Purdue University Weed Science

SOYBEAN WEED CONTROL IN NO/MIN TILL

Trial ID: 13S-SEP-CTS-10 Location: SEPAC Trial Year: 2013
Protocol ID: 13S-SEP-CTS-10 Investigator: Dr. Bill Johnson
Project ID: DEM-AWC-SOY01-2013 Study Director: JOE IKLEY
Sponsor Contact: BASF - GERY WELKER

General Trial Information

Study Director: JOE IKLEY **Title:** RESEARCH ASSOCIATE
Investigator: DR. BILL JOHNSON **Title:** PROFESSOR

Discipline: H HERBICIDE
Trial Status: F one-year/final
Initiation Date: 4/30/2013 **Planned Completion Date:** 8/16/2013
Completion Date: 10/4/2013

Trial Location

City: BUTLERVILLE **Country:** USA UNITED STATES
State/Prov.: INDIANA
Postal Code: 47223

Contacts

Study Director: JOE IKLEY **Title:** RESEARCH ASSOCIATE
Organization: PURDUE UNIVERSITY
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City+State/Prov: WEST LAFAYETTE **Mobile No.:** 410-596-9091
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Investigator: DR. BILL JOHNSON **Title:** PROFESSOR
Organization: PURDUE UNIVERSITY
Address: 915 WEST STATE STREET **Phone No.:** 765-494-4656
City+State/Prov: WEST LAFAYETTE **Mobile No.:** 765-404-9801
Postal Code: 47907 **E-mail:** WGJ@PURDUE.EDU

Cooperator/Landowner

Cooperator: DON BIEHLE **Role:** SUPERINTENDENT
Organization: SOUTHEAST PURDUE AGRICULTURE CENTER
Address 1: 4425 EAST COUNTY ROAD 350 NORTH
City: BUTLERVILLE **Phone No.:** 812-458-6977
State/Prov: INDIANA **Fax No.:** 812-458-6979
Postal Code: 47223-0216 **Mobile No.:** 812-592-8426
Country: USA UNITED STATES **E-mail:** BIEHLED@PURDUE.EDU

Crop Description

Crop 1: GLXMA GLYCINE MAX SOYBEAN
Variety: ASGROW 2933
Description: RR

Planting Rate, Unit: 140000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Spacing Within Row, Unit: 2 IN
Planting Density, Unit: 140000 S/A
Soil Temperature, Unit: 79 F
Soil Moisture: SLIWET SLIGHTLY WET, MOIST

Planting Date: 5/30/2013
Planting Method: DIRDRI DIRECT DRILLED
Planting Equipment: JD7000
Emergence Date: 6/6/2013
Harvest Date: 10/4/2013
Harvested Width, Unit: 10 FT
Harvested Length, Unit: 25 FT
Harvest Equipment: Gleaner F3
Moisture Meter: Harvest Master
Weighing Equipment: Harvest Master

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Pest Description

Pest 1 Type: W **Code:** AMBEL AMBROSIA ARTEMISIIFOLIA
Common Name: COMMON RAGWEED

Pest 2 Type: W **Code:** BROSS BROMUS SP.
Common Name: BROMEGRASS

Pest 3 Type: W **Code:** PANDI PANICUM DICHOTOMIFLORUM
Common Name: FALL PANICUM

Pest 4 Type: W **Code:** XANST XANTHIUM STRUMARIUM
Common Name: HEART-LEAF COCKLEBUR

Pest 5 Type: W **Code:** SETPU SETARIA PUMILA
Common Name: YELLOW FOXTAIL

Pest 6 Type: W **Code:** IPOSS IPOMOEA SP.
Common Name: MORNING GLORY

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT2 **Treatments:** 20
Replications: 4
Site Type: FIELD FIELD
Experimental Unit: 1 PLOT PLOT
Tillage Type: NOTILL NO-TILL
Study Design: RACOBL Randomized Complete Block (RCB)

Soil Description

Description Name: SEPAC-U41
% Sand: 20 **% OM:** 1.3 **Texture:** SIL SILT LOAM
% Silt: 65 **pH:** 6.5 **Soil Name:** AVONBURG
% Clay: 15 **CEC:** 5.7 **Fert. Level:** F FAIR
Soil Drainage: P POOR

Application Description

	A	B	C
Application Date:	4/30/2013	5/30/2013	7/12/2013
Appl. Start Time:	3 PM	13:00	11:00
Appl. Stop Time:	3:30 PM	2:30 PM	11:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREPLA	PREPRE	POSPOS
Application Placement:	BROADC	BROADC	BROADC
Applied By:	IKLEY	DEVKOTA	DEVKOTA
Air Temperature, Unit:	80 F	86.5 F	77 F
% Relative Humidity:	60	60	51
Wind Velocity, Unit:	3 MPH	5 MPH	3 MPH
Wind Direction:	SSE	SSE	NE
Dew Presence (Y/N):	N NO	N NO	Y YES
Soil Temperature, Unit:	72 F	79 F	76 F
Soil Moisture:	SLIWET	SLIWET	SLIWET
% Cloud Cover:	0	45	30
Next Moisture Occurred On:		5/31/2013	
Time to Next Moisture, Unit:		24 HR	

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Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:		00	60
Stage Minimum, Percent:			18
Stage Maximum, Percent:			61
Height, Unit:			11.5 IN
Height Minimum, Maximum:			9 13
Stage Scale Used:	BBCH	BBCH	BBCH

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	AMBEL W	AMBEL W	AMBEL W
Stage Majority, Percent:	12	34	36G
Stage Minimum, Percent:	10	33	34G
Stage Maximum, Percent:	13	35	38G
Height, Unit:	1 IN	10 IN	13.5 IN
Height Minimum, Maximum:	0.5 2	7 12	7 20
Density, Unit:	45 YD2	45 YD2	17 YD2
Pest 2 Code, Type, Scale:	BROSS W	BROSS W	BROSS W
Stage Majority, Percent:	11	69	
Stage Minimum, Percent:	10		
Stage Maximum, Percent:	11		
Height, Unit:	0.5 IN	35 IN	
Height Minimum, Maximum:	30 40	30 40	
Density, Unit:	25 YD2	25 YD2	
Pest 3 Code, Type, Scale:	PANDI W	PANDI W	PANDI W
Stage Majority, Percent:		12	
Height, Unit:		2 IN	
Height Minimum, Maximum:		0.5 3	
Density, Unit:		50 YD2	
Pest 4 Code, Type, Scale:	XANST W	XANST W	XANST W
Stage Majority, Percent:		34	33G
Stage Minimum, Percent:			32G
Stage Maximum, Percent:			34G
Height, Unit:		7 IN	3 IN
Height Minimum, Maximum:		5 8	2 4
Density, Unit:		20 YD2	8 YD2
Pest 5 Code, Type, Scale:	SETPU W	SETPU W	SETPU W
Stage Majority, Percent:			17
Stage Minimum, Percent:			15
Stage Maximum, Percent:			18
Height, Unit:			14 IN
Height Minimum, Maximum:			8 20
Density, Unit:			60 YD2
Pest 6 Code, Type, Scale:	IPOSS W	IPOSS W	IPOSS W
Stage Majority, Percent:			35G
Stage Minimum, Percent:			33G
Stage Maximum, Percent:			36G
Height, Unit:			5.5 IN
Height Minimum, Maximum:			3 8
Density, Unit:			10 YD2

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Application Equipment

	A	B	C
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	SPRBAC	SPRBAC	SPRBAC
Operation Pressure, Unit:	20 PSI	17 PSI	17 PSI
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	XR11002	XR11002	XR11002
Nozzle Spacing, Unit:	15 IN	15 IN	15 IN
Nozzles/Row:	8	8	8
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	18 IN	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	H2O	H2O	H2O
Water Hardness (ppm CaCO3):	150	150	150
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.8 LITERS	1.8 LITERS	1.8 LITERS
Propellant:	CO2	CO2	CO2
Tank Mix (Y/N):	N NO	N NO	N NO

Trial Comments

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Sponsor Contact: BASF - GERY WELKER

Reps: 4 Plots: 10 by 30 feet
Spray vol: 15 gal/ac Mix size: 1.8 liters (min 1.5642)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt Product to Measure	Rep 1	Rep 2
1	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	101	503
	VERDICT	5.57	LB/GAL	EC	244	g ai/ha	5	fl oz/a	PREPLA	B		4.683 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
2	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	102	504
	VERDICT	5.57	LB/GAL	EC	244	g ai/ha	5	fl oz/a	PREPLA	B		4.683 ml/mx		
	SENCOR 75DF	75	%AW/W	DF	525	g ai/ha	10	oz/a	PREPLA	B		8.98 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
3	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	103	507
	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
4	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	104	305
	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx		
	SENCOR 75DF	75	%AW/W	DF	525	g ai/ha	10	oz/a	PREPLA	B		8.98 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
5	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx	105	408
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
6	SHARPEN	2.85	LB/GAL	L	50	g ai/ha	2	fl oz/a	PREPLA	B		1.876 ml/mx	106	508
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
7	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx	107	406
	SENCOR 75DF	75	%AW/W	DF	525	g ai/ha	10	oz/a	PREPLA	B		8.98 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
8	OPTILL	68	%	WG	95	g ai/ha	2	oz/a	PREPLA	B		1.792 g/mx	108	307
	OUTLOOK	719	G/L	EC	525	g ai/ha	10	fl oz/a	PREPLA	B		9.367 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		

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Reps: 4 Plots: 10 by 30 feet
Spray vol: 15 gal/ac Mix size: 1.8 liters (min 1.5642)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt Product to Measure	Rep 1	2
9	VERDICT	5.57	LB/GAL	EC	244	g ai/ha	5	fl oz/a	PREPLA	B		4.683 ml/mx	201	506
	OUTLOOK	719	G/L	EC	630	g ai/ha	12	fl oz/a	PREPLA	B		11.24 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
10	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	202	404
	VALOR	51	%	WG	73	g ai/ha	2.05	oz/a	PREPLA	B		1.836 g/mx		
	CLASSIC	25	%AW/W	DF	25.4	g ai/ha	1.45	oz/a	PREPLA	B		1.303 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
11	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	203	407
	AUTHORITY MTZ	45	%	DF	504	g ai/ha	16	oz/a	PREPLA	B		14.37 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
12	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	204	505
	PREFIX	5.3	LB/GAL	L	1490	g ai/ha	2	pt/a	PREPLA	B		30.05 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
13	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	205	501
	ANTHEM	258	G/L	SE	170	g ai/ha	9	fl oz/a	PREPLA	B		8.453 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
14	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	206	401
	FIERCE	76	%	WG	240	g ai/ha	4.5	oz/a	PREPLA	B		4.051 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
15	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	207	306
	SONIC	70	%	WG	294	g ai/ha	6	oz/a	PREPLA	B		5.388 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
16	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	A	30 DPP	0.9378 ml/mx	208	308
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	A	30 DPP	20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	A	30 DPP	18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	A	30 DPP	45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
17	SHARPEN	2.85	LB/GAL	L	50	g ai/ha	2	fl oz/a	PREPLA	A	30 DPP	1.876 ml/mx	301	502
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	A	30 DPP	20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	A	30 DPP	18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	A	30 DPP	45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
18	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	302	405
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
19	UNTREATED CHECK												303	402
20	UNTREATED CHECK												304	403

Sort Order: Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Purdue University Weed Science

Reps: 4 Plots: 10 by 30 feet
Spray vol: 15 gal/ac Mix size: 1.8 liters (min 1.5642)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt Product to Measure	3	4
1	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	603	1001
	VERDICT	5.57	LB/GAL	EC	244	g ai/ha	5	fl oz/a	PREPLA	B		4.683 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
2	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	601	903
	VERDICT	5.57	LB/GAL	EC	244	g ai/ha	5	fl oz/a	PREPLA	B		4.683 ml/mx		
	SENCOR 75DF	75	%AW/W	DF	525	g ai/ha	10	oz/a	PREPLA	B		8.98 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
3	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	703	1008
	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
4	ZIDUA	85	%	WG	149	g ai/ha	2.5	oz/a	PREPLA	B		2.249 g/mx	705	906
	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx		
	SENCOR 75DF	75	%AW/W	DF	525	g ai/ha	10	oz/a	PREPLA	B		8.98 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
5	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx	604	1004
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
6	SHARPEN	2.85	LB/GAL	L	50	g ai/ha	2	fl oz/a	PREPLA	B		1.876 ml/mx	804	1003
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
7	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	B		0.9378 ml/mx	606	1002
	SENCOR 75DF	75	%AW/W	DF	525	g ai/ha	10	oz/a	PREPLA	B		8.98 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
8	OPTILL	68	%	WG	95	g ai/ha	2	oz/a	PREPLA	B		1.792 g/mx	803	901
	OUTLOOK	719	G/L	EC	525	g ai/ha	10	fl oz/a	PREPLA	B		9.367 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		

Purdue University Weed Science

Reps: 4 Plots: 10 by 30 feet
Spray vol: 15 gal/ac Mix size: 1.8 liters (min 1.5642)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt Product to Measure	3	4
9	VERDICT	5.57	LB/GAL	EC	244	g ai/ha	5	fl oz/a	PREPLA	B		4.683 ml/mx	602	1007
	OUTLOOK	719	G/L	EC	630	g ai/ha	12	fl oz/a	PREPLA	B		11.24 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	B		18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
10	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	607	808
	VALOR	51	%	WG	73	g ai/ha	2.05	oz/a	PREPLA	B		1.836 g/mx		
	CLASSIC	25	%AW/W	DF	25.4	g ai/ha	1.45	oz/a	PREPLA	B		1.303 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
11	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	707	1006
	AUTHORITY MTZ	45	%	DF	504	g ai/ha	16	oz/a	PREPLA	B		14.37 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
12	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	608	904
	PREFIX	5.3	LB/GAL	L	1490	g ai/ha	2	pt/a	PREPLA	B		30.05 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
13	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	706	905
	ANTHEM	258	G/L	SE	170	g ai/ha	9	fl oz/a	PREPLA	B		8.453 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
14	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	701	805
	FIERCE	76	%	WG	240	g ai/ha	4.5	oz/a	PREPLA	B		4.051 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
15	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	605	806
	SONIC	70	%	WG	294	g ai/ha	6	oz/a	PREPLA	B		5.388 g/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
16	SHARPEN	2.85	LB/GAL	L	25	g ai/ha	1	fl oz/a	PREPLA	A	30 DPP	0.9378 ml/mx	704	807
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	A	30 DPP	20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	A	30 DPP	18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	A	30 DPP	45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
17	SHARPEN	2.85	LB/GAL	L	50	g ai/ha	2	fl oz/a	PREPLA	A	30 DPP	1.876 ml/mx	802	1005
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	A	30 DPP	20.67 ml/mx		
	MSO	100	%	L	1	% v/v	1	% v/v	PREPLA	A	30 DPP	18.0 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	A	30 DPP	45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
18	WEEDAR	3.8	LBAE/GAL	L	533	g ai/ha	16	fl oz/a	PREPLA	B		14.99 ml/mx	708	907
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	PREPLA	B		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	PREPLA	B		45.0 ml/mx		
	ROUNDUP POWERMAX	4.5	LBAE/GAL	SL	870	g ae/ha	22	fl oz/a	POSPOS	C		20.67 ml/mx		
	N-PAK AMS	3.4	LBA/GAL	SL	2.5	% v/v	8.5	lb ai/100 gal	POSPOS	C		45.0 ml/mx		
19	UNTREATED CHECK												702	902
20	UNTREATED CHECK												801	908

Purdue University Weed Science

Reps: 4 Plots: 10 by 30 feet
Spray vol: 15 gal/ac Mix size: 1.8 liters (min 1.5642)

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
8.995	g	ZIDUA	85	WG	
14.049	ml	VERDICT	5.57	EC	
744.064	ml	ROUNDUP POWERMAX	4.5	SL	
198.000	ml	MSO	100	L	
1,620.000	ml	N-PAK AMS	3.4	SL	
26.940	g	SENCOR 75DF	75	DF	
8.440	ml	SHARPEN	2.85	L	
1.792	g	OPTILL	68	WG	
20.608	ml	OUTLOOK	719	EC	
104.965	ml	WEEDAR	3.8	L	
1.836	g	VALOR	51	WG	
1.303	g	CLASSIC	25	DF	
14.368	g	AUTHORITY MTZ	45	DF	
30.055	ml	PREFIX	5.3	L	
8.453	ml	ANTHEM	258	SE	
4.051	g	FIERCE	76	WG	
5.388	g	SONIC	70	WG	

* 'Per area' calculations based on spray volume= 15 gal/ac, mix size= 1.8 liters (mix size basis).
* 'Per volume' calculations use spray volume= 15 gal/ac, mix size= 1.8 liters.

Purdue University Weed Science

SOYBEAN WEED CONTROL IN NO/MIN TILL

Trial ID: 13S-SEP-CTS-10
Protocol ID: 13S-SEP-CTS-10
Project ID: DEM-AWC-SOY01-2013
Location: SEPAC Trial Year: 2013
Investigator: Dr. Bill Johnson
Study Director: JOE IKLEY
Sponsor Contact: BASF - GERY WELKER

Pest Type					W WEED	W WEED	W WEED
Pest Code					XANST	AMBEL	XANST
Pest Scientific Name					XANTHIUM STRUM>	AMBROSIA ARTEM>	XANTHIUM STRUM>
Pest Name					HEART-LEAF COC>	COMMON RAGWEED	HEART-LEAF COC>
Crop Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Part Rated					PLOT P	PLOT P	PLOT P
Rating Date					5/30/2013	5/30/2013	6/20/2013
Rating Type					CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%
Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.					30 30	30 30	51 21
Trt-Eval Interval					30 DA-A	30 DA-A	21 DA-B
ARM Action Codes					P	P	P
Number of Decimals					0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code / Plot	1	2	3
1	ZIDUA	149	g ai/ha	B 101	.	.	70
	VERDICT	244	g ai/ha	B 503	.	.	95
	ROUNDUP POWERMAX	870	g ae/ha	B 603	.	.	80
	MSO	1	% v/v	B 1001	.	.	100
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
				Mean =	.	.	86
2	ZIDUA	149	g ai/ha	B 102	.	.	85
	VERDICT	244	g ai/ha	B 504	.	.	85
	SENCOR 75DF	525	g ai/ha	B 601	.	.	75
	ROUNDUP POWERMAX	870	g ae/ha	B 903	.	.	95
	MSO	1	% v/v	B			
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
				Mean =	.	.	85
3	ZIDUA	149	g ai/ha	B 103	.	.	80
	SHARPEN	25	g ai/ha	B 507	.	.	100
	ROUNDUP POWERMAX	870	g ae/ha	B 703	.	.	85
	MSO	1	% v/v	B 1008	.	.	80
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
				Mean =	.	.	86
4	ZIDUA	149	g ai/ha	B 104	.	.	95
	SHARPEN	25	g ai/ha	B 305	.	.	100
	SENCOR 75DF	525	g ai/ha	B 705	.	.	100
	ROUNDUP POWERMAX	870	g ae/ha	B 906	.	.	100
	MSO	1	% v/v	B			
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
				Mean =	.	.	99
5	SHARPEN	25	g ai/ha	B 105	.	.	100
	ROUNDUP POWERMAX	870	g ae/ha	B 408	.	.	75
	MSO	1	% v/v	B 604	.	.	65
	N-PAK AMS	2.5	% v/v	B 1004	.	.	100
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
				Mean =	.	.	85

Purdue University Weed Science

Pest Type					W WEED	W WEED	W WEED
Pest Code					XANST	AMBEL	XANST
Pest Scientific Name					XANTHIUM STRUM>	AMBROSIA ARTEM>	XANTHIUM STRUM>
Pest Name					HEART-LEAF COC>	COMMON RAGWEED	HEART-LEAF COC>
Crop Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Part Rated					PLOT P	PLOT P	PLOT P
Rating Date					5/30/2013	5/30/2013	6/20/2013
Rating Type					CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%
Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.					30 30	30 30	51 21
Trt-Eval Interval					30 DA-A	30 DA-A	21 DA-B
ARM Action Codes					P	P	P
Number of Decimals					0	0	0
Trt No. Treatment Name	Rate	Rate Unit	Appl Code	Plot	1	2	3
6 SHARPEN	50	g ai/ha	B	106	.	.	100
ROUNDUP POWERMAX	870	g ae/ha	B	508	.	.	80
MSO	1	% v/v	B	804	.	.	90
N-PAK AMS	2.5	% v/v	B	1003	.	.	85
ROUNDUP POWERMAX	870	g ae/ha	C				
N-PAK AMS	2.5	% v/v	C				
				Mean =	.	.	89
7 SHARPEN	25	g ai/ha	B	107	.	.	80
SENCOR 75DF	525	g ai/ha	B	406	.	.	95
ROUNDUP POWERMAX	870	g ae/ha	B	606	.	.	90
MSO	1	% v/v	B	1002	.	.	85
N-PAK AMS	2.5	% v/v	B				
ROUNDUP POWERMAX	870	g ae/ha	C				
N-PAK AMS	2.5	% v/v	C				
				Mean =	.	.	88
8 OPTILL	95	g ai/ha	B	108	.	.	95
OUTLOOK	525	g ai/ha	B	307	.	.	95
ROUNDUP POWERMAX	870	g ae/ha	B	803	.	.	95
MSO	1	% v/v	B	901	.	.	100
N-PAK AMS	2.5	% v/v	B				
ROUNDUP POWERMAX	870	g ae/ha	C				
N-PAK AMS	2.5	% v/v	C				
				Mean =	.	.	96
9 VERDICT	244	g ai/ha	B	201	.	.	60
OUTLOOK	630	g ai/ha	B	506	.	.	90
ROUNDUP POWERMAX	870	g ae/ha	B	602	.	.	80
MSO	1	% v/v	B	1007	.	.	60
N-PAK AMS	2.5	% v/v	B				
ROUNDUP POWERMAX	870	g ae/ha	C				
N-PAK AMS	2.5	% v/v	C				
				Mean =	.	.	73
10 WEEDAR	533	g ai/ha	B	202	.	.	90
VALOR	73	g ai/ha	B	404	.	.	100
CLASSIC	25.4	g ai/ha	B	607	.	.	100
ROUNDUP POWERMAX	870	g ae/ha	B	808	.	.	95
N-PAK AMS	2.5	% v/v	B				
ROUNDUP POWERMAX	870	g ae/ha	C				
N-PAK AMS	2.5	% v/v	C				
				Mean =	.	.	96
11 WEEDAR	533	g ai/ha	B	203	.	.	80
AUTHORITY MTZ	504	g ai/ha	B	407	.	.	80
ROUNDUP POWERMAX	870	g ae/ha	B	707	.	.	90
N-PAK AMS	2.5	% v/v	B	1006	.	.	95
ROUNDUP POWERMAX	870	g ae/ha	C				
N-PAK AMS	2.5	% v/v	C				
				Mean =	.	.	86

Purdue University Weed Science

Pest Type						W WEED	W WEED	W WEED
Pest Code						XANST	AMBEL	XANST
Pest Scientific Name						XANTHIUM STRUM>	AMBROSIA ARTEM>	XANTHIUM STRUM>
Pest Name						HEART-LEAF COC>	COMMON RAGWEED	HEART-LEAF COC>
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Part Rated						PLOT P	PLOT P	PLOT P
Rating Date						5/30/2013	5/30/2013	6/20/2013
Rating Type						CONTRO	CONTRO	CONTRO
Rating Unit						%	%	%
Sample Size, Unit						1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.						30 30	30 30	51 21
Trt-Eval Interval						30 DA-A	30 DA-A	21 DA-B
ARM Action Codes						P	P	P
Number of Decimals						0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	1	2	3
12	WEEDAR	533	g ai/ha	B	204	.	.	95
	PREFIX	1490	g ai/ha	B	505	.	.	95
	ROUNDUP POWERMAX	870	g ae/ha	B	608	.	.	90
	N-PAK AMS	2.5	% v/v	B	904	.	.	95
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
					Mean =	.	.	94
13	WEEDAR	533	g ai/ha	B	205	.	.	95
	ANTHEM	170	g ai/ha	B	501	.	.	80
	ROUNDUP POWERMAX	870	g ae/ha	B	706	.	.	90
	N-PAK AMS	2.5	% v/v	B	905	.	.	80
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
					Mean =	.	.	86
14	WEEDAR	533	g ai/ha	B	206	.	.	85
	FIERCE	240	g ai/ha	B	401	.	.	80
	ROUNDUP POWERMAX	870	g ae/ha	B	701	.	.	85
	N-PAK AMS	2.5	% v/v	B	805	.	.	100
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
					Mean =	.	.	88
15	WEEDAR	533	g ai/ha	B	207	.	.	100
	SONIC	294	g ai/ha	B	306	.	.	100
	ROUNDUP POWERMAX	870	g ae/ha	B	605	.	.	100
	N-PAK AMS	2.5	% v/v	B	806	.	.	90
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
					Mean =	.	.	98
16	SHARPEN	25	g ai/ha	A	208	30	50	20
	ROUNDUP POWERMAX	870	g ae/ha	A	308	60	90	10
	MSO	1	% v/v	A	704	80	100	0
	N-PAK AMS	2.5	% v/v	A	807	30	60	0
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
					Mean =	50	75	8
17	SHARPEN	50	g ai/ha	A	301	80	80	10
	ROUNDUP POWERMAX	870	g ae/ha	A	502	100	100	10
	MSO	1	% v/v	A	802	95	90	30
	N-PAK AMS	2.5	% v/v	A	1005	85	95	10
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
					Mean =	90	91	15
18	WEEDAR	533	g ai/ha	B	302	.	.	60
	ROUNDUP POWERMAX	870	g ae/ha	B	405	.	.	85
	N-PAK AMS	2.5	% v/v	B	708	.	.	70
	ROUNDUP POWERMAX	870	g ae/ha	C	907	.	.	70
	N-PAK AMS	2.5	% v/v	C				
					Mean =	.	.	71

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Pest Type						W WEED	W WEED	W WEED
Pest Code						XANST	AMBEL	XANST
Pest Scientific Name						XANTHIUM STRUM>	AMBROSIA ARTEM>	XANTHIUM STRUM>
Pest Name						HEART-LEAF COC>	COMMON RAGWEED	HEART-LEAF COC>
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Part Rated						PLOT P	PLOT P	PLOT P
Rating Date						5/30/2013	5/30/2013	6/20/2013
Rating Type						CONTRO	CONTRO	CONTRO
Rating Unit						%	%	%
Sample Size, Unit						1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.						30 30	30 30	51 21
Trt-Eval Interval						30 DA-A	30 DA-A	21 DA-B
ARM Action Codes						P	P	P
Number of Decimals						0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	1	2	3
19	UNTREATED CHECK				303	.	.	0
					402	.	.	0
					702	.	.	0
					902	.	.	0
					Mean =	.	.	0
20	UNTREATED CHECK				304	.	.	0
					403	.	.	0
					801	.	.	0
					908	.	.	0
					Mean =	.	.	0

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Unit	Appl Code	Plot	4	5	6	7
	Pest Type					W WEED	W WEED		W WEED
	Pest Code					AMBEL	SETSS		XANST
	Pest Scientific Name					AMBROSIA ARTEM>	SETARIA SP.		XANTHIUM STRUM>
	Pest Name					COMMON RAGWEED	FOXTAIL MILLET		HEART-LEAF COC>
	Crop Code							GLXMA	
	BBCH Scale							BSOY	
	Crop Scientific Name							GLYCINE MAX	
	Crop Name							SOYBEAN	
	Part Rated					PLOT P	PLOT P	PLOT C	PLOT P
	Rating Date					6/20/2013	6/20/2013	6/13/2013	7/12/2013
	Rating Type					CONTRO	CONTRO	PHYGEN	CONTRO
	Rating Unit					%	%	%	%
	Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.					51 21	51 21	44 14	73 43
	Trt-Eval Interval					21 DA-B	21 DA-B	14 DA-B	0 DA-C
	ARM Action Codes					P	P	P	P
	Number of Decimals					0	0	0	0
1	ZIDUA	149	g ai/ha	B	101	85	90	0	60
	VERDICT	244	g ai/ha	B	503	100	95	0	30
	ROUNDUP POWERMAX	870	g ae/ha	B	603	100	100	0	60
	MSO	1	% v/v	B	1001	100	100	0	90
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	96	96	0	60
2	ZIDUA	149	g ai/ha	B	102	100	85	0	30
	VERDICT	244	g ai/ha	B	504	100	70	0	50
	SENCOR 75DF	525	g ai/ha	B	601	100	95	0	85
	ROUNDUP POWERMAX	870	g ae/ha	B	903	100	85	0	80
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	84	0	61
3	ZIDUA	149	g ai/ha	B	103	90	95	0	60
	SHARPEN	25	g ai/ha	B	507	100	100	0	75
	ROUNDUP POWERMAX	870	g ae/ha	B	703	90	90	0	65
	MSO	1	% v/v	B	1008	100	100	0	30
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	95	96	0	58
4	ZIDUA	149	g ai/ha	B	104	90	60	0	45
	SHARPEN	25	g ai/ha	B	305	85	60	0	60
	SENCOR 75DF	525	g ai/ha	B	705	100	90	0	75
	ROUNDUP POWERMAX	870	g ae/ha	B	906	70	90	0	70
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	86	75	0	63
5	SHARPEN	25	g ai/ha	B	105	85	35	0	90
	ROUNDUP POWERMAX	870	g ae/ha	B	408	100	50	0	70
	MSO	1	% v/v	B	604	90	60	0	65
	N-PAK AMS	2.5	% v/v	B	1004	95	50	0	95
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	93	49	0	80

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Unit	Appl Code	Plot	4	5	6	7
	Pest Type					W WEED	W WEED		W WEED
	Pest Code					AMBEL	SETSS		XANST
	Pest Scientific Name					AMBROSIA ARTEM>	SETARIA SP.		XANTHIUM STRUM>
	Pest Name					COMMON RAGWEED	FOXTAIL MILLET		HEART-LEAF COC>
	Crop Code							GLXMA	
	BBCH Scale							BSOY	
	Crop Scientific Name							GLYCINE MAX	
	Crop Name							SOYBEAN	
	Part Rated					PLOT P	PLOT P	PLOT C	PLOT P
	Rating Date					6/20/2013	6/20/2013	6/13/2013	7/12/2013
	Rating Type					CONTRO	CONTRO	PHYGEN	CONTRO
	Rating Unit					%	%	%	%
	Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.					51 21	51 21	44 14	73 43
	Trt-Eval Interval					21 DA-B	21 DA-B	14 DA-B	0 DA-C
	ARM Action Codes					P	P	P	P
	Number of Decimals					0	0	0	0
6	SHARPEN	50	g ai/ha	B	106	100	50	0	90
	ROUNDUP POWERMAX	870	g ae/ha	B	508	100	50	0	35
	MSO	1	% v/v	B	804	100	70	0	78
	N-PAK AMS	2.5	% v/v	B	1003	95	75	0	92
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	99	61	0	74
7	SHARPEN	25	g ai/ha	B	107	85	70	0	80
	SENCOR 75DF	525	g ai/ha	B	406	95	65	0	90
	ROUNDUP POWERMAX	870	g ae/ha	B	606	80	70	0	70
	MSO	1	% v/v	B	1002	100	90	0	90
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	90	74	0	83
8	OPTILL	95	g ai/ha	B	108	100	100	0	50
	OUTLOOK	525	g ai/ha	B	307	100	100	0	70
	ROUNDUP POWERMAX	870	g ae/ha	B	803	80	100	0	78
	MSO	1	% v/v	B	901	100	100	0	95
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	95	100	0	73
9	VERDICT	244	g ai/ha	B	201	100	90	0	20
	OUTLOOK	630	g ai/ha	B	506	100	70	0	60
	ROUNDUP POWERMAX	870	g ae/ha	B	602	100	80	0	70
	MSO	1	% v/v	B	1007	100	95	0	30
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	84	0	45
10	WEEDAR	533	g ai/ha	B	202	100	100	0	40
	VALOR	73	g ai/ha	B	404	95	70	0	72
	CLASSIC	25.4	g ai/ha	B	607	100	100	0	90
	ROUNDUP POWERMAX	870	g ae/ha	B	808	100	90	0	40
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	99	90	0	61
11	WEEDAR	533	g ai/ha	B	203	95	60	0	30
	AUTHORITY MTZ	504	g ai/ha	B	407	100	80	0	40
	ROUNDUP POWERMAX	870	g ae/ha	B	707	100	85	0	85
	N-PAK AMS	2.5	% v/v	B	1006	60	70	0	70
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	89	74	0	56

Purdue University Weed Science

Pest Type						W WEED		W WEED				W WEED
Pest Code						AMBEL		SETSS				XANST
Pest Scientific Name						AMBROSIA ARTEM>		SETARIA SP.				XANTHIUM STRUM>
Pest Name						COMMON RAGWEED		FOXTAIL MILLET				HEART-LEAF COC>
Crop Code										GLXMA		
BBCH Scale										BSOY		
Crop Scientific Name										GLYCINE MAX		
Crop Name										SOYBEAN		
Part Rated						PLOT P		PLOT P		PLOT C		PLOT P
Rating Date						6/20/2013		6/20/2013		6/13/2013		7/12/2013
Rating Type						CONTRO		CONTRO		PHYGEN		CONTRO
Rating Unit						%		%		%		%
Sample Size, Unit						1 PLOT		1 PLOT		1 PLOT		1 PLOT
Days After First/Last Applic.						51 21		51 21		44 14		73 43
Trt-Eval Interval						21 DA-B		21 DA-B		14 DA-B		0 DA-C
ARM Action Codes						P		P		P		P
Number of Decimals						0		0		0		0
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	4		5		6		7
12	WEEDAR	533	g ai/ha	B	204	100		90		0		50
	PREFIX	1490	g ai/ha	B	505	100		60		0		70
	ROUNDUP POWERMAX	870	g ae/ha	B	608	100		95		0		20
	N-PAK AMS	2.5	% v/v	B	904	100		65		0		60
	ROUNDUP POWERMAX	870	g ae/ha	C								
	N-PAK AMS	2.5	% v/v	C								
					Mean =	100		78		0		50
13	WEEDAR	533	g ai/ha	B	205	95		90		0		70
	ANTHEM	170	g ai/ha	B	501	90		80		0		75
	ROUNDUP POWERMAX	870	g ae/ha	B	706	95		80		0		70
	N-PAK AMS	2.5	% v/v	B	905	90		75		0		85
	ROUNDUP POWERMAX	870	g ae/ha	C								
	N-PAK AMS	2.5	% v/v	C								
					Mean =	93		81		0		75
14	WEEDAR	533	g ai/ha	B	206	100		70		0		80
	FIERCE	240	g ai/ha	B	401	100		85		0		60
	ROUNDUP POWERMAX	870	g ae/ha	B	701	100		100		0		80
	N-PAK AMS	2.5	% v/v	B	805	100		90		0		85
	ROUNDUP POWERMAX	870	g ae/ha	C								
	N-PAK AMS	2.5	% v/v	C								
					Mean =	100		86		0		76
15	WEEDAR	533	g ai/ha	B	207	97*		85		0		85
	SONIC	294	g ai/ha	B	306	100		95		0		78
	ROUNDUP POWERMAX	870	g ae/ha	B	605	100		85		0		85
	N-PAK AMS	2.5	% v/v	B	806	100		80		0		87
	ROUNDUP POWERMAX	870	g ae/ha	C								
	N-PAK AMS	2.5	% v/v	C								
					Mean =	99		86		0		84
16	SHARPEN	25	g ai/ha	A	208	95		0		0		78
	ROUNDUP POWERMAX	870	g ae/ha	A	308	100		0		0		75
	MSO	1	% v/v	A	704	85		0		0		60
	N-PAK AMS	2.5	% v/v	A	807	85		0		0		30
	ROUNDUP POWERMAX	870	g ae/ha	C								
	N-PAK AMS	2.5	% v/v	C								
					Mean =	91		0		0		61
17	SHARPEN	50	g ai/ha	A	301	20		0		0		45
	ROUNDUP POWERMAX	870	g ae/ha	A	502	36*		0		0		50
	MSO	1	% v/v	A	802	50		0		0		90
	N-PAK AMS	2.5	% v/v	A	1005	30		0		0		90
	ROUNDUP POWERMAX	870	g ae/ha	C								
	N-PAK AMS	2.5	% v/v	C								
					Mean =	34		0		0		69
18	WEEDAR	533	g ai/ha	B	302	70		50		0		45
	ROUNDUP POWERMAX	870	g ae/ha	B	405	90		30		0		70
	N-PAK AMS	2.5	% v/v	B	708	100		35		0		85
	ROUNDUP POWERMAX	870	g ae/ha	C	907	95		70		0		50
	N-PAK AMS	2.5	% v/v	C								
					Mean =	89		46		0		63

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Pest Type			W WEED	W WEED		W WEED
Pest Code			AMBEL	SETSS		XANST
Pest Scientific Name			AMBROSIA ARTEM>	SETARIA SP.		XANTHIUM STRUM>
Pest Name			COMMON RAGWEED	FOXTAIL MILLET		HEART-LEAF COC>
Crop Code					GLXMA	
BBCH Scale					BSOY	
Crop Scientific Name					GLYCINE MAX	
Crop Name					SOYBEAN	
Part Rated			PLOT P	PLOT P	PLOT C	PLOT P
Rating Date			6/20/2013	6/20/2013	6/13/2013	7/12/2013
Rating Type			CONTRO	CONTRO	PHYGEN	CONTRO
Rating Unit			%	%	%	%
Sample Size, Unit			1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.			51 21	51 21	44 14	73 43
Trt-Eval Interval			21 DA-B	21 DA-B	14 DA-B	0 DA-C
ARM Action Codes			P	P	P	P
Number of Decimals			0	0	0	0
Trt Treatment No. Name	Rate	Rate Unit	Appl Code Plot	4	5	6	7
19 UNTREATED CHECK			303	0	0	0	0
			402	0	0	0	0
			702	0	0	0	0
			902	0	0	0	0
			Mean =	0	0	0	0
20 UNTREATED CHECK			304	0	0	0	0
			403	0	0	0	0
			801	0	0	0	0
			908	0	0	0	0
			Mean =	0	0	0	0

Purdue University Weed Science

Pest Type					W WEED	W WEED	W WEED	W WEED
Pest Code					AMBEL	SETSS	IPOSS	XANST
Pest Scientific Name					AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	XANTHIUM STRUM>
Pest Name					COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	HEART-LEAF COC>
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Part Rated					PLOT P	PLOT P	PLOT P	PLOT P
Rating Date					7/12/2013	7/12/2013	7/12/2013	8/9/2013
Rating Type					CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit					%	%	%	%
Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.					73 43	73 43	73 43	101 28
Trt-Eval Interval					0 DA-C	0 DA-C	0 DA-C	28 DA-C
ARM Action Codes					P	P	P	P
Number of Decimals					0	0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	8	9	10	11
1	ZIDUA	149	g ai/ha	B	101	88	90	30	100
	VERDICT	244	g ai/ha	B	503	90	70	90	100
	ROUNDUP POWERMAX	870	g ae/ha	B	603	95	95	40	100
	MSO	1	% v/v	B	1001	95	75	90	100
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	92	83	63	100
2	ZIDUA	149	g ai/ha	B	102	90	95	70	100
	VERDICT	244	g ai/ha	B	504	70	50	60	100
	SENCOR 75DF	525	g ai/ha	B	601	90	90	40	100
	ROUNDUP POWERMAX	870	g ae/ha	B	903	90	77	60	100
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	85	78	58	100
3	ZIDUA	149	g ai/ha	B	103	95	95	40	100
	SHARPEN	25	g ai/ha	B	507	90	95	100	100
	ROUNDUP POWERMAX	870	g ae/ha	B	703	80	75	88	100
	MSO	1	% v/v	B	1008	95	90	95	100
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	90	89	81	100
4	ZIDUA	149	g ai/ha	B	104	85	65	40	100
	SHARPEN	25	g ai/ha	B	305	95	80	90	100
	SENCOR 75DF	525	g ai/ha	B	705	90	85	95	100
	ROUNDUP POWERMAX	870	g ae/ha	B	906	95*	75	95	100
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	91	76	80	100
5	SHARPEN	25	g ai/ha	B	105	90	30	95	100
	ROUNDUP POWERMAX	870	g ae/ha	B	408	90	20	95	100
	MSO	1	% v/v	B	604	55	20	85	100
	N-PAK AMS	2.5	% v/v	B	1004	95	20	95	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	83	23	93	100

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Pest Type						W WEED	W WEED	W WEED	W WEED
Pest Code						AMBEL	SETSS	IPOSS	XANST
Pest Scientific Name						AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	XANTHIUM STRUM>
Pest Name						COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	HEART-LEAF COC>
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Part Rated						PLOT P	PLOT P	PLOT P	PLOT P
Rating Date						7/12/2013	7/12/2013	7/12/2013	8/9/2013
Rating Type						CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit						%	%	%	%
Sample Size, Unit						1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.						73 43	73 43	73 43	101 28
Trt-Eval Interval						0 DA-C	0 DA-C	0 DA-C	28 DA-C
ARM Action Codes						P	P	P	P
Number of Decimals						0	0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	8	9	10	11
6	SHARPEN	50	g ai/ha	B	106	85	30	90	100
	ROUNDUP POWERMAX	870	g ae/ha	B	508	90	30	90	100
	MSO	1	% v/v	B	804	90	20	40	100
	N-PAK AMS	2.5	% v/v	B	1003	93	20	95	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	90	25	79	100
7	SHARPEN	25	g ai/ha	B	107	89	35	90	100
	SENCOR 75DF	525	g ai/ha	B	406	85	35	95	100
	ROUNDUP POWERMAX	870	g ae/ha	B	606	65	40	90	100
	MSO	1	% v/v	B	1002	90	30	85	100
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	82	35	90	100
8	OPTILL	95	g ai/ha	B	108	95	95	60	100
	OUTLOOK	525	g ai/ha	B	307	93	85	95	100
	ROUNDUP POWERMAX	870	g ae/ha	B	803	80	89	95	100
	MSO	1	% v/v	B	901	95	90	30	100
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	91	90	70	100
9	VERDICT	244	g ai/ha	B	201	85	45	35	100
	OUTLOOK	630	g ai/ha	B	506	92	40	95	100
	ROUNDUP POWERMAX	870	g ae/ha	B	602	87	35	60	100
	MSO	1	% v/v	B	1007	85	50	90	100
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	87	43	70	100
10	WEEDAR	533	g ai/ha	B	202	90	90	90	100
	VALOR	73	g ai/ha	B	404	90	50	40	100
	CLASSIC	25.4	g ai/ha	B	607	95	95	95	100
	ROUNDUP POWERMAX	870	g ae/ha	B	808	85	70	90	100
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	90	76	79	100
11	WEEDAR	533	g ai/ha	B	203	80	60	90	100
	AUTHORITY MTZ	504	g ai/ha	B	407	85	50	90	100
	ROUNDUP POWERMAX	870	g ae/ha	B	707	90	85	95	100
	N-PAK AMS	2.5	% v/v	B	1006	70	40	90	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	81	59	91	100

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Pest Type						W WEED	W WEED	W WEED	W WEED
Pest Code						AMBEL	SETSS	IPOSS	XANST
Pest Scientific Name						AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	XANTHIUM STRUM>
Pest Name						COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	HEART-LEAF COC>
Crop Code									
BBCH Scale									
Crop Scientific Name									
Crop Name									
Part Rated						PLOT P	PLOT P	PLOT P	PLOT P
Rating Date						7/12/2013	7/12/2013	7/12/2013	8/9/2013
Rating Type						CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit						%	%	%	%
Sample Size, Unit						1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.						73 43	73 43	73 43	101 28
Trt-Eval Interval						0 DA-C	0 DA-C	0 DA-C	28 DA-C
ARM Action Codes						P	P	P	P
Number of Decimals						0	0	0	0
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	8	9	10	11
12	WEEDAR	533	g ai/ha	B	204	85	80	35	100
	PREFIX	1490	g ai/ha	B	505	95	30	93	100
	ROUNDUP POWERMAX	870	g ae/ha	B	608	90	85	95	100
	N-PAK AMS	2.5	% v/v	B	904	92	20	70	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	91	54	73	100
13	WEEDAR	533	g ai/ha	B	205	87	90	90	100
	ANTHEM	170	g ai/ha	B	501	75	77	100*	100
	ROUNDUP POWERMAX	870	g ae/ha	B	706	87	70	95	100
	N-PAK AMS	2.5	% v/v	B	905	90	80	90	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	85	79	94	100
14	WEEDAR	533	g ai/ha	B	206	90	87	90	100
	FIERCE	240	g ai/ha	B	401	90	75	85	100
	ROUNDUP POWERMAX	870	g ae/ha	B	701	93	90	40	100
	N-PAK AMS	2.5	% v/v	B	805	95	92	95	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	92	86	78	100
15	WEEDAR	533	g ai/ha	B	207	82	86	90	100
	SONIC	294	g ai/ha	B	306	90	85	95	100
	ROUNDUP POWERMAX	870	g ae/ha	B	605	95	70	90	100
	N-PAK AMS	2.5	% v/v	B	806	95	40	95	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	91	70	93	100
16	SHARPEN	25	g ai/ha	A	208	95	0	95	100
	ROUNDUP POWERMAX	870	g ae/ha	A	308	90	20	95	100
	MSO	1	% v/v	A	704	60	0	80	100
	N-PAK AMS	2.5	% v/v	A	807	50	0	90	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	74	5	90	100
17	SHARPEN	50	g ai/ha	A	301	40	0	85	100
	ROUNDUP POWERMAX	870	g ae/ha	A	502	40	20	85	100
	MSO	1	% v/v	A	802	20	0	90	100
	N-PAK AMS	2.5	% v/v	A	1005	85	0	95	100
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	46	5	89	100
18	WEEDAR	533	g ai/ha	B	302	35	30	68	100
	ROUNDUP POWERMAX	870	g ae/ha	B	405	75	30	90	100
	N-PAK AMS	2.5	% v/v	B	708	92	30	85	100
	ROUNDUP POWERMAX	870	g ae/ha	C	907	90	20	95	100
	N-PAK AMS	2.5	% v/v	C					
					Mean =	73	28	85	100

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Pest Type			W WEED	W WEED	W WEED	W WEED
Pest Code			AMBEL	SETSS	IPOSS	XANST
Pest Scientific Name			AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	XANTHIUM STRUM>
Pest Name			COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	HEART-LEAF COC>
Crop Code						
BBCH Scale						
Crop Scientific Name						
Crop Name						
Part Rated			PLOT P	PLOT P	PLOT P	PLOT P
Rating Date			7/12/2013	7/12/2013	7/12/2013	8/9/2013
Rating Type			CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit			%	%	%	%
Sample Size, Unit			1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.			73 43	73 43	73 43	101 28
Trt-Eval Interval			0 DA-C	0 DA-C	0 DA-C	28 DA-C
ARM Action Codes			P	P	P	P
Number of Decimals			0	0	0	0
Trt No.	Treatment Name	Rate	Rate Unit / Appl Code / Plot	8	9	10	11
19	UNTREATED CHECK		303	0	0	0	0
			402	0	0	0	0
			702	0	0	0	0
			902	0	0	0	0
			Mean =	0	0	0	0
20	UNTREATED CHECK		304	0	0	0	0
			403	0	0	0	0
			801	0	0	0	0
			908	0	0	0	0
			Mean =	0	0	0	0

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Trt No.	Treatment Name	Rate	Unit	Appl Code	Plot	12	13	14	15
	Pest Type					W WEED	W WEED	W WEED	
	Pest Code					AMBEL	SETSS	IPOSS	
	Pest Scientific Name					AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	
	Pest Name					COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	
	Crop Code								GLXMA
	BBCH Scale								BSOY
	Crop Scientific Name								Glycine max
	Crop Name								Soybean
	Part Rated					PLOT P	PLOT P	PLOT P	YIELD C
	Rating Date					8/9/2013	8/9/2013	8/9/2013	10/4/2013
	Rating Type					CONTRO	CONTRO	CONTRO	YIELD
	Rating Unit					%	%	%	lb/plot
	Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.					101 28	101 28	101 28	157 84
	Trt-Eval Interval					28 DA-C	28 DA-C	28 DA-C	
	ARM Action Codes					P	P	P	
	Number of Decimals					0	0	0	
1	ZIDUA	149	g ai/ha	B	101	100	100	100	16.5381529*
	VERDICT	244	g ai/ha	B	503	100	100	100	15.4497925
	ROUNDUP POWERMAX	870	g ae/ha	B	603	100	100	100	21.0418261
	MSO	1	% v/v	B	1001	100	100	100	16.7940307
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	17.4559506
2	ZIDUA	149	g ai/ha	B	102	100	100	100	15.0196315
	VERDICT	244	g ai/ha	B	504	100	100	100	17.8694248
	SENCOR 75DF	525	g ai/ha	B	601	100	100	100	15.9337176
	ROUNDUP POWERMAX	870	g ae/ha	B	903	100	100	100	17.9231888
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	16.6864907
3	ZIDUA	149	g ai/ha	B	103	100	100	100	14.3206264
	SHARPEN	25	g ai/ha	B	507	100	100	100	17.4930287
	ROUNDUP POWERMAX	870	g ae/ha	B	703	100	100	100	17.1166477
	MSO	1	% v/v	B	1008	100	100	100	14.8583235
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.9471566
4	ZIDUA	149	g ai/ha	B	104	100	100	100	15.8261816
	SHARPEN	25	g ai/ha	B	305	100	100	100	13.0301523
	SENCOR 75DF	525	g ai/ha	B	705	100	100	100	14.3206264
	ROUNDUP POWERMAX	870	g ae/ha	B	906	100	100	100	14.3206264
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	14.3743967
5	SHARPEN	25	g ai/ha	B	105	100	100	100	12.9226163
	ROUNDUP POWERMAX	870	g ae/ha	B	408	100	100	100	12.4637542
	MSO	1	% v/v	B	604	100	100	100	19.0523469
	N-PAK AMS	2.5	% v/v	B	1004	100	100	100	15.1809405
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	14.9049145

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	12	13	14	15
	Pest Type					W WEED	W WEED	W WEED	
	Pest Code					AMBEL	SETSS	IPOSS	
	Pest Scientific Name					AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	
	Pest Name					COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	
	Crop Code								GLXMA
	BBCH Scale								BSOY
	Crop Scientific Name								Glycine max
	Crop Name								Soybean
	Part Rated					PLOT P	PLOT P	PLOT P	YIELD C
	Rating Date					8/9/2013	8/9/2013	8/9/2013	10/4/2013
	Rating Type					CONTRO	CONTRO	CONTRO	YIELD
	Rating Unit					%	%	%	lb/plot
	Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.					101 28	101 28	101 28	157 84
	Trt-Eval Interval					28 DA-C	28 DA-C	28 DA-C	
	ARM Action Codes					P	P	P	
	Number of Decimals					0	0	0	
6	SHARPEN	50	g ai/ha	B	106	100	100	100	14.2668544
	ROUNDUP POWERMAX	870	g ae/ha	B	508	100	100	100	14.9363345
	MSO	1	% v/v	B	804	100	100	100	18.5146499
	N-PAK AMS	2.5	% v/v	B	1003	100	100	100	15.0734035
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.6978106
7	SHARPEN	25	g ai/ha	B	107	100	100	100	13.5140924
	SENCOR 75DF	525	g ai/ha	B	406	100	100	100	15.5573286
	ROUNDUP POWERMAX	870	g ae/ha	B	606	100	100	100	15.7186376
	MSO	1	% v/v	B	1002	100	100	100	15.4497925
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.0599628
8	OPTILL	95	g ai/ha	B	108	100	100	100	14.5600755
	OUTLOOK	525	g ai/ha	B	307	100	100	100	12.8688443
	ROUNDUP POWERMAX	870	g ae/ha	B	803	100	100	100	19.6975960
	MSO	1	% v/v	B	901	100	100	100	13.0839243
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.0526100
9	VERDICT	244	g ai/ha	B	201	100	100	100	16.1487976
	OUTLOOK	630	g ai/ha	B	506	100	100	100	15.3422485
	ROUNDUP POWERMAX	870	g ae/ha	B	602	100	100	100	17.7618888
	MSO	1	% v/v	B	1007	100	100	100	14.5357075
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.9471606
10	WEEDAR	533	g ai/ha	B	202	100	100	100	14.4819354
	VALOR	73	g ai/ha	B	404	100	100	100	15.6648576
	CLASSIC	25.4	g ai/ha	B	607	100	100	100	17.2779477
	ROUNDUP POWERMAX	870	g ae/ha	B	808	100	100	100	16.0113766
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.8590293
11	WEEDAR	533	g ai/ha	B	203	100	100	100	16.6327227
	AUTHORITY MTZ	504	g ai/ha	B	407	100	100	100	12.8688443
	ROUNDUP POWERMAX	870	g ae/ha	B	707	100	100	100	16.9015677
	N-PAK AMS	2.5	% v/v	B	1006	100	100	100	15.5573286
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.4901158

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Pest Type					W WEED	W WEED	W WEED	
Pest Code					AMBEL	SETSS	IPOSS	
Pest Scientific Name					AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	
Pest Name					COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	
Crop Code								GLXMA
BBCH Scale								BSOY
Crop Scientific Name								Glycine max
Crop Name								Soybean
Part Rated					PLOT P	PLOT P	PLOT P	YIELD C
Rating Date					8/9/2013	8/9/2013	8/9/2013	10/4/2013
Rating Type					CONTRO	CONTRO	CONTRO	YIELD
Rating Unit					%	%	%	lb/plot
Sample Size, Unit					1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.					101 28	101 28	101 28	157 84
Trt-Eval Interval					28 DA-C	28 DA-C	28 DA-C	
ARM Action Codes					P	P	P	
Number of Decimals					0	0	0	
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	12	13	14	15
12	WEEDAR	533	g ai/ha	B	204	100	100	100	15.8261816
	PREFIX	1490	g ai/ha	B	505	100	100	100	15.5035566
	ROUNDUP POWERMAX	870	g ae/ha	B	608	100	100	100	16.0113766
	N-PAK AMS	2.5	% v/v	B	904	100	100	100	20.6116661
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	16.9881952
13	WEEDAR	533	g ai/ha	B	205	100	100	100	14.6970155
	ANTHEM	170	g ai/ha	B	501	100	100	100	15.3960205
	ROUNDUP POWERMAX	870	g ae/ha	B	706	100	100	100	15.3422485
	N-PAK AMS	2.5	% v/v	B	905	100	100	100	15.6111006
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	15.2615963
14	WEEDAR	533	g ai/ha	B	206	100	100	100	12.4924562
	FIERCE	240	g ai/ha	B	401	100	100	100	13.2386511*
	ROUNDUP POWERMAX	870	g ae/ha	B	701	100	100	100	14.5894795
	N-PAK AMS	2.5	% v/v	B	805	100	100	100	15.6648576
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	13.9963611
15	WEEDAR	533	g ai/ha	B	207	100	100	100	11.9547592
	SONIC	294	g ai/ha	B	306	100	100	100	12.1698392
	ROUNDUP POWERMAX	870	g ae/ha	B	605	100	100	100	16.3638706
	N-PAK AMS	2.5	% v/v	B	806	100	100	100	14.2130904
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	13.6753899
16	SHARPEN	25	g ai/ha	A	208	100	100	100	10.5824521
	ROUNDUP POWERMAX	870	g ae/ha	A	308	100	100	100	9.1849069
	MSO	1	% v/v	A	704	100	100	100	15.6648576
	N-PAK AMS	2.5	% v/v	A	807	100	100	100	13.2990053
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	12.1828055
17	SHARPEN	50	g ai/ha	A	301	100	100	100	13.3837094*
	ROUNDUP POWERMAX	870	g ae/ha	A	502	100	100	100	14.8045515
	MSO	1	% v/v	A	802	100	100	100	14.2668544
	N-PAK AMS	2.5	% v/v	A	1005	100	100	100	14.7507875
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	14.3014757
18	WEEDAR	533	g ai/ha	B	302	100	100	100	14.1055464
	ROUNDUP POWERMAX	870	g ae/ha	B	405	100	100	100	14.9120955
	N-PAK AMS	2.5	% v/v	B	708	100	100	100	13.7000514
	ROUNDUP POWERMAX	870	g ae/ha	C	907	100	100	100	17.0091107
	N-PAK AMS	2.5	% v/v	C					
					Mean =	100	100	100	14.9317010

Purdue University Weed Science

Pest Type			W WEED	W WEED	W WEED	
Pest Code			AMBEL	SETSS	IPOSS	
Pest Scientific Name			AMBROSIA ARTEM>	SETARIA SP.	IPOMOEA SP.	
Pest Name			COMMON RAGWEED	FOXTAIL MILLET	MORNING GLORY	
Crop Code						GLXMA
BBCH Scale						BSOY
Crop Scientific Name						Glycine max
Crop Name						Soybean
Part Rated			PLOT P	PLOT P	PLOT P	YIELD C
Rating Date			8/9/2013	8/9/2013	8/9/2013	10/4/2013
Rating Type			CONTRO	CONTRO	CONTRO	YIELD
Rating Unit			%	%	%	lb/plot
Sample Size, Unit			1 PLOT	1 PLOT	1 PLOT	1 PLOT
Days After First/Last Applic.			101 28	101 28	101 28	157 84
Trt-Eval Interval			28 DA-C	28 DA-C	28 DA-C	
ARM Action Codes			P	P	P	
Number of Decimals			0	0	0	
Trt No.	Treatment Name	Rate Unit	Appl Code	Plot	12	13	14	15
19	UNTREATED CHECK			303	0	0	0	3.8893284
				402	0	0	0	5.0184865
				702	0	0	0	4.2119524
				902	0	0	0	5.8250356
				Mean =	0	0	0	4.7362007
20	UNTREATED CHECK			304	0	0	0	2.8139343
				403	0	0	0	3.4054033
				801	0	0	0	4.7496415
				908	0	0	0	4.1632719*
				Mean =	0	0	0	3.7830627

Purdue University Weed Science

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
Part Rated						YIELD C	YIELD C
Rating Date						10/4/2013	10/4/2013
Rating Type						YIELD	YIELD
Rating Unit						bu/ac	kg/ha
Sample Size, Unit						1 PLOT	1 PLOT
Days After First/Last Applic.						157 84	157 84
Trt-Eval Interval							
ARM Action Codes						TY1	TY2
Number of Decimals						1	1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	16	17
1	ZIDUA	149	g ai/ha	B	101	45.8*	3081.4*
	VERDICT	244	g ai/ha	B	503	42.8	2878.6
	ROUNDUP POWERMAX	870	g ae/ha	B	603	58.3	3920.5
	MSO	1	% v/v	B	1001	46.5	3129.0
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	48.4	3252.4
2	ZIDUA	149	g ai/ha	B	102	41.6	2798.4
	VERDICT	244	g ai/ha	B	504	49.5	3329.4
	SENCOR 75DF	525	g ai/ha	B	601	44.1	2968.8
	ROUNDUP POWERMAX	870	g ae/ha	B	903	49.7	3339.4
	MSO	1	% v/v	B			
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	46.2	3109.0
3	ZIDUA	149	g ai/ha	B	103	39.7	2668.2
	SHARPEN	25	g ai/ha	B	507	48.5	3259.3
	ROUNDUP POWERMAX	870	g ae/ha	B	703	47.4	3189.2
	MSO	1	% v/v	B	1008	41.2	2768.4
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	44.2	2971.3
4	ZIDUA	149	g ai/ha	B	104	43.8	2948.7
	SHARPEN	25	g ai/ha	B	305	36.1	2427.8
	SENCOR 75DF	525	g ai/ha	B	705	39.7	2668.2
	ROUNDUP POWERMAX	870	g ae/ha	B	906	39.7	2668.2
	MSO	1	% v/v	B			
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	39.8	2678.2
5	SHARPEN	25	g ai/ha	B	105	35.8	2407.7
	ROUNDUP POWERMAX	870	g ae/ha	B	408	34.5	2322.2
	MSO	1	% v/v	B	604	52.8	3549.8
	N-PAK AMS	2.5	% v/v	B	1004	42.1	2828.5
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	41.3	2777.1

Purdue University Weed Science

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
Part Rated						YIELD C	YIELD C
Rating Date						10/4/2013	10/4/2013
Rating Type						YIELD	YIELD
Rating Unit						bu/ac	kg/ha
Sample Size, Unit						1 PLOT	1 PLOT
Days After First/Last Applic.						157 84	157 84
Trt-Eval Interval							
ARM Action Codes						TY1	TY2
Number of Decimals						1	1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	16	17
6	SHARPEN	50	g ai/ha	B	106	39.5	2658.2
	ROUNDUP POWERMAX	870	g ae/ha	B	508	41.4	2782.9
	MSO	1	% v/v	B	804	51.3	3449.6
	N-PAK AMS	2.5	% v/v	B	1003	41.8	2808.5
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	43.5	2924.8
7	SHARPEN	25	g ai/ha	B	107	37.4	2517.9
	SENCOR 75DF	525	g ai/ha	B	406	43.1	2898.6
	ROUNDUP POWERMAX	870	g ae/ha	B	606	43.5	2928.7
	MSO	1	% v/v	B	1002	42.8	2878.6
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	41.7	2806.0
8	OPTILL	95	g ai/ha	B	108	40.3	2712.8
	OUTLOOK	525	g ai/ha	B	307	35.7	2397.7
	ROUNDUP POWERMAX	870	g ae/ha	B	803	54.6	3670.0
	MSO	1	% v/v	B	901	36.2	2437.8
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	41.7	2804.6
9	VERDICT	244	g ai/ha	B	201	44.7	3008.8
	OUTLOOK	630	g ai/ha	B	506	42.5	2858.6
	ROUNDUP POWERMAX	870	g ae/ha	B	602	49.2	3309.4
	MSO	1	% v/v	B	1007	40.3	2708.3
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	44.2	2971.3
10	WEEDAR	533	g ai/ha	B	202	40.1	2698.3
	VALOR	73	g ai/ha	B	404	43.4	2918.7
	CLASSIC	25.4	g ai/ha	B	607	47.9	3219.2
	ROUNDUP POWERMAX	870	g ae/ha	B	808	44.4	2983.2
	N-PAK AMS	2.5	% v/v	B			
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	43.9	2954.8
11	WEEDAR	533	g ai/ha	B	203	46.1	3099.0
	AUTHORITY MTZ	504	g ai/ha	B	407	35.7	2397.7
	ROUNDUP POWERMAX	870	g ae/ha	B	707	46.8	3149.1
	N-PAK AMS	2.5	% v/v	B	1006	43.1	2898.6
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	42.9	2886.1

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	16	17
	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
	Part Rated					YIELD C	YIELD C
	Rating Date					10/4/2013	10/4/2013
	Rating Type					YIELD	YIELD
	Rating Unit					bu/ac	kg/ha
	Sample Size, Unit					1 PLOT	1 PLOT
	Days After First/Last Applic.					157 84	157 84
	Trt-Eval Interval						
	ARM Action Codes					TY1	TY2
	Number of Decimals					1	1
12	WEEDAR	533	g ai/ha	B	204	43.8	2948.7
	PREFIX	1490	g ai/ha	B	505	43.0	2888.6
	ROUNDUP POWERMAX	870	g ae/ha	B	608	44.4	2983.2
	N-PAK AMS	2.5	% v/v	B	904	57.1	3840.3
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	47.1	3165.2
13	WEEDAR	533	g ai/ha	B	205	40.7	2738.3
	ANTHEM	170	g ai/ha	B	501	42.7	2868.6
	ROUNDUP POWERMAX	870	g ae/ha	B	706	42.5	2858.6
	N-PAK AMS	2.5	% v/v	B	905	43.3	2908.6
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	42.3	2843.5
14	WEEDAR	533	g ai/ha	B	206	34.6	2327.6
	FIERCE	240	g ai/ha	B	401	36.7*	2466.6*
	ROUNDUP POWERMAX	870	g ae/ha	B	701	40.4	2718.3
	N-PAK AMS	2.5	% v/v	B	805	43.4	2918.7
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	38.8	2607.8
15	WEEDAR	533	g ai/ha	B	207	33.1	2227.4
	SONIC	294	g ai/ha	B	306	33.7	2267.5
	ROUNDUP POWERMAX	870	g ae/ha	B	605	45.3	3048.9
	N-PAK AMS	2.5	% v/v	B	806	39.4	2648.2
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	37.9	2548.0
16	SHARPEN	25	g ai/ha	A	208	29.3	1971.7
	ROUNDUP POWERMAX	870	g ae/ha	A	308	25.4	1711.3
	MSO	1	% v/v	A	704	43.4	2918.7
	N-PAK AMS	2.5	% v/v	A	807	36.8	2477.9
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	33.8	2269.9
17	SHARPEN	50	g ai/ha	A	301	37.1*	2493.6*
	ROUNDUP POWERMAX	870	g ae/ha	A	502	41.0	2758.4
	MSO	1	% v/v	A	802	39.5	2658.2
	N-PAK AMS	2.5	% v/v	A	1005	40.9	2748.4
	ROUNDUP POWERMAX	870	g ae/ha	C			
	N-PAK AMS	2.5	% v/v	C			
					Mean =	39.6	2664.6
18	WEEDAR	533	g ai/ha	B	302	39.1	2628.1
	ROUNDUP POWERMAX	870	g ae/ha	B	405	41.3	2778.4
	N-PAK AMS	2.5	% v/v	B	708	38.0	2552.6
	ROUNDUP POWERMAX	870	g ae/ha	C	907	47.1	3169.1
	N-PAK AMS	2.5	% v/v	C			
					Mean =	41.4	2782.1

Purdue University Weed Science

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
Part Rated					YIELD C	YIELD C
Rating Date					10/4/2013	10/4/2013
Rating Type					YIELD	YIELD
Rating Unit					bu/ac	kg/ha
Sample Size, Unit					1 PLOT	1 PLOT
Days After First/Last Applic.					157 84	157 84
Trt-Eval Interval						
ARM Action Codes					TY1	TY2
Number of Decimals					1	1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	16	17
19	UNTREATED CHECK				303	10.8	724.7
					402	13.9	935.0
					702	11.7	784.8
					902	16.1	1085.3
					Mean =	13.1	882.4
20	UNTREATED CHECK				304	7.8	524.3
					403	9.4	634.5
					801	13.2	884.9
					908	11.5*	775.7*
					Mean =	10.5	704.9

Purdue University Weed Science

SOYBEAN WEED CONTROL IN NO/MIN TILL

Trial ID: 13S-SEP-CTS-10 Location: SEPAC Trial Year: 2013
Protocol ID: 13S-SEP-CTS-10 Investigator: Dr. Bill Johnson
Project ID: DEM-AWC-SOY01-2013 Study Director: JOE IKLEY
Sponsor Contact: BASF - GERY WELKER

Pest Type
W, WEED, G-BYRW7, G-WEDSTG = Weed or volunteer crop
Pest Code
XANST, XANTHIUM STRUMARIUM, = US
AMBEL, AMBROSIA ARTEMISIIFOLIA, = US
SETSS, SETARIA SP., = US
IPOSS, IPOMOEA SP., = US
Crop Code
GLXMA, BSOY, GLYCINE MAX, = US
Part Rated
PLOT = plot
YIELD = yield
P = Pest is Part Rated
C = Crop is Part Rated
Rating Type
CONTRO = control / burndown or knockdown
PHYGEN = phytotoxicity - general / injury
YIELD = yield
Rating Unit
% = percent
lb/plot = pounds per plot
bu/ac = bushels per acre
kg/ha = kilograms per hectare

PLOT = total plot
ARM Action Codes
P = Rating scale of 0 to 100 (e.g. % control or injury)
TY1 = 2.770483*[15]
TY2 = 186.3191*[15]

Purdue University Weed Science

SOYBEAN WEED CONTROL IN NO/MIN TILL

Trial ID: 13S-SEP-CTS-10 Location: SEPAC Trial Year: 2013
Protocol ID: 13S-SEP-CTS-10 Investigator: Dr. Bill Johnson
Project ID: DEM-AWC-SOY01-2013 Study Director: JOE IKLEY
Sponsor Contact: BASF - GERY WELKER

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4
	Pest Type				W WEED	W WEED	W WEED	W WEED
	Pest Code				XANST	AMBEL	XANST	AMBEL
	Pest Scientific Name				XANTHIUM STRUM>	AMBROSIA ARTEM>	XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				HEART-LEAF COC>	COMMON RAGWEED	HEART-LEAF COC>	COMMON RAGWEED
	Crop Code							
	BBCH Scale							
	Crop Scientific Name							
	Crop Name							
	Part Rated				PLOT P	PLOT P	PLOT P	PLOT P
	Rating Date				5/30/2013	5/30/2013	6/20/2013	6/20/2013
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				30 30	30 30	51 21	51 21
	Trt-Eval Interval				30 DA-A	30 DA-A	21 DA-B	21 DA-B
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
1	ZIDUA	149	g ai/ha	B			86 ab	96 a
	VERDICT	244	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
2	ZIDUA	149	g ai/ha	B			85 ab	100 a
	VERDICT	244	g ai/ha	B				
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
3	ZIDUA	149	g ai/ha	B			86 ab	95 a
	SHARPEN	25	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
4	ZIDUA	149	g ai/ha	B			99 a	86 a
	SHARPEN	25	g ai/ha	B				
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
5	SHARPEN	25	g ai/ha	B			85 ab	93 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				

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.
Missing data estimates are included in columns:Yates=4,8,10,15,16,17

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4
	Pest Type				W WEED	W WEED	W WEED	W WEED
	Pest Code				XANST	AMBEL	XANST	AMBEL
	Pest Scientific Name				XANTHIUM STRUM>	AMBROSIA ARTEM>	XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				HEART-LEAF COC>	COMMON RAGWEED	HEART-LEAF COC>	COMMON RAGWEED
	Crop Code							
	BBCH Scale							
	Crop Scientific Name							
	Crop Name							
	Part Rated				PLOT P	PLOT P	PLOT P	PLOT P
	Rating Date				5/30/2013	5/30/2013	6/20/2013	6/20/2013
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				30 30	30 30	51 21	51 21
	Trt-Eval Interval				30 DA-A	30 DA-A	21 DA-B	21 DA-B
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
6	SHARPEN	50	g ai/ha	B			89 ab	99 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
7	SHARPEN	25	g ai/ha	B			88 ab	90 a
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
8	OPTILL	95	g ai/ha	B			96 a	95 a
	OUTLOOK	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
9	VERDICT	244	g ai/ha	B			73 b	100 a
	OUTLOOK	630	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
10	WEEDAR	533	g ai/ha	B			96 a	99 a
	VALOR	73	g ai/ha	B				
	CLASSIC	25.4	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
11	WEEDAR	533	g ai/ha	B			86 ab	89 a
	AUTHORITY MTZ	504	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
12	WEEDAR	533	g ai/ha	B			94 a	100 a
	PREFIX	1490	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
13	WEEDAR	533	g ai/ha	B			86 ab	93 a
	ANTHEM	170	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4
	Pest Type				W WEED	W WEED	W WEED	W WEED
	Pest Code				XANST	AMBEL	XANST	AMBEL
	Pest Scientific Name				XANTHIUM STRUM>	AMBROSIA ARTEM>	XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				HEART-LEAF COC>	COMMON RAGWEED	HEART-LEAF COC>	COMMON RAGWEED
	Crop Code							
	BBCH Scale							
	Crop Scientific Name							
	Crop Name							
	Part Rated				PLOT P	PLOT P	PLOT P	PLOT P
	Rating Date				5/30/2013	5/30/2013	6/20/2013	6/20/2013
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				30 30	30 30	51 21	51 21
	Trt-Eval Interval				30 DA-A	30 DA-A	21 DA-B	21 DA-B
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
14	WEEDAR	533	g ai/ha	B			88 ab	100 a
	FIERCE	240	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
15	WEEDAR	533	g ai/ha	B			98 a	99 a
	SONIC	294	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
16	SHARPEN	25	g ai/ha	A	50 b	75 a	8 c	91 a
	ROUNDUP POWERMAX	870	g ae/ha	A				
	MSO	1	% v/v	A				
	N-PAK AMS	2.5	% v/v	A				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
17	SHARPEN	50	g ai/ha	A	90 a	91 a	15 c	34 b
	ROUNDUP POWERMAX	870	g ae/ha	A				
	MSO	1	% v/v	A				
	N-PAK AMS	2.5	% v/v	A				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
18	WEEDAR	533	g ai/ha	B			71 b	89 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
19	UNTREATED CHECK						0 c	0 c
20	UNTREATED CHECK						0 c	0 c
	LSD (P=.05)				28.3	32.7	12.7	11.3
	Standard Deviation				12.6	14.5	9.0	8.0
	CV				17.98	17.49	12.55	9.71
	Bartlett's X2				2.523	2.696	24.832	23.137
	P(Bartlett's X2)				0.112	0.101	0.099	0.027*
	Skewness				-0.7512	-1.0728	-1.289*	-2.001*
	Kurtosis				-0.9983	-0.1955	0.079	2.5354*

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	5	6	7	8
	Pest Type				W WEED		W WEED	W WEED
	Pest Code				SETSS		XANST	AMBEL
	Pest Scientific Name				SETARIA SP.		XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				FOXTAIL MILLET		HEART-LEAF COC>	COMMON RAGWEED
	Crop Code					GLXMA		
	BBCH Scale					BSOY		
	Crop Scientific Name					GLYCINE MAX		
	Crop Name					SOYBEAN		
	Part Rated				PLOT P	PLOT C	PLOT P	PLOT P
	Rating Date				6/20/2013	6/13/2013	7/12/2013	7/12/2013
	Rating Type				CONTRO	PHYGEN	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				51 21	44 14	73 43	73 43
	Trt-Eval Interval				21 DA-B	14 DA-B	0 DA-C	0 DA-C
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
1	ZIDUA	149	g ai/ha	B	96 ab	0 a	60 a	92 a
	VERDICT	244	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
2	ZIDUA	149	g ai/ha	B	84 ab	0 a	61 a	85 a
	VERDICT	244	g ai/ha	B				
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
3	ZIDUA	149	g ai/ha	B	96 ab	0 a	58 a	90 a
	SHARPEN	25	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
4	ZIDUA	149	g ai/ha	B	75 bc	0 a	63 a	91 a
	SHARPEN	25	g ai/ha	B				
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
5	SHARPEN	25	g ai/ha	B	49 d	0 a	80 a	83 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	5	6	7	8
	Pest Type				W WEED		W WEED	W WEED
	Pest Code				SETSS		XANST	AMBEL
	Pest Scientific Name				SETARIA SP.		XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				FOXTAIL MILLET		HEART-LEAF COC>	COMMON RAGWEED
	Crop Code					GLXMA		
	BBCH Scale					BSOY		
	Crop Scientific Name					GLYCINE MAX		
	Crop Name					SOYBEAN		
	Part Rated				PLOT P	PLOT C	PLOT P	PLOT P
	Rating Date				6/20/2013	6/13/2013	7/12/2013	7/12/2013
	Rating Type				CONTRO	PHYGEN	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				51 21	44 14	73 43	73 43
	Trt-Eval Interval				21 DA-B	14 DA-B	0 DA-C	0 DA-C
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
6	SHARPEN	50	g ai/ha	B	61 cd	0 a	74 a	90 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
7	SHARPEN	25	g ai/ha	B	74 bc	0 a	83 a	82 a
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
8	OPTILL	95	g ai/ha	B	100 a	0 a	73 a	91 a
	OUTLOOK	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
9	VERDICT	244	g ai/ha	B	84 ab	0 a	45 a	87 a
	OUTLOOK	630	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
10	WEEDAR	533	g ai/ha	B	90 ab	0 a	61 a	90 a
	VALOR	73	g ai/ha	B				
	CLASSIC	25.4	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
11	WEEDAR	533	g ai/ha	B	74 bc	0 a	56 a	81 a
	AUTHORITY MTZ	504	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
12	WEEDAR	533	g ai/ha	B	78 abc	0 a	50 a	91 a
	PREFIX	1490	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
13	WEEDAR	533	g ai/ha	B	81 abc	0 a	75 a	85 a
	ANTHEM	170	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	5	6	7	8
	Pest Type				W WEED		W WEED	W WEED
	Pest Code				SETSS		XANST	AMBEL
	Pest Scientific Name				SETARIA SP.		XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				FOXTAIL MILLET		HEART-LEAF COC>	COMMON RAGWEED
	Crop Code					GLXMA		
	BBCH Scale					BSOY		
	Crop Scientific Name					GLYCINE MAX		
	Crop Name					SOYBEAN		
	Part Rated				PLOT P	PLOT C	PLOT P	PLOT P
	Rating Date				6/20/2013	6/13/2013	7/12/2013	7/12/2013
	Rating Type				CONTRO	PHYGEN	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				51 21	44 14	73 43	73 43
	Trt-Eval Interval				21 DA-B	14 DA-B	0 DA-C	0 DA-C
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
14	WEEDAR	533	g ai/ha	B	86 ab	0 a	76 a	92 a
	FIERCE	240	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
15	WEEDAR	533	g ai/ha	B	86 ab	0 a	84 a	91 a
	SONIC	294	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
16	SHARPEN	25	g ai/ha	A	0 e	0 a	61 a	74 a
	ROUNDUP POWERMAX	870	g ae/ha	A				
	MSO	1	% v/v	A				
	N-PAK AMS	2.5	% v/v	A				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
17	SHARPEN	50	g ai/ha	A	0 e	0 a	69 a	46 b
	ROUNDUP POWERMAX	870	g ae/ha	A				
	MSO	1	% v/v	A				
	N-PAK AMS	2.5	% v/v	A				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
18	WEEDAR	533	g ai/ha	B	46 d	0 a	63 a	73 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
19	UNTREATED CHECK				0 e	0 a	0 b	0 c
20	UNTREATED CHECK				0 e	0 a	0 b	0 c
	LSD (P=.05)				13.8	0.0	25.9	17.1
	Standard Deviation				9.8	0.0	18.3	12.1
	CV				15.49	0.0	30.77	15.96
	Bartlett's X2				12.443	0.0	16.432	50.855
	P(Bartlett's X2)				0.571	.	0.493	0.001*
	Skewness				-0.8699*	.	-0.8634*	-1.8422*
	Kurtosis				-0.6873	.	-0.2266	2.0267*

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	9	10	11	12
	Pest Type				W WEED	W WEED	W WEED	W WEED
	Pest Code				SETSS	IPOSS	XANST	AMBEL
	Pest Scientific Name				SETARIA SP.	IPOMOEA SP.	XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				FOXTAIL MILLET	MORNING GLORY	HEART-LEAF COC>	COMMON RAGWEED
	Crop Code							
	BBCH Scale							
	Crop Scientific Name							
	Crop Name							
	Part Rated				PLOT P	PLOT P	PLOT P	PLOT P
	Rating Date				7/12/2013	7/12/2013	8/9/2013	8/9/2013
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				73 43	73 43	101 28	101 28
	Trt-Eval Interval				0 DA-C	0 DA-C	28 DA-C	28 DA-C
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
1	ZIDUA	149	g ai/ha	B	83 ab	63 a	100 a	100 a
	VERDICT	244	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
2	ZIDUA	149	g ai/ha	B	78 abc	58 a	100 a	100 a
	VERDICT	244	g ai/ha	B				
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
3	ZIDUA	149	g ai/ha	B	89 a	81 a	100 a	100 a
	SHARPEN	25	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
4	ZIDUA	149	g ai/ha	B	76 abc	80 a	100 a	100 a
	SHARPEN	25	g ai/ha	B				
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
5	SHARPEN	25	g ai/ha	B	23 fgh	93 a	100 a	100 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	9	10	11	12
	Pest Type				W WEED	W WEED	W WEED	W WEED
	Pest Code				SETSS	IPOSS	XANST	AMBEL
	Pest Scientific Name				SETARIA SP.	IPOMOEA SP.	XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				FOXTAIL MILLET	MORNING GLORY	HEART-LEAF COC>	COMMON RAGWEED
	Crop Code							
	BBCH Scale							
	Crop Scientific Name							
	Crop Name							
	Part Rated				PLOT P	PLOT P	PLOT P	PLOT P
	Rating Date				7/12/2013	7/12/2013	8/9/2013	8/9/2013
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				73 43	73 43	101 28	101 28
	Trt-Eval Interval				0 DA-C	0 DA-C	28 DA-C	28 DA-C
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
6	SHARPEN	50	g ai/ha	B	25 fgh	79 a	100 a	100 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
7	SHARPEN	25	g ai/ha	B	35 ef	90 a	100 a	100 a
	SENCOR 75DF	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
8	OPTILL	95	g ai/ha	B	90 a	70 a	100 a	100 a
	OUTLOOK	525	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
9	VERDICT	244	g ai/ha	B	43 def	70 a	100 a	100 a
	OUTLOOK	630	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	MSO	1	% v/v	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
10	WEEDAR	533	g ai/ha	B	76 abc	79 a	100 a	100 a
	VALOR	73	g ai/ha	B				
	CLASSIC	25.4	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
11	WEEDAR	533	g ai/ha	B	59 bcd	91 a	100 a	100 a
	AUTHORITY MTZ	504	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
12	WEEDAR	533	g ai/ha	B	54 cde	73 a	100 a	100 a
	PREFIX	1490	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
13	WEEDAR	533	g ai/ha	B	79 abc	94 a	100 a	100 a
	ANTHEM	170	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	9	10	11	12
	Pest Type				W WEED	W WEED	W WEED	W WEED
	Pest Code				SETSS	IPOSS	XANST	AMBEL
	Pest Scientific Name				SETARIA SP.	IPOMOEA SP.	XANTHIUM STRUM>	AMBROSIA ARTEM>
	Pest Name				FOXTAIL MILLET	MORNING GLORY	HEART-LEAF COC>	COMMON RAGWEED
	Crop Code							
	BBCH Scale							
	Crop Scientific Name							
	Crop Name							
	Part Rated				PLOT P	PLOT P	PLOT P	PLOT P
	Rating Date				7/12/2013	7/12/2013	8/9/2013	8/9/2013
	Rating Type				CONTRO	CONTRO	CONTRO	CONTRO
	Rating Unit				%	%	%	%
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				73 43	73 43	101 28	101 28
	Trt-Eval Interval				0 DA-C	0 DA-C	28 DA-C	28 DA-C
	ARM Action Codes				P	P	P	P
	Number of Decimals				0	0	0	0
14	WEEDAR	533	g ai/ha	B	86 ab	78 a	100 a	100 a
	FIERCE	240	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
15	WEEDAR	533	g ai/ha	B	70 abc	93 a	100 a	100 a
	SONIC	294	g ai/ha	B				
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
16	SHARPEN	25	g ai/ha	A	5 gh	90 a	100 a	100 a
	ROUNDUP POWERMAX	870	g ae/ha	A				
	MSO	1	% v/v	A				
	N-PAK AMS	2.5	% v/v	A				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
17	SHARPEN	50	g ai/ha	A	5 gh	89 a	100 a	100 a
	ROUNDUP POWERMAX	870	g ae/ha	A				
	MSO	1	% v/v	A				
	N-PAK AMS	2.5	% v/v	A				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
18	WEEDAR	533	g ai/ha	B	28 fg	85 a	100 a	100 a
	ROUNDUP POWERMAX	870	g ae/ha	B				
	N-PAK AMS	2.5	% v/v	B				
	ROUNDUP POWERMAX	870	g ae/ha	C				
	N-PAK AMS	2.5	% v/v	C				
19	UNTREATED CHECK				0 h	0 b	0 b	0 b
20	UNTREATED CHECK				0 h	0 b	0 b	0 b
	LSD (P=.05)				17.9	26.5	0.0	0.0
	Standard Deviation				12.7	18.7	0.0	0.0
	CV				25.27	25.76	0.0	0.0
	Bartlett's X2				36.978	50.476	0.0	0.0
	P(Bartlett's X2)				0.003*	0.001*	.	.
	Skewness				-0.145	-1.3248*	-2.7179*	-2.7179*
	Kurtosis				-1.473*	0.4083	5.5245*	5.5245*

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16	17
	Pest Type				W WEED	W WEED			
	Pest Code				SETSS	IPOSS			
	Pest Scientific Name				SETARIA SP.	IPOMOEA SP.			
	Pest Name				FOXTAIL MILLET	MORNING GLORY			
	Crop Code						GLXMA	GLXMA	GLXMA
	BBCH Scale						BSOY	BSOY	BSOY
	Crop Scientific Name						Glycine max	Glycine max	Glycine max
	Crop Name						Soybean	Soybean	Soybean
	Part Rated				PLOT P	PLOT P	YIELD C	YIELD C	YIELD C
	Rating Date				8/9/2013	8/9/2013	10/4/2013	10/4/2013	10/4/2013
	Rating Type				CONTRO	CONTRO	YIELD	YIELD	YIELD
	Rating Unit				%	%	lb/plot	bu/ac	kg/ha
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				101 28	101 28	157 84	157 84	157 84
	Trt-Eval Interval				28 DA-C	28 DA-C			
	ARM Action Codes				P	P		TY1	TY2
	Number of Decimals				0	0		1	1
1	ZIDUA	149	g ai/ha	B	100 a	100 a	17.4559506 a	48.4 a	3252.4 a
	VERDICT	244	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
2	ZIDUA	149	g ai/ha	B	100 a	100 a	16.6864907 a	46.2 a	3109.0 a
	VERDICT	244	g ai/ha	B					
	SENCOR 75DF	525	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
3	ZIDUA	149	g ai/ha	B	100 a	100 a	15.9471566 ab	44.2 ab	2971.3 ab
	SHARPEN	25	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
4	ZIDUA	149	g ai/ha	B	100 a	100 a	14.3743967 ab	39.8 ab	2678.2 ab
	SHARPEN	25	g ai/ha	B					
	SENCOR 75DF	525	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
5	SHARPEN	25	g ai/ha	B	100 a	100 a	14.9049145 ab	41.3 ab	2777.1 ab
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					

Purdue University Weed Science

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16	17
	Pest Type				W WEED	W WEED			
	Pest Code				SETSS	IPOSS			
	Pest Scientific Name				SETARIA SP.	IPOMOEA SP.			
	Pest Name				FOXTAIL MILLET	MORNING GLORY			
	Crop Code						GLXMA	GLXMA	GLXMA
	BBCH Scale						BSOY	BSOY	BSOY
	Crop Scientific Name						Glycine max	Glycine max	Glycine max
	Crop Name						Soybean	Soybean	Soybean
	Part Rated				PLOT P	PLOT P	YIELD C	YIELD C	YIELD C
	Rating Date				8/9/2013	8/9/2013	10/4/2013	10/4/2013	10/4/2013
	Rating Type				CONTRO	CONTRO	YIELD	YIELD	YIELD
	Rating Unit				%	%	lb/plot	bu/ac	kg/ha
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				101 28	101 28	157 84	157 84	157 84
	Trt-Eval Interval				28 DA-C	28 DA-C			
	ARM Action Codes				P	P		TY1	TY2
	Number of Decimals				0	0		1	1
6	SHARPEN	50	g ai/ha	B	100 a	100 a	15.6978106 ab	43.5 ab	2924.8 ab
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
7	SHARPEN	25	g ai/ha	B	100 a	100 a	15.0599628 ab	41.7 ab	2806.0 ab
	SENCOR 75DF	525	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
8	OPTILL	95	g ai/ha	B	100 a	100 a	15.0526100 ab	41.7 ab	2804.6 ab
	OUTLOOK	525	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
9	VERDICT	244	g ai/ha	B	100 a	100 a	15.9471606 ab	44.2 ab	2971.3 ab
	OUTLOOK	630	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	MSO	1	% v/v	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
10	WEEDAR	533	g ai/ha	B	100 a	100 a	15.8590293 ab	43.9 ab	2954.8 ab
	VALOR	73	g ai/ha	B					
	CLASSIC	25.4	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
11	WEEDAR	533	g ai/ha	B	100 a	100 a	15.4901158 ab	42.9 ab	2886.1 ab
	AUTHORITY MTZ	504	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
12	WEEDAR	533	g ai/ha	B	100 a	100 a	16.9881952 a	47.1 a	3165.2 a
	PREFIX	1490	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
13	WEEDAR	533	g ai/ha	B	100 a	100 a	15.2615963 ab	42.3 ab	2843.5 ab
	ANTHEM	170	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	13	14	15	16	17
	Pest Type				W WEED	W WEED			
	Pest Code				SETSS	IPOSS			
	Pest Scientific Name				SETARIA SP.	IPOMOEA SP.			
	Pest Name				FOXTAIL MILLET	MORNING GLORY			
	Crop Code						GLXMA	GLXMA	GLXMA
	BBCH Scale						BSOY	BSOY	BSOY
	Crop Scientific Name						Glycine max	Glycine max	Glycine max
	Crop Name						Soybean	Soybean	Soybean
	Part Rated				PLOT P	PLOT P	YIELD C	YIELD C	YIELD C
	Rating Date				8/9/2013	8/9/2013	10/4/2013	10/4/2013	10/4/2013
	Rating Type				CONTRO	CONTRO	YIELD	YIELD	YIELD
	Rating Unit				%	%	lb/plot	bu/ac	kg/ha
	Sample Size, Unit				1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
	Days After First/Last Applic.				101 28	101 28	157 84	157 84	157 84
	Trt-Eval Interval				28 DA-C	28 DA-C			
	ARM Action Codes				P	P		TY1	TY2
	Number of Decimals				0	0		1	1
14	WEEDAR	533	g ai/ha	B	100 a	100 a	13.9963611 ab	38.8 ab	2607.8 ab
	FIERCE	240	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
15	WEEDAR	533	g ai/ha	B	100 a	100 a	13.6753899 ab	37.9 ab	2548.0 ab
	SONIC	294	g ai/ha	B					
	ROUNDUP POWERMAX	870	g ae/ha	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
16	SHARPEN	25	g ai/ha	A	100 a	100 a	12.1828055 b	33.8 b	2269.9 b
	ROUNDUP POWERMAX	870	g ae/ha	A					
	MSO	1	% v/v	A					
	N-PAK AMS	2.5	% v/v	A					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
17	SHARPEN	50	g ai/ha	A	100 a	100 a	14.3014757 ab	39.6 ab	2664.6 ab
	ROUNDUP POWERMAX	870	g ae/ha	A					
	MSO	1	% v/v	A					
	N-PAK AMS	2.5	% v/v	A					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
18	WEEDAR	533	g ai/ha	B	100 a	100 a	14.9317010 ab	41.4 ab	2782.1 ab
	ROUNDUP POWERMAX	870	g ae/ha	B					
	N-PAK AMS	2.5	% v/v	B					
	ROUNDUP POWERMAX	870	g ae/ha	C					
	N-PAK AMS	2.5	% v/v	C					
19	UNTREATED CHECK				0 b	0 b	4.7362007 c	13.1 c	882.4 c
20	UNTREATED CHECK				0 b	0 b	3.7830627 c	10.5 c	704.9 c
	LSD (P=.05)				0.0	0.0	2.27191982	6.29	423.30
	Standard Deviation				0.0	0.0	1.60648991	4.45	299.32
	CV				0.0	0.0	11.38	11.38	11.38
	Bartlett's X2				0.0	0.0	24.731	24.731	24.731
	P(Bartlett's X2)				.	.	0.17	0.17	0.17
	Skewness				-2.7179*	-2.7179*	-1.5382*	-1.5382*	-1.5382*
	Kurtosis				5.5245*	5.5245*	2.5969*	2.5969*	2.5969*

Purdue University Weed Science

SOYBEAN WEED CONTROL IN NO/MIN TILL

Trial ID: 13S-SEP-CTS-10 Location: SEPAC Trial Year: 2013
Protocol ID: 13S-SEP-CTS-10 Investigator: Dr. Bill Johnson
Project ID: DEM-AWC-SOY01-2013 Study Director: JOE IKLEY
Sponsor Contact: BASF - GERY WELKER

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 5/30/2013 CONTRO % 1 PLOT 30 30 30 DA-A P 0 (Data Column 1)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	7	5250.000000			
Replicate	3	1575.000000	525.000000	3.316	0.1756
Treatment	1	3200.000000	3200.000000	20.211	0.0205
Error	3	475.000000	158.333333		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 5/30/2013 CONTRO % 1 PLOT 30 30 30 DA-A P 0 (Data Column 2)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	7	2446.875000			
Replicate	3	1284.375000	428.125000	2.025	0.2885
Treatment	1	528.125000	528.125000	2.498	0.2122
Error	3	634.375000	211.458333		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 6/20/2013 CONTRO % 1 PLOT 51 21 21 DA-B P 0 (Data Column 3)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	95448.750000			
Replicate	3	91.250000	30.416667	0.379	0.7683
Treatment	19	90786.250000	4778.223684	59.581	0.0001
Error	57	4571.250000	80.197368		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 6/20/2013 CONTRO % 1 PLOT 51 21 21 DA-B P 0 (Data Column 4)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	77	79443.071643			
Replicate	3	239.529081	79.843027	1.247	0.3014
Treatment	19	75683.384002	3983.336000	62.237	0.0001
Error	55	3520.158559	64.002883		

Randomized Complete Block (RCB) AOV For W WEED SETSS SETARIA SP. FOXTAIL MILLET PLOT P 6/20/2013 CONTRO % 1 PLOT 51 21 21 DA-B P 0 (Data Column 5)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	100630.000000			
Replicate	3	1072.500000	357.500000	3.754	0.0157
Treatment	19	94130.000000	4954.210526	52.029	0.0001
Error	57	5427.500000	95.219298		

Randomized Complete Block (RCB) AOV For GLXMA BSOY GLYCINE MAX SOYBEAN PLOT C 6/13/2013 PHYGEN % 1 PLOT 44 14 14 DA-B P 0 (Data Column 6)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	0.000000000000			
Replicate	3	0.000000000000	0.000000000000	0.000	1.0000
Treatment	19	0.000000000000	0.000000000000	0.000	1.0000
Error	57	0.000000000000	0.000000000000		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 7/12/2013 CONTRO % 1 PLOT 73 43 0 DA-C P 0 (Data Column 7)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	61145.950000			
Replicate	3	2232.250000	744.083333	2.221	0.0955
Treatment	19	39820.950000	2095.839474	6.257	0.0001
Error	57	19092.750000	334.960526		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 7/12/2013 CONTRO % 1 PLOT 73 43 0 DA-C P 0 (Data Column 8)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	78	67821.982148			
Replicate	3	475.579224	158.526408	1.088	0.3617
Treatment	19	59187.274854	3115.119729	21.381	0.0001
Error	56	8159.128070	145.698716		

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Randomized Complete Block (RCB) AOV For W WEED SETSS SETARIA SP. FOXTAIL MILLET PLOT P 7/12/2013 CONTRO % 1 PLOT 73 43 0 DA-C P 0 (Data Column 9)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	91407.200000			
Replicate	3	1587.700000	529.233333	3.302	0.0266
Treatment	19	80683.200000	4246.484211	26.493	0.0001
Error	57	9136.300000	160.285965		

Randomized Complete Block (RCB) AOV For W WEED IPOSS IPOMOEA SP. MORNING GLORY PLOT P 7/12/2013 CONTRO % 1 PLOT 73 43 0 DA-C P 0 (Data Column 10)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	78	77260.987500			
Replicate	3	2864.337500	954.779167	2.729	0.0524
Treatment	19	54805.737500	2884.512500	8.245	0.0001
Error	56	19590.912500	349.837723		

Randomized Complete Block (RCB) AOV For W WEED XANST XANTHIUM STRUMARIUM HEART-LEAF COCKLEBUR PLOT P 8/9/2013 CONTRO % 1 PLOT 101 28 28 DA-C P 0 (Data Column 11)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	72000.000000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	19	72000.000000	3789.473684	0.000	1.0000
Error	57	0.000000	0.000000		

Randomized Complete Block (RCB) AOV For W WEED AMBEL AMBROSIA ARTEMISIIFOLIA COMMON RAGWEED PLOT P 8/9/2013 CONTRO % 1 PLOT 101 28 28 DA-C P 0 (Data Column 12)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	72000.000000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	19	72000.000000	3789.473684	0.000	1.0000
Error	57	0.000000	0.000000		

Randomized Complete Block (RCB) AOV For W WEED SETSS SETARIA SP. FOXTAIL MILLET PLOT P 8/9/2013 CONTRO % 1 PLOT 101 28 28 DA-C P 0 (Data Column 13)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	72000.000000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	19	72000.000000	3789.473684	0.000	1.0000
Error	57	0.000000	0.000000		

Randomized Complete Block (RCB) AOV For W WEED IPOSS IPOMOEA SP. MORNING GLORY PLOT P 8/9/2013 CONTRO % 1 PLOT 101 28 28 DA-C P 0 (Data Column 14)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	79	72000.000000			
Replicate	3	0.000000	0.000000	0.000	1.0000
Treatment	19	72000.000000	3789.473684	0.000	1.0000
Error	57	0.000000	0.000000		

Randomized Complete Block (RCB) AOV For GLXMA BSOY Glycine max Soybean YIELD C 10/4/2013 YIELD lb/plot 1 PLOT 157 84 (Data Column 15)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	75	1174.806744			
Replicate	3	64.774119	21.591373	8.366	0.0001
Treatment	19	973.249730	51.223670	19.848	0.0001
Error	53	136.782894	2.580809		

Randomized Complete Block (RCB) AOV For GLXMA BSOY Glycine max Soybean YIELD C 10/4/2013 YIELD bu/ac 1 PLOT 157 84 TY1 1 (Data Column 16)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	75	9017.318510			
Replicate	3	497.178680	165.726227	8.366	0.0001
Treatment	19	7470.252323	393.171175	19.848	0.0001
Error	53	1049.887507	19.809198		

Randomized Complete Block (RCB) AOV For GLXMA BSOY Glycine max Soybean YIELD C 10/4/2013 YIELD kg/ha 1 PLOT 157 84 TY2 1 (Data Column 17)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	75	40783189.403021			
Replicate	3	2248621.055764	749540.351921	8.366	0.0001
Treatment	19	33786176.572858	1778219.819624	19.848	0.0001
Error	53	4748391.774399	89592.297630		

Pest Type
W, WEED, G-BYRW7, G-WEDSTG = Weed or volunteer crop
Pest Code
XANST, XANTHIUM STRUMARIUM, = US
AMBEL, AMBROSIA ARTEMISIIFOLIA, = US
SETSS, SETARIA SP., = US

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IPOSS, IPOMOEA SP., = US
Crop Code
GLXMA, BSOY, GLYCINE MAX, = US
Part Rated
PLOT = plot
YIELD = yield
P = Pest is Part Rated
C = Crop is Part Rated
Rating Type
CONTRO = control / burndown or knockdown
PHYGEN = phytotoxicity - general / injury
YIELD = yield
Rating Unit
% = percent
lb/plot = pounds per plot
bu/ac = bushels per acre
kg/ha = kilograms per hectare

PLOT = total plot
ARM Action Codes
P = Rating scale of 0 to 100 (e.g. % control or injury)
TY1 = 2.770483*[15]
TY2 = 186.3191*[15]