.0	87.0	99.0	3.0
MARVEL	2.72 oz ai/a	B	501	10.0	12.0	99.0	90.0	99.0	5.0
NIS	0.25 % v/v	B	802	5.0	10.0	99.0	80.0	99.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	1005	3.0	8.0	99.0	87.0	70.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	5.8	11.3	99.0	86.0	91.8	2.0
7 DUAL II MAGNUM	11.5 oz ai/a	A	204	3.0	11.0	99.0	85.0	99.0	0.0
MARVEL	2.72 oz ai/a	B	401	4.0	10.0	95.0	85.0	99.0	0.0
NIS	0.125 % v/v	B	601	10.0	7.0	99.0	84.0	99.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	902	5.0	15.0	99.0	85.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	5.5	10.8	98.0	84.8	99.0	0.0
8 DUAL II MAGNUM	11.5 oz ai/a	A	205	3.0	6.0	99.0	87.0	99.0	0.0
FIRST RATE	0.00252 oz ai/a	B	305	4.0	8.0	99.0	84.0	99.0	0.0
COC	1 % v/v	B	604	3.0	3.0	99.0	90.0	99.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	1004	3.0	7.0	99.0	75.0	99.0	0.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	3.3	6.0	99.0	84.0	99.0	0.0
9 DUAL II MAGNUM	11.5 oz ai/a	A	301	5.0	7.0	99.0	91.0	99.0	0.0
ACCOLADE	0.0072 oz ai/a	B	304	5.0	9.0	99.0	87.0	99.0	0.0
COC	1 % v/v	B	701	5.0	8.0	97.0	87.0	99.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B	1001	6.0	10.0	95.0	83.0	99.0	5.0
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	5.3	8.5	97.5	87.0	99.0	1.3
10 DUAL II MAGNUM	11.5 oz ai/a	A	302	0.0	10.0	99.0	93.0	99.0	0.0
ACCOLADE	0.00096 oz ai/a	B	504	5.0	6.0	95.0	90.0	99.0	0.0
FIRST RATE	0.3 oz/a	B	801	0.0	6.0	99.0	70.0	99.0	0.0
COC	1 % v/v	B	1002	3.0	5.0	99.0	85.0	99.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	2.0	6.8	98.0	84.5	99.0	0.0
11 DUAL II MAGNUM	11.5 oz ai/a	A	103	3.0	6.0	95.0	92.0	99.0	3.0
CADET	0.068 oz ai/a	B	403	0.0	5.0	99.0	80.0	99.0	0.0
FIRST RATE	0.00252 oz ai/a	B	606	3.0	5.0	95.0	87.0	99.0	0.0
COC	1 % v/v	B	1006	3.0	5.0	99.0	90.0	70.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
			Mean =	2.3	5.3	97.0	87.3	91.8	0.8

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Pest Type				W Weed	W Weed	W Weed			
Pest Code				SETFA	AMBTR	CHEAL			
Pest Scientific Name				Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name				Giant foxtail	Giant ragweed	Common lambsqu>			
Crop Code	GLXMA	GLXMA							GLXMA
BBCH Scale	BSOY	BSOY							BSOY
Crop Scientific Name	Glycine max	Glycine max							Glycine max
Crop Name	Soybean	Soybean							Soybean
Rating Date	Jun-6-2014	Jun-6-2014		Jun-16-2014	Jun-16-2014	Jun-16-2014		Jun-16-2014	Jun-16-2014
Rating Type	PHYSTU	PHYLMA		CONTRO	CONTRO	CONTRO		CONTRO	PHYSTU
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	V2	V2		V2	V2	V2		V2	V2
Pest Stage Majority				5"	10"	3"			
Pest Density, Unit				10 FT2	7 YD2	2 FT2			
Days After First/Last Applic.	29 7	29 7		39 17	39 17	39 17		39 17	39 17
Plant-Eval Interval	30 DP-1	30 DP-1		40 DP-1	40 DP-1	40 DP-1		40 DP-1	40 DP-1
Days After Emergence	24 DE-1	24 DE-1		34 DE-1	34 DE-1	34 DE-1		34 DE-1	34 DE-1
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12	
12 ANTHEM	1.61 oz ai/a	B 106	5.0	15.0	99.0	94.0	99.0	15.0	
ACCOLADE	0.00096 oz ai/a	B 306	5.0	15.0	97.0	94.0	99.0	15.0	
FIRST RATE	0.00252 oz ai/a	B 706	5.0	15.0	99.0	94.0	99.0	15.0	
COC	1 % v/v	B 903	0.0	15.0	99.0	90.0	99.0	10.0	
ROUNDUP POWERMAX	22 oz ai/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
	Mean =		3.8	15.0	98.5	93.0	99.0	13.8	
13 ANTHEM	1.61 oz ai/a	B 203	5.0	15.0	97.0	65.0	99.0	15.0	
ACCOLADE	0.00096 oz ai/a	B 506	5.0	15.0	94.0	96.0	99.0	20.0	
FIRST RATE	0.00252 oz ai/a	B 603	3.0	14.0	95.0	88.0	99.0	10.0	
COC	1 % v/v	B 906	5.0	15.0	99.0	85.0	99.0	20.0	
SELECT MAX	12 oz/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
	Mean =		4.5	14.8	96.3	83.5	99.0	16.3	
14 ANTHEM	1.61 oz ai/a	B 206	5.0	15.0	85.0	90.0	99.0	12.0	
BASAGRAN	6 oz ai/a	B 406	5.0	15.0	93.0	86.0	99.0	17.0	
FIRST RATE	0.00252 oz ai/a	B 803	0.0	15.0	99.0	85.0	93.0	5.0	
COC	1 % v/v	B 806	5.0	15.0	95.0	86.0	90.0	25.0	
SELECT MAX	12 oz/a	B							
AMS - Liquid	8.5 lb ai/100 gal	B							
	Mean =		3.8	15.0	93.0	86.8	95.3	14.8	
15 ANTHEM	1.61 oz ai/a	B 303	3.0	15.0	99.0	88.0	99.0	17.0	
FIRST RATE	0.00252 oz ai/a	B 503	5.0	14.0	99.0	92.0	99.0	15.0	
COC	1 % v/v	B 703	5.0	15.0	99.0	85.0	99.0	15.0	
ROUNDUP POWERMAX	22 oz ai/a	B 1003	4.0	15.0	97.0	87.0	99.0	15.0	
AMS - Liquid	8.5 lb ai/100 gal	B							
	Mean =		4.3	14.8	98.5	88.0	99.0	15.5	

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Pest Type					W Weed	W Weed		W Weed	W Weed		
Pest Code					SETFA	AMBTR		SETFA	AMBTR		
Pest Scientific Name					Setaria faberi	Ambrosia trifi>		Setaria faberi	Ambrosia trifi>		
Pest Name					Giant foxtail	Giant ragweed		Giant foxtail	Giant ragweed		
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-16-2014	Jun-16-2014			Jun-25-2014	Jun-25-2014	Jun-25-2014	Jul-24-2014	Jul-24-2014		
Rating Type	PHYLMA	PHYNEC			CONTRO	CONTRO	PHYSTU	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	V2	V2			V5	V5	V5				
Pest Stage Majority					20"	36"		40	72		
Pest Density, Unit					5 FT2	5 YD2		6 FT2	7 YD2		
Days After First/Last Applic.	39 17	39 17			48 26	48 26	48 26	77 55	77 55		
Plant-Eval Interval	40 DP-1	40 DP-1			49 DP-1	49 DP-1	49 DP-1	78 DP-1	78 DP-1		
Days After Emergence	34 DE-1	34 DE-1			43 DE-1	43 DE-1	43 DE-1	72 DE-1	72 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 DUAL II MAGNUM	11.5 oz ai/a	A		102	7.0	5.0	90.0	30.0	0.0	99.0	80.0
ROUNDUP POWERMAX	22 oz ai/a	B		404	0.0	0.0	90.0	70.0	0.0	99.0	80.0
AMS - Liquid	8.5 lb ai/100 gal	B		602	0.0	0.0	99.0	50.0	0.0	99.0	60.0
				804	0.0	0.0	99.0	78.0	0.0	99.0	78.0
				Mean =	1.8	1.3	94.5	57.0	0.0	99.0	74.5
3 DUAL II MAGNUM	11.5 oz ai/a	A		104	0.0	0.0	95.0	55.0	0.0	99.0	70.0
CADET	0.068 oz ai/a	B		502	5.0	5.0	95.0	65.0	0.0	99.0	50.0
COC	1 % v/v	B		704	5.0	0.0	90.0	65.0	0.0	99.0	84.0
ROUNDUP POWERMAX	22 oz ai/a	B		901	5.0	5.0	95.0	60.0	0.0	99.0	65.0
AMS - Liquid	8.5 lb ai/100 gal	B									
				Mean =	3.8	2.5	93.8	61.3	0.0	99.0	67.3
4 DUAL II MAGNUM	11.5 oz ai/a	A		105	3.0	5.0	95.0	50.0	0.0	99.0	60.0
CADET	0.102 oz ai/a	B		402	7.0	7.0	99.0	85.0	0.0	99.0	82.0
COC	1 % v/v	B		605	5.0	0.0	99.0	65.0	0.0	99.0	70.0
ROUNDUP POWERMAX	22 oz ai/a	B		904	3.0	3.0	90.0	73.0	0.0	99.0	78.0
AMS - Liquid	8.5 lb ai/100 gal	B									
				Mean =	4.5	3.8	95.8	68.3	0.0	99.0	72.5
5 DUAL II MAGNUM	11.5 oz ai/a	A		201	5.0	3.0	99.0	84.0	0.0	95.0	84.0
MARVEL	2.72 oz ai/a	B		505	5.0	7.0	99.0	80.0	5.0	99.0	85.0
COC	1 % v/v	B		705	5.0	3.0	95.0	84.0	0.0	95.0	86.0
ROUNDUP POWERMAX	22 oz ai/a	B		905	5.0	0.0	99.0	85.0	3.0	99.0	86.0
AMS - Liquid	8.5 lb ai/100 gal	B									
				Mean =	5.0	3.3	98.0	83.3	2.0	97.0	85.3

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Pest Type				W Weed	W Weed	W Weed	W Weed
Pest Code				SETFA	AMBTR	SETFA	AMBTR
Pest Scientific Name				Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>
Pest Name				Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed
Crop Code	GLXMA	GLXMA				GLXMA	
BBCB Scale	BSOY	BSOY				BSOY	
Crop Scientific Name	Glycine max	Glycine max				Glycine max	
Crop Name	Soybean	Soybean				Soybean	
Rating Date	Jun-16-2014	Jun-16-2014	Jun-25-2014	Jun-25-2014	Jun-25-2014	Jul-24-2014	Jul-24-2014
Rating Type	PHYLMA	PHYNEC	CONTRO	CONTRO	PHYSTU	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	V2	V2	V5	V5	V5		
Pest Stage Majority			20"	36"		40	72
Pest Density, Unit			5 FT2	5 YD2		6 FT2	7 YD2
Days After First/Last Applic.	39 17	39 17	48 26	48 26	48 26	77 55	77 55
Plant-Eval Interval	40 DP-1	40 DP-1	49 DP-1	49 DP-1	49 DP-1	78 DP-1	78 DP-1
Days After Emergence	34 DE-1	34 DE-1	43 DE-1	43 DE-1	43 DE-1	72 DE-1	72 DE-1
Trt Treatment	Rate	Appl					
No. Name	Rate	Code Plot	13	14	15	16	17
6 DUAL II MAGNUM	11.5 oz ai/a	A 202	5.0	5.0	99.0	86.0	0.0
MARVEL	2.72 oz ai/a	B 501	7.0	7.0	99.0	89.0	0.0
NIS	0.25 % v/v	B 802	3.0	3.0	99.0	83.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B 1005	3.0	0.0	95.0	89.0	0.0
AMS - Liquid	8.5 lb ai/100 gal B						
	Mean =		4.5	3.8	98.0	86.8	0.0
7 DUAL II MAGNUM	11.5 oz ai/a	A 204	7.0	5.0	99.0	85.0	0.0
MARVEL	2.72 oz ai/a	B 401	5.0	3.0	99.0	74.0	0.0
NIS	0.125 % v/v	B 601	5.0	5.0	99.0	70.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B 902	7.0	3.0	99.0	85.0	0.0
AMS - Liquid	8.5 lb ai/100 gal B						
	Mean =		6.0	4.0	99.0	78.5	0.0
8 DUAL II MAGNUM	11.5 oz ai/a	A 205	0.0	3.0	95.0	82.0	0.0
FIRST RATE	0.00252 oz ai/a	B 305	0.0	0.0	99.0	85.0	0.0
COC	1 % v/v	B 604	0.0	0.0	99.0	85.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B 1004	0.0	0.0	95.0	79.0	3.0
AMS - Liquid	8.5 lb ai/100 gal B						
	Mean =		0.0	0.8	97.0	82.8	0.8
9 DUAL II MAGNUM	11.5 oz ai/a	A 301	5.0	0.0	95.0	84.0	0.0
ACCOLADE	0.0072 oz ai/a	B 304	0.0	0.0	99.0	82.0	0.0
COC	1 % v/v	B 701	5.0	3.0	92.0	86.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B 1001	10.0	0.0	95.0	86.0	0.0
AMS - Liquid	8.5 lb ai/100 gal B						
	Mean =		5.0	0.8	95.3	84.5	0.0
10 DUAL II MAGNUM	11.5 oz ai/a	A 302	3.0	0.0	99.0	87.0	0.0
ACCOLADE	0.00096 oz ai/a	B 504	5.0	0.0	99.0	90.0	0.0
FIRST RATE	0.3 oz/a	B 801	10.0	3.0	99.0	70.0	0.0
COC	1 % v/v	B 1002	0.0	0.0	95.0	78.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B					
AMS - Liquid	8.5 lb ai/100 gal B						
	Mean =		4.5	0.8	98.0	81.3	0.0
11 DUAL II MAGNUM	11.5 oz ai/a	A 103	5.0	0.0	95.0	80.0	0.0
CADET	0.068 oz ai/a	B 403	5.0	0.0	99.0	80.0	0.0
FIRST RATE	0.00252 oz ai/a	B 606	3.0	0.0	95.0	84.0	7.0
COC	1 % v/v	B 1006	0.0	0.0	99.0	85.0	0.0
ROUNDUP POWERMAX	22 oz ai/a	B					
AMS - Liquid	8.5 lb ai/100 gal B						
	Mean =		3.3	0.0	97.0	82.3	1.8

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Pest Type				W Weed	W Weed	W Weed	W Weed		
Pest Code				SETFA	AMBTR	SETFA	AMBTR		
Pest Scientific Name				Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>		
Pest Name				Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed		
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-16-2014	Jun-16-2014	Jun-25-2014	Jun-25-2014	Jun-25-2014	Jul-24-2014	Jul-24-2014		
Rating Type	PHYLMA	PHYNEC	CONTRO	CONTRO	PHYSTU	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	V2	V2	V5	V5	V5				
Pest Stage Majority			20"	36"		40	72		
Pest Density, Unit			5 FT2	5 YD2		6 FT2	7 YD2		
Days After First/Last Applic.	39 17	39 17	48 26	48 26	48 26	77 55	77 55		
Plant-Eval Interval	40 DP-1	40 DP-1	49 DP-1	49 DP-1	49 DP-1	78 DP-1	78 DP-1		
Days After Emergence	34 DE-1	34 DE-1	43 DE-1	43 DE-1	43 DE-1	72 DE-1	72 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	13	14	15	16	17	18	19
12 ANTHEM	1.61 oz ai/a	B 106	3.0	5.0	94.0	87.0	7.0	90.0	85.0
ACCOLADE	0.00096 oz ai/a	B 306	5.0	10.0	90.0	89.0	10.0	95.0	85.0
FIRST RATE	0.00252 oz ai/a	B 706	7.0	10.0	95.0	90.0	10.0	93.0	88.0
COC	1 % v/v	B 903	5.0	5.0	90.0	86.0	7.0	91.0	80.0
ROUNDUP POWERMAX	22 oz ai/a	B							
AMS - Liquid	8.5 lb ai/100 gal B								
	Mean =		5.0	7.5	92.3	88.0	8.5	92.3	84.5
13 ANTHEM	1.61 oz ai/a	B 203	7.0	10.0	99.0	75.0	3.0	93.0	30.0
ACCOLADE	0.00096 oz ai/a	B 506	5.0	3.0	90.0	85.0	10.0	85.0	70.0
FIRST RATE	0.00252 oz ai/a	B 603	5.0	7.0	90.0	85.0	5.0	90.0	84.0
COC	1 % v/v	B 906	5.0	5.0	90.0	70.0	10.0	90.0	20.0
SELECT MAX	12 oz/a	B							
AMS - Liquid	8.5 lb ai/100 gal B								
	Mean =		5.5	6.3	92.3	78.8	7.0	89.5	51.0
14 ANTHEM	1.61 oz ai/a	B 206	7.0	7.0	80.0	85.0	10.0	93.0	80.0
BASAGRAN	6 oz ai/a	B 406	5.0	10.0	90.0	80.0	12.0	90.0	70.0
FIRST RATE	0.00252 oz ai/a	B 803	3.0	5.0	95.0	80.0	5.0	99.0	55.0
COC	1 % v/v	B 806	7.0	5.0	87.0	85.0	15.0	90.0	65.0
SELECT MAX	12 oz/a	B							
AMS - Liquid	8.5 lb ai/100 gal B								
	Mean =		5.5	6.8	88.0	82.5	10.5	93.0	67.5
15 ANTHEM	1.61 oz ai/a	B 303	5.0	5.0	95.0	76.0	10.0	95.0	60.0
FIRST RATE	0.00252 oz ai/a	B 503	7.0	5.0	99.0	86.0	12.0	92.0	84.0
COC	1 % v/v	B 703	5.0	5.0	90.0	84.0	10.0	85.0	80.0
ROUNDUP POWERMAX	22 oz ai/a	B 1003	7.0	5.0	90.0	83.0	5.0	90.0	60.0
AMS - Liquid	8.5 lb ai/100 gal B								
	Mean =		6.0	5.0	93.5	82.3	9.3	90.5	71.0

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				W Weed			
Pest Type							
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				Jul-24-2014	Oct-22-2014		
Rating Type				PHYSTU	YIELD		
Rating Unit				%	bu/ac		
Sample Size, Unit				1 PLOT			
Number of Subsamples				1	1		
Crop Stage Majority							
Pest Stage Majority							
Pest Density, Unit							
Days After First/Last Applic.				77 55	167 145		
Plant-Eval Interval				78 DP-1	168 DP-1		
Days After Emergence				72 DE-1	162 DE-1		
Trt No.	Treatment Name	Rate	Appl Unit	Code	Plot	20	21
1	Untreated Check				101	0.0	27.60
					405	0.0	35.50
					702	0.0	27.30
					805	0.0	30.00
					Mean =	0.0	30.10
2	DUAL II MAGNUM	11.5 oz ai/a	A		102	0.0	37.80
	ROUNDUP POWERMAX	22 oz ai/a	B		404	0.0	73.40
	AMS - Liquid	8.5 lb ai/100 gal	B		602	0.0	61.70
					804	0.0	76.30
					Mean =	0.0	62.30
3	DUAL II MAGNUM	11.5 oz ai/a	A		104	0.0	76.90
	CADET	0.068 oz ai/a	B		502	0.0	60.90
	COC	1 % v/v	B		704	0.0	73.80
	ROUNDUP POWERMAX	22 oz ai/a	B		901	0.0	63.10
	AMS - Liquid	8.5 lb ai/100 gal	B				
					Mean =	0.0	68.68
4	DUAL II MAGNUM	11.5 oz ai/a	A		105	0.0	55.90
	CADET	0.102 oz ai/a	B		402	0.0	72.20
	COC	1 % v/v	B		605	0.0	72.70
	ROUNDUP POWERMAX	22 oz ai/a	B		904	0.0	75.80
	AMS - Liquid	8.5 lb ai/100 gal	B				
					Mean =	0.0	69.15
5	DUAL II MAGNUM	11.5 oz ai/a	A		201	0.0	69.80
	MARVEL	2.72 oz ai/a	B		505	0.0	82.40
	COC	1 % v/v	B		705	0.0	75.80
	ROUNDUP POWERMAX	22 oz ai/a	B		905	3.0	77.50
	AMS - Liquid	8.5 lb ai/100 gal	B				
					Mean =	0.8	76.38

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					W Weed	
Pest Type						
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					Jul-24-2014	Oct-22-2014
Rating Type					PHYSTU	YIELD
Rating Unit					%	bu/ac
Sample Size, Unit					1 PLOT	
Number of Subsamples					1	1
Crop Stage Majority						
Pest Stage Majority						
Pest Density, Unit						
Days After First/Last Applic.					77 55	167 145
Plant-Eval Interval					78 DP-1	168 DP-1
Days After Emergence					72 DE-1	162 DE-1
Trt No.	Treatment Name	Rate	Unit	Appl Code	Plot	
						20
						21
6	DUAL II MAGNUM	11.5 oz ai/a		A	202	0.0
	MARVEL	2.72 oz ai/a		B	501	0.0
	NIS	0.25 % v/v		B	802	0.0
	ROUNDUP POWERMAX	22 oz ai/a		B	1005	0.0
	AMS - Liquid	8.5 lb ai/100 gal		B		0.0
					Mean =	0.0
7	DUAL II MAGNUM	11.5 oz ai/a		A	204	0.0
	MARVEL	2.72 oz ai/a		B	401	0.0
	NIS	0.125 % v/v		B	601	0.0
	ROUNDUP POWERMAX	22 oz ai/a		B	902	0.0
	AMS - Liquid	8.5 lb ai/100 gal		B		0.0
					Mean =	0.0
8	DUAL II MAGNUM	11.5 oz ai/a		A	205	0.0
	FIRST RATE	0.00252 oz ai/a		B	305	0.0
	COC	1 % v/v		B	604	0.0
	ROUNDUP POWERMAX	22 oz ai/a		B	1004	0.0
	AMS - Liquid	8.5 lb ai/100 gal		B		0.0
					Mean =	0.0
9	DUAL II MAGNUM	11.5 oz ai/a		A	301	0.0
	ACCOLADE	0.0072 oz ai/a		B	304	0.0
	COC	1 % v/v		B	701	0.0
	ROUNDUP POWERMAX	22 oz ai/a		B	1001	0.0
	AMS - Liquid	8.5 lb ai/100 gal		B		0.0
					Mean =	0.0
10	DUAL II MAGNUM	11.5 oz ai/a		A	302	0.0
	ACCOLADE	0.00096 oz ai/a		B	504	0.0
	FIRST RATE	0.3 oz/a		B	801	0.0
	COC	1 % v/v		B	1002	0.0
	ROUNDUP POWERMAX	22 oz ai/a		B		0.0
	AMS - Liquid	8.5 lb ai/100 gal		B		0.0
					Mean =	0.0
11	DUAL II MAGNUM	11.5 oz ai/a		A	103	0.0
	CADET	0.068 oz ai/a		B	403	0.0
	FIRST RATE	0.00252 oz ai/a		B	606	0.0
	COC	1 % v/v		B	1006	0.0
	ROUNDUP POWERMAX	22 oz ai/a		B		0.0
	AMS - Liquid	8.5 lb ai/100 gal		B		0.0
					Mean =	0.0

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					W Weed	
Pest Type						
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					Jul-24-2014	Oct-22-2014
Rating Type					PHYSTU	YIELD
Rating Unit					%	bu/ac
Sample Size, Unit					1 PLOT	
Number of Subsamples					1	1
Crop Stage Majority						
Pest Stage Majority						
Pest Density, Unit						
Days After First/Last Applic.					77 55	167 145
Plant-Eval Interval					78 DP-1	168 DP-1
Days After Emergence					72 DE-1	162 DE-1
Trt No.	Treatment Name	Rate	Unit	Appl Code	Plot	
						20
						21
12	ANTHEM	1.61 oz ai/a	B		106	10.0
	ACCOLADE	0.00096 oz ai/a	B		306	7.0
	FIRST RATE	0.00252 oz ai/a	B		706	7.0
	COC	1 % v/v	B		903	5.0
	ROUNDUP POWERMAX	22 oz ai/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
						Mean =
						7.3
						71.13
13	ANTHEM	1.61 oz ai/a	B		203	0.0
	ACCOLADE	0.00096 oz ai/a	B		506	5.0
	FIRST RATE	0.00252 oz ai/a	B		603	3.0
	COC	1 % v/v	B		906	5.0
	SELECT MAX	12 oz/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
						Mean =
						3.3
						47.98
14	ANTHEM	1.61 oz ai/a	B		206	7.0
	BASAGRAN	6 oz ai/a	B		406	7.0
	FIRST RATE	0.00252 oz ai/a	B		803	3.0
	COC	1 % v/v	B		806	7.0
	SELECT MAX	12 oz/a	B			
	AMS - Liquid	8.5 lb ai/100 gal	B			
						Mean =
						6.0
						60.83
15	ANTHEM	1.61 oz ai/a	B		303	7.0
	FIRST RATE	0.00252 oz ai/a	B		503	7.0
	COC	1 % v/v	B		703	7.0
	ROUNDUP POWERMAX	22 oz ai/a	B		1003	5.0
	AMS - Liquid	8.5 lb ai/100 gal	B			
						Mean =
						6.5
						60.95

Purdue University

2014/CADET/MARVEL/ROUNDUP/SOYBEAN/EARLY POSTEMERGENCE/

Trial ID: 14S-THP-CTS-51-2 Protocol ID: 14S-THP-CTS-51-2
 Location: Throckmorton Study Director:
 Project ID: FULT.SOY.14.JPR.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 ABUTH, Abutilon theophrasti, = US
 CHEAL, Chenopodium album, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

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

Rating Unit

% = percent
 bu/ac = bushels per acre

PLOT = total plot

Pest Stage Majority

40 = V Vegetative reproductive organs begin to develop (rhizomes, stolons, tubers, runners, bulbs)

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

30 DP-1 = 1 GLXMA May-7-2014
 40 DP-1 = 1 GLXMA May-7-2014
 49 DP-1 = 1 GLXMA May-7-2014
 78 DP-1 = 1 GLXMA May-7-2014
 168 DP-1 = 1 GLXMA May-7-2014

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2014/CADET/MARVEL/ROUNDUP/SOYBEAN/EARLY POSTEMERGENCE/

Trial ID: 14S-THP-CTS-51-2 Protocol ID: 14S-THP-CTS-51-2
 Location: Throckmorton Study Director:
 Project ID: FULT.SOY.14.JPR.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

Pest Type	W Weed	W Weed	W Weed	W Weed						
Pest Code	SETFA	AMBTR	ABUTH	CHEAL						
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Chenopodium ai>						
Pest Name	Giant foxtail	Giant ragweed	velvetleaf	Common lambsqu>						
Crop Code					GLXMA	GLXMA	GLXMA			
BBCH Scale					BSOY	BSOY	BSOY			
Crop Scientific Name					Glycine max	Glycine max	Glycine max			
Crop Name					Soybean	Soybean	Soybean			
Rating Date	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL	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	V2	V2	V2	V2	V2	V2	V2	V2		
Pest Stage Majority	1-2"	1-4"	1-3"	1-2"						
Pest Density, Unit	7 FT2	2 YD2	1 YD2	1 YD2						
Days After First/Last Applic.	29 7	29 7	29 7	29 7	29 7	29 7	29 7	29 7		
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1		
Days After Emergence	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 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 d	0.0 d	0.0 b
2 DUAL II MAGNUM	11.5 oz ai/a	A		99.0 a	91.8 a	99.0 a	99.0 a	6.8 ab	3.5 c	3.3 ab
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								
3 DUAL II MAGNUM	11.5 oz ai/a	A		99.0 a	83.3 a	99.0 a	99.0 a	4.3 a-d	7.3 b	3.3 ab
CADET	0.068 oz ai/a	B								
COC	1 % v/v	B								
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								
4 DUAL II MAGNUM	11.5 oz ai/a	A		99.0 a	91.0 a	99.0 a	99.0 a	4.8 a-d	7.5 b	5.0 ab
CADET	0.102 oz ai/a	B								
COC	1 % v/v	B								
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								
5 DUAL II MAGNUM	11.5 oz ai/a	A		99.0 a	97.3 a	99.0 a	99.0 a	4.0 a-d	9.8 b	5.0 ab
MARVEL	2.72 oz ai/a	B								
COC	1 % v/v	B								
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								
6 DUAL II MAGNUM	11.5 oz ai/a	A		99.0 a	98.0 a	99.0 a	99.0 a	1.5 cd	8.5 b	5.8 a
MARVEL	2.72 oz ai/a	B								
NIS	0.25 % v/v	B								
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								
7 DUAL II MAGNUM	11.5 oz ai/a	A		99.0 a	92.8 a	99.0 a	99.0 a	2.8 bcd	8.5 b	5.5 a
MARVEL	2.72 oz ai/a	B								
NIS	0.125 % v/v	B								
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Pest Type	W Weed SETFA	W Weed AMBTR	W Weed ABUTH	W Weed CHEAL						
Pest Code	Setaria faberi	Ambrosia trifida	Abutilon theophrasti	Chenopodium album						
Pest Scientific Name	Giant foxtail	Giant ragweed	velvetleaf	Common lambsquarters						
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-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014	Jun-6-2014		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL	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	V2	V2	V2	V2	V2	V2	V2	V2		
Pest Stage Majority	1-2"	1-4"	1-3"	1-2"						
Pest Density, Unit	7 FT2	2 YD2	1 YD2	1 YD2						
Days After First/Last Applic.	29 7	29 7	29 7	29 7	29 7	29 7	29 7	29 7		
Plant-Eval Interval	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1	30 DP-1		
Days After Emergence	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1	24 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	1	2	3	4	5	6	7
15 ANTHEM	1.61 oz ai/a	B		99.0 a	86.5 a	99.0 a	99.0 a	7.5 ab	15.0 a	4.3 ab
FIRST RATE	0.00252 oz ai/a	B								
COC	1 % v/v	B								
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								
LSD (P=.05)				5.55	13.45	0.00	0.00	3.04	2.00	2.95
Standard Deviation				3.88	9.41	0.00	0.00	2.13	1.40	2.06
CV				4.23	11.06	0.0	0.0	43.3	17.53	54.52
Bartlett's X2				3.912	39.507	0.0	0.0	17.549	9.818	18.845
P(Bartlett's X2)				0.048*	0.001*	.	.	0.175	0.365	0.128
Replicate F				1.046	7.863	0.000	0.000	1.131	2.838	0.317
Replicate Prob(F)				0.3823	0.0003	1.0000	1.0000	0.3474	0.0494	0.8128
Treatment F				171.943	25.908	0.000	0.000	4.898	53.313	2.240
Treatment Prob(F)				0.0001	0.0001	1.0000	1.0000	0.0001	0.0001	0.0222

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Pest Type		W Weed	W Weed	W Weed						
Pest Code		SETFA	AMBTR	CHEAL						
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>						
Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>						
Crop Code	GLXMA				GLXMA	GLXMA	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	Jun-6-2014	Jun-16-2014	Jun-16-2014	Jun-16-2014	Jun-16-2014	Jun-16-2014	Jun-16-2014	Jun-16-2014		
Rating Type	PHYLMA	CONTRO	CONTRO	CONTRO	PHYSTU	PHYLMA	PHYNEC			
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	V2	V2	V2	V2	V2	V2	V2	V2		
Pest Stage Majority		5"	10"	3"						
Pest Density, Unit		10 FT2	7 YD2	2 FT2						
Days After First/Last Applic.	29 7	39 17	39 17	39 17	39 17	39 17	39 17	39 17		
Plant-Eval Interval	30 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1		
Days After Emergence	24 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1	34 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	8	9	10	11	12	13	14
15 ANTHEM	1.61 oz ai/a	B		14.8 a	98.5 a	88.0 ab	99.0 a	15.5 a	6.0 a	5.0 abc
FIRST RATE	0.00252 oz ai/a	B								
COC	1 % v/v	B								
ROUNDUP POWERMAX	22 oz ai/a	B								
AMS - Liquid	8.5 lb ai/100 gal	B								
LSD (P=.05)				2.49	2.98	10.48	9.28	4.23	3.32	3.02
Standard Deviation				1.74	2.08	7.34	6.49	2.96	2.32	2.12
CV				18.91	2.29	9.41	7.23	64.04	57.79	68.65
Bartlett's X2				31.789	17.181	36.291	6.808	18.462	13.544	6.186
P(Bartlett's X2)				0.001*	0.046*	0.001*	0.235	0.03*	0.259	0.861
Replicate F				2.747	0.934	0.725	2.434	2.026	0.061	1.978
Replicate Prob(F)				0.0547	0.4326	0.5430	0.0782	0.1249	0.9801	0.1319
Treatment F				26.764	587.307	37.418	59.945	19.807	2.860	5.578
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0043	0.0001

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Pest Type	W Weed SETFA	W Weed AMBTR		W Weed SETFA	W Weed AMBTR	W Weed				
Pest Code	Setaria faberi	Ambrosia trifi>		Setaria faberi	Ambrosia trifi>					
Pest Scientific Name	Giant foxtail	Giant ragweed		Giant foxtail	Giant ragweed					
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-25-2014	Jun-25-2014	Jun-25-2014	Jul-24-2014	Jul-24-2014	Jul-24-2014	Oct-22-2014			
Rating Type	CONTRO	CONTRO	PHYSTU	CONTRO	CONTRO	PHYSTU	YIELD			
Rating Unit	%	%	%	%	%	%	bu/ac			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1			
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	V5	V5	V5							
Pest Stage Majority	20"	36"		40	72					
Pest Density, Unit	5 FT2	5 YD2		6 FT2	7 YD2					
Days After First/Last Applic.	48 26	48 26	48 26	77 55	77 55	77 55	167 145			
Plant-Eval Interval	49 DP-1	49 DP-1	49 DP-1	78 DP-1	78 DP-1	78 DP-1	168 DP-1			
Days After Emergence	43 DE-1	43 DE-1	43 DE-1	72 DE-1	72 DE-1	72 DE-1	162 DE-1			
Trt Treatment	Rate	Rate	Appl	Rate	Rate	Rate	Rate			
No. Name	Rate	Unit	Code	15	16	17	18	19	20	21
8 DUAL II MAGNUM	11.5 oz ai/a		A	97.0 a	82.8 ab	0.8 b	99.0 a	85.5 a	0.0 c	67.88 a
FIRST RATE	0.00252 oz ai/a		B							
COC	1 % v/v		B							
ROUNDUP POWERMAX	22 oz ai/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
9 DUAL II MAGNUM	11.5 oz ai/a		A	95.3 ab	84.5 ab	0.0 b	97.0 a	83.0 a	0.0 c	75.30 a
ACCOLADE	0.0072 oz ai/a		B							
COC	1 % v/v		B							
ROUNDUP POWERMAX	22 oz ai/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
10 DUAL II MAGNUM	11.5 oz ai/a		A	98.0 a	81.3 ab	0.0 b	98.0 a	82.5 a	0.0 c	71.85 a
ACCOLADE	0.00096 oz ai/a		B							
FIRST RATE	0.3 oz/a		B							
COC	1 % v/v		B							
ROUNDUP POWERMAX	22 oz ai/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
11 DUAL II MAGNUM	11.5 oz ai/a		A	97.0 a	82.3 ab	1.8 b	99.0 a	83.0 a	0.0 c	72.38 a
CADET	0.068 oz ai/a		B							
FIRST RATE	0.00252 oz ai/a		B							
COC	1 % v/v		B							
ROUNDUP POWERMAX	22 oz ai/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
12 ANTHEM	1.61 oz ai/a		B	92.3 ab	88.0 a	8.5 a	92.3 b	84.5 a	7.3 a	71.13 a
ACCOLADE	0.00096 oz ai/a		B							
FIRST RATE	0.00252 oz ai/a		B							
COC	1 % v/v		B							
ROUNDUP POWERMAX	22 oz ai/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
13 ANTHEM	1.61 oz ai/a		B	92.3 ab	78.8 ab	7.0 a	89.5 b	51.0 b	3.3 b	47.98 b
ACCOLADE	0.00096 oz ai/a		B							
FIRST RATE	0.00252 oz ai/a		B							
COC	1 % v/v		B							
SELECT MAX	12 oz/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							
14 ANTHEM	1.61 oz ai/a		B	88.0 b	82.5 ab	10.5 a	93.0 b	67.5 ab	6.0 a	60.83 ab
BASAGRAN	6 oz ai/a		B							
FIRST RATE	0.00252 oz ai/a		B							
COC	1 % v/v		B							
SELECT MAX	12 oz/a		B							
AMS - Liquid	8.5 lb ai/100 gal		B							

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2014/CADET/MARVEL/ROUNDUP/SOYBEAN/EARLY POSTEMERGENCE/

Trial ID: 14S-THP-CTS-51-2 Protocol ID: 14S-THP-CTS-51-2
 Location: Throckmorton Study Director:
 Project ID: FULT.SOY.14.JPR.01 Investigator: Dr. Bill Johnson
 Sponsor Contact: FMC - Joe Reed

Pest Type

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

Pest Code

SETFA, Setaria faberi, = US
 AMBTR, Ambrosia trifida, = US
 ABUTH, Abutilon theophrasti, = US
 CHEAL, Chenopodium album, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

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

Rating Unit

% = percent
 bu/ac = bushels per acre

PLOT = total plot

Pest Stage Majority

40 = V Vegetative reproductive organs begin to develop (rhizomes, stolons, tubers, runners, bulbs)

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

30 DP-1 = 1 GLXMA May-7-2014
 40 DP-1 = 1 GLXMA May-7-2014
 49 DP-1 = 1 GLXMA May-7-2014
 78 DP-1 = 1 GLXMA May-7-2014
 168 DP-1 = 1 GLXMA May-7-2014