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Giant Ragweed study in soybeans using various spray volume GPAs and adjuvants.

Trial ID: 07S-THP-CTS-62
Location: Throckmorton

Protocol ID: 07S-THP-CTS-62
Study Director: Vince Davis/ Kevin Westerfeld
Investigator: Dr. William G. Johnson

General Trial Information

Study Director: Vince Davis/ Kevin Westerfeld **Title:** Research Associate
Affiliation: Purdue University
Postal Code: 47907 **E-mail:** davisv@purdue.edu, kwesterf@purdue.edu
Investigator: Dr. William G. Johnson **Title:** Associate Professor
Affiliation: Purdue University
Postal Code: 47907 **E-mail:** wgj@purdue.edu

Trial Location

City: Lafayette **Trial Status:** ESTABLISHED
State/Prov.: Indiana
Postal Code: 47909-9049
Country: US
Map Reference: Field 4A

Objectives:

Giant Ragweed study in soybeans using various glyphosate GPAs and adjuvants

Cooperator/Landowner

Cooperator: Throckmorton-Purdue Ag Center (TPAC) **Country:** US
Organization: Purdue University **Phone No:** 765-538-3422
Address 1: 8343 US 231 South **Fax No:** 765-538-3423
City: Lafayette
State/Prov: Indiana
Postal Code: 47909-9049

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG3305 **Description:** Roundup Ready
BBCH Scale: BSOY **Planting Date:** May/01/2007
Planting Method: DIRECT DRILLED **Rate, Unit:** 150000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Seed Bed: MEDIUM **Soil Temperature, Unit:** 60 F
Soil Moisture: DRY **Emergence Date:** May/09/2007

Pest Description

Pest 1 Type: W **Code:** AMBTR **Ambrosia trifida**
Common Name: Giant Ragweed
Pest 2 Type: W **Code:** SETFA **Setaria faberi**
Common Name: Giant foxtail
Pest 3 Type: W **Code:** LAMAM **Lamium amplexicaule**
Common Name: Henbit
Pest 4 Type: W **Code:** STEME **Stellaria media**
Common Name: Common chickweed
Pest 5 Type: W **Code:** CHEAL **Chenopodium album**
Common Name: Common lambsquarters
Pest 6 Type: W **Code:** ABUTH **Abutilon theophrasti**
Common Name: Velvetleaf

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD
Plot Length, Unit: 30 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 4 **Study Design:** Randomized Complete Block
Soil Drainage: G Good

Trial Initiation Comments:

5% Residue Cover

Field Prep./Maintenance:

Field disked on 4/21/07

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Soil Description

Description Name: TPAC Field 4A
% OM: 3.1 **Texture:** Silty loam
pH: 6 **Soil Name:** Toronto-Millbrook
CEC: 11.1

Analyzed By:
A&L Great Lakes Laboratories, Inc. Report #: F04048-0006

Additional Measured Elements

Element	Quantity	Unit
K	208	ppm
Mg	325	ppm
Ca	1100	ppm

Moisture and Weather Conditions

Closest Weather Station: On research station **Distance:** 0.5 **Unit:** MI

Application Description

	A
Application Date:	Jun/05/2007
Time of Day:	4:15PM
Application Method:	SPRAY
Application Timing:	LAPOWE
Application Placement:	BROFOL
Applied By:	KW
Air Temperature, Unit:	75 F
% Relative Humidity:	85
Wind Velocity, Unit:	2.5 MPH
Wind Direction:	NW
Dew Presence (Y/N):	N
Water Hardness:	Hard
Soil Temperature, Unit:	74 F
Soil Moisture:	Moist
% Cloud Cover:	85

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	GLXMA BSOY
Stage Scale Used:	BBCH
Stage Majority, Percent:	V3
Height, Unit:	4 IN
Height Minimum, Maximum:	3 5

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Pest Stage At Each Application

	A	
Pest 1 Code, Disc., Scale:	AMBTR	W
Stage Majority, Percent:	8-12lf	
Height, Unit:	7	IN
Height Minimum, Maximum:	0	15
Density, Unit:	1	YD2
Pest 2 Code, Disc., Scale:	SETFA	W
Stage Majority, Percent:	3 till	
Height, Unit:	5	IN
Height Minimum, Maximum:	0	10
Density, Unit:	15	YD2
Pest 3 Code, Disc., Scale:	LAMAM	W
Stage Majority, Percent:	flower	
Height, Unit:	2	IN
Height Minimum, Maximum:	1	3
Density, Unit:	7	YD2
Pest 4 Code, Disc., Scale:	STEME	W
Stage Majority, Percent:	flower	
Height, Unit:	13	IN
Height Minimum, Maximum:	3	24
Density, Unit:	6	YD2
Pest 5 Code, Disc., Scale:	CHEAL	W
Stage Majority, Percent:	2-12ND	
Height, Unit:	5	IN
Height Minimum, Maximum:	0	10
Density, Unit:	1	YD2
Pest 6 Code, Disc., Scale:	ABUTH	W
Stage Majority, Percent:	5 lf	
Height, Unit:	3	IN
Height Minimum, Maximum:	2	5
Density, Unit:	1	YD2

Application Equipment

	A	
Appl. Equipment:	Backpack	
Operating Pressure, Unit:	15	PSI
Nozzle Type:	XR11002	
Nozzle Spacing, Unit:	15	IN
Nozzles/Row:	6	
Boom Length, Unit:	7.5	FT
Boom Height, Unit:	15	IN
Ground Speed, Unit:	3	MPH
Carrier:	TPAC H2O	
Spray Volume, Unit:	15	GPA
Mix Size, Unit:	1.8	Liters
Propellant:	CO2	

Trial Comments

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								W Weed	W Weed		W Weed	W Weed	W Weed						
								AMBTR	CHEAL		AMBTR	CHEAL	AMBTR						
								Giant ragwe>	Common lamb>		Giant ragwe>	Common lamb>	Giant ragwe>						
Pest Type	Pest Code	Pest Name	Crop Code	BBCH Scale	Crop Name	Crop Variety	Description	Rating Date	Rating Data Type	Rating Unit	Crop Stage	Crop Stage Scale	Pest Stage	Pest Density, Unit	Assessed By	Rating Timing	Days After First/Last Applic.	Trt-Eval Interval	Plant-Eval Interval
							RR	Jun/18/2007	CONTRO	%	8-12"	R1	6-30"	2.5 YD2	GK	14 DAT	13 13	13 DA-A	48 DP-1
							RR	Jun/18/2007	CONTRO	%	8-12"	R1	1-8"	1 YD2	GK	14 DAT	13 13	13 DA-A	48 DP-1
							RR	Jun/18/2007	PHYGEN	%	8-12"	R1			GK	14 DAT	13 13	13 DA-A	48 DP-1
							RR	Jul/02/2007	CONTRO	%	16-20"	R1	6-48"	2.5 YD2	VMD	28 DAT	27 27	27 DA-A	62 DP-1
							RR	Jul/02/2007	CONTRO	%	16-20"	R1	4-36"	1 YD2	VMD	28 DAT	27 27	27 DA-A	62 DP-1
							RR	Aug/02/2007	CONTRO	%	3-3.5'	R5	2-7"	2.5 YD2	KW AW	56 DAT	58 58	58 DA-A	93 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage	Appl Code	Plot	1	2	3	4	5	6						
1	Roundup Original Max	0.77 lb ae/a		22 fl oz/a	LAPOWE A	A	101	92.0	100.0	0.0	80.0	90.0	90.0						
							403	92.0	100.0	0.0	95.0	100.0	95.0						
							803	92.0	100.0	0.0	99.0	100.0	95.0						
							906	99.0	100.0	0.0	99.0	100.0	100.0						
							Mean =	93.8	100.0	0.0	93.3	97.5	95.0						
2	Roundup Original Max	0.77 lb ae/a		22 fl oz/a	LAPOWE A	A	102	99.0	100.0	0.0	93.0	100.0	95.0						
	Alliance (AMS Liquid)	1.25 % v/v	1.25 % v/v		LAPOWE A	A	402	75.0	100.0	0.0	70.0	100.0	95.0						
							605	100.0	100.0	0.0	100.0	100.0	100.0						
							1006	85.0	100.0	0.0	85.0	100.0	100.0						
							Mean =	89.8	100.0	0.0	87.0	100.0	97.5						
3	Roundup Original Max	0.77 lb ae/a		22 fl oz/a	LAPOWE A	A	103	96.0	100.0	0.0	88.0	100.0	95.0						
	Alliance (AMS Liquid)	1.25 % v/v	1.25 % v/v		LAPOWE A	A	304	99.0	100.0	0.0	97.0	100.0	98.0						
	Preference	0.25 % v/v	0.25 % v/v		LAPOWE A	A	704	100.0	100.0	0.0	100.0	100.0	95.0						
							1001	80.0	100.0	0.0	70.0	100.0	98.0						
							Mean =	93.8	100.0	0.0	88.8	100.0	96.5						
4	Roundup Original Max	0.77 lb ae/a		22 fl oz/a	LAPOWE A	A	104	99.0	100.0	0.0	99.0	100.0	95.0						
	Alliance (AMS Liquid)	1.25 % v/v	1.25 % v/v		LAPOWE A	A	501	100.0	100.0	0.0	98.0	100.0	100.0						
	Interlock	0.26 lb ai/a		4 fl oz/a	LAPOWE A	A	706	95.0	100.0	0.0	95.0	100.0	95.0						
							903	95.0	100.0	0.0	100.0	100.0	100.0						
							Mean =	97.3	100.0	0.0	98.0	100.0	97.5						
5	Roundup Original Max	0.77 lb ae/a		22 fl oz/a	LAPOWE A	A	105	98.0	100.0	0.0	90.0	100.0	95.0						
	Alliance (AMS Liquid)	1.25 % v/v	1.25 % v/v		LAPOWE A	A	505	98.0	100.0	0.0	93.0	100.0	90.0						
	Powerlock	0.418 lb ai/a		6.4 fl oz/a	LAPOWE A	A	603	100.0	100.0	0.0	99.0	100.0	100.0						
							901	60.0	100.0	0.0	70.0	100.0	100.0						
							Mean =	89.0	100.0	0.0	88.0	100.0	96.3						
6	Roundup Original Max	0.77 lb ae/a		22 fl oz/a	LAPOWE A	A	106	99.0	100.0	0.0	90.0	100.0	90.0						
	AG06097	2.5 % v/v	2.5 % v/v		LAPOWE A	A	506	98.0	100.0	0.0	97.0	100.0	98.0						
							703	98.0	100.0	0.0	98.0	100.0	100.0						
							805	90.0	100.0	0.0	90.0	100.0	100.0						
							Mean =	96.3	100.0	0.0	93.8	100.0	97.0						
7	Roundup Original Max	0.77 lb ae/a		22 fl oz/a	LAPOWE A	A	201	95.0	100.0	0.0	70.0	100.0	80.0						
							405	97.0	100.0	0.0	95.0	100.0	99.0						
							705	98.0	100.0	0.0	98.0	100.0	100.0						
							1003	85.0	100.0	0.0	90.0	100.0	100.0						
							Mean =	93.8	100.0	0.0	88.3	100.0	94.8						

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								W Weed	W Weed		W Weed	W Weed	W Weed	
								AMBTR	CHEAL		AMBTR	CHEAL	AMBTR	
								Giant ragwe>	Common lamb>		Giant ragwe>	Common lamb>	Giant ragwe>	
								GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	
								BSOY	BSOY	BSOY	BSOY	BSOY	BSOY	
								Soybean	Soybean	Soybean	Soybean	Soybean	Soybean	
								AG3305	AG3305	AG3305	AG3305	AG3305	AG3305	
								RR	RR	RR	RR	RR	RR	
								Jun/18/2007	Jun/18/2007	Jun/18/2007	Jul/02/2007	Jul/02/2007	Aug/02/2007	
								CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	
								%	%	%	%	%	%	
								8-12"	8-12"	8-12"	16-20"	16-20"	3-3.5'	
								R1	R1	R1	R1	R1	R5	
								6-30"	1-8"		6-48"	4-36"	2-7'	
								2.5 YD2	1 YD2		2.5 YD2	1 YD2	2.5 YD2	
								GK	GK	GK	VMD	VMD	KW AW	
								14 DAT	14 DAT	14 DAT	28 DAT	28 DAT	56 DAT	
								13 13	13 13	13 13	27 27	27 27	58 58	
								13 DA-A	13 DA-A	13 DA-A	27 DA-A	27 DA-A	58 DA-A	
								48 DP-1	48 DP-1	48 DP-1	62 DP-1	62 DP-1	93 DP-1	
Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot	1	2	3	4	5	6
8	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	202	98.0	100.0	0.0	80.0	100.0	80.0
	Alliance (AMS Liquid)	1.25	% v/v	1.25	% v/v	LAPOWE	A	305	100.0	100.0	0.0	90.0	100.0	98.0
								702	100.0	100.0	0.0	100.0	100.0	100.0
								1002	88.0	100.0	0.0	85.0	100.0	95.0
	Mean =								96.5	100.0	0.0	88.8	100.0	93.3
9	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	203	95.0	100.0	0.0	75.0	100.0	80.0
	Alliance (AMS Liquid)	1.25	% v/v	1.25	% v/v	LAPOWE	A	406	97.0	100.0	0.0	95.0	100.0	100.0
	Preference	0.25	% v/v	0.25	% v/v	LAPOWE	A	801	97.0	100.0	0.0	97.0	100.0	100.0
								902	90.0	100.0	0.0	80.0	100.0	95.0
Mean =								94.8	100.0	0.0	86.8	100.0	93.8	
10	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	204	92.0	100.0	0.0	88.0	97.0	95.0
	Alliance (AMS Liquid)	1.25	% v/v	1.25	% v/v	LAPOWE	A	306	98.0	100.0	0.0	97.0	100.0	100.0
	Interlock	0.26	lb ai/a	4	fl oz/a	LAPOWE	A	802	100.0	100.0	0.0	100.0	100.0	95.0
								806	99.0	100.0	0.0	95.0	100.0	95.0
	Mean =								97.3	100.0	0.0	95.0	99.3	96.3
11	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	205	95.0	100.0	0.0	80.0	100.0	90.0
	Alliance (AMS Liquid)	1.25	% v/v	1.25	% v/v	LAPOWE	A	502	95.0	100.0	0.0	95.0	100.0	98.0
	Powerlock	0.418	lb ai/a	6.4	fl oz/a	LAPOWE	A	604	100.0	100.0	0.0	99.0	100.0	98.0
								1004	100.0	100.0	0.0	100.0	100.0	100.0
Mean =								97.5	100.0	0.0	93.5	100.0	96.5	
12	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	206	97.0	100.0	0.0	95.0	100.0	85.0
	AG06097	2.5	% v/v	2.5	% v/v	LAPOWE	A	401	97.0	100.0	0.0	90.0	100.0	100.0
								606	100.0	100.0	0.0	98.0	100.0	98.0
								804	100.0	100.0	0.0	98.0	100.0	100.0
	Mean =								98.5	100.0	0.0	95.3	100.0	95.8
13	Untreated Check							301	0.0	0.0	0.0	0.0	0.0	0.0
								504	0.0	0.0	0.0	0.0	0.0	0.0
								601	0.0	0.0	0.0	0.0	0.0	0.0
								1005	0.0	0.0	0.0	0.0	0.0	0.0
	Mean =								0.0	0.0	0.0	0.0	0.0	0.0
14	Roundup WeatherMAX	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	302	85.0	100.0	0.0	78.0	85.0	85.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	A	503	98.0	100.0	0.0	97.0	100.0	100.0
								602	100.0	100.0	0.0	98.0	100.0	100.0
								905	100.0	100.0	0.0	99.0	100.0	95.0
	Mean =								95.8	100.0	0.0	93.0	96.3	95.0
15	Roundup WeatherMAX	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	303	92.0	100.0	0.0	85.0	97.0	90.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	A	404	100.0	100.0	0.0	98.0	100.0	95.0
								701	100.0	100.0	0.0	98.0	100.0	98.0
								904	100.0	100.0	0.0	98.0	100.0	100.0
	Mean =								98.0	100.0	0.0	94.8	99.3	95.8

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Pest Type	W Weed	Common lamb>
Pest Code	CHEAL	
Pest Name	GLXMA	GLXMA
Crop Code	BSOY	BSOY
BBCH Scale	Soybean	Soybean
Crop Name	AG3305	AG3305
Crop Variety	RR	RR
Description	Aug/02/2007	Aug/02/2007
Rating Date	CONTRO	PHYGEN
Rating Data Type	%	%
Rating Unit	3-3.5'	3-3.5'
Crop Stage	R5	R5
Crop Stage Scale	3-5'	
Pest Stage	1 YD2	
Pest Density, Unit	KW AW	KW AW
Assessed By	56 DAT	56 DAT
Rating Timing	58 58	58 58
Days After First/Last Applic.	58 DA-A	58 DA-A
Trt-Eval Interval	93 DP-1	93 DP-1
Plant-Eval Interval		

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code	Plot	7	8
1	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	101	90.0	0.0
								403	100.0	0.0
								803	100.0	0.0
								906	100.0	0.0
								Mean =	97.5	0.0
2	Roundup Original Max Alliance (AMS Liquid)	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	102	95.0	0.0
								402	100.0	0.0
								605	100.0	0.0
								1006	100.0	0.0
								Mean =	98.8	0.0
3	Roundup Original Max Alliance (AMS Liquid) Preference	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	103	90.0	0.0
								304	100.0	0.0
								704	100.0	0.0
								1001	100.0	0.0
								Mean =	97.5	0.0
4	Roundup Original Max Alliance (AMS Liquid) Interlock	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	104	100.0	0.0
								501	100.0	0.0
								706	100.0	0.0
								903	100.0	0.0
								Mean =	100.0	0.0
5	Roundup Original Max Alliance (AMS Liquid) Powerlock	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	105	100.0	0.0
								505	100.0	0.0
								603	100.0	0.0
								901	100.0	0.0
								Mean =	100.0	0.0
6	Roundup Original Max AG06097	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	106	100.0	0.0
								506	100.0	0.0
								703	100.0	0.0
								805	100.0	0.0
								Mean =	100.0	0.0
7	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	201	100.0	0.0
								405	100.0	0.0
								705	100.0	0.0
								1003	100.0	0.0
								Mean =	100.0	0.0
8	Roundup Original Max Alliance (AMS Liquid)	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	202	90.0	0.0
								305	100.0	0.0
								702	100.0	0.0
								1002	100.0	0.0
								Mean =	97.5	0.0

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Pest Type	W Weed							
Pest Code	CHEAL							
Pest Name	Common lamb>							
Crop Code	GLXMA	GLXMA						
BBCH Scale	BSOY	BSOY						
Crop Name	Soybean	Soybean						
Crop Variety	AG3305	AG3305						
Description	RR	RR						
Rating Date	Aug/02/2007	Aug/02/2007						
Rating Data Type	CONTRO	PHYGEN						
Rating Unit	%	%						
Crop Stage	3-3.5'	3-3.5'						
Crop Stage Scale	R5	R5						
Pest Stage	3-5'							
Pest Density, Unit	1 YD2							
Assessed By	KW AW	KW AW						
Rating Timing	56 DAT	56 DAT						
Days After First/Last Applic.	58 58	58 58						
Trt-Eval Interval	58 DA-A	58 DA-A						
Plant-Eval Interval	93 DP-1	93 DP-1						
Trt No.	Treatment Name	Rate Rate Unit	Other Rate Rate Unit	Growth Stage	Appl Code	Plot	7	8
9	Roundup Original Max Alliance (AMS Liquid) Preference	0.77 lb ae/a 1.25 % v/v 0.25 % v/v	22 fl oz/a 1.25 % v/v 0.25 % v/v	LAPOWE A LAPOWE A LAPOWE A	203 406 801 902		100.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0
	Mean =						100.0	0.0
10	Roundup Original Max Alliance (AMS Liquid) Interlock	0.77 lb ae/a 1.25 % v/v 0.26 lb ai/a	22 fl oz/a 1.25 % v/v 4 fl oz/a	LAPOWE A LAPOWE A LAPOWE A	204 306 802 806		95.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0
	Mean =						98.8	0.0
11	Roundup Original Max Alliance (AMS Liquid) Powerlock	0.77 lb ae/a 1.25 % v/v 0.418 lb ai/a	22 fl oz/a 1.25 % v/v 6.4 fl oz/a	LAPOWE A LAPOWE A LAPOWE A	205 502 604 1004		100.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0
	Mean =						100.0	0.0
12	Roundup Original Max AG06097	0.77 lb ae/a 2.5 % v/v	22 fl oz/a 2.5 % v/v	LAPOWE A LAPOWE A	206 401 606 804		100.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0
	Mean =						100.0	0.0
13	Untreated Check				301 504 601 1005		0.0 0.0 0.0 0.0	5.0 5.0 5.0 5.0
	Mean =						0.0	5.0
14	Roundup WeatherMAX Ammonium Sulfate	0.77 lb ae/a 17 lb ai/100 gal	22 fl oz/a 17 lb/100 gal	LAPOWE A LAPOWE A	302 503 602 905		75.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0
	Mean =						93.8	0.0
15	Roundup WeatherMAX Ammonium Sulfate	0.77 lb ae/a 17 lb ai/100 gal	22 fl oz/a 17 lb/100 gal	LAPOWE A LAPOWE A	303 404 701 904		95.0 100.0 100.0 100.0	0.0 0.0 0.0 0.0
	Mean =						98.8	0.0

Purdue University

Giant Ragweed study in soybeans using various spray volume GPAs and adjuvants.

Trial ID: 07S-THP-CTS-62
Location: Throckmorton

Protocol ID: 07S-THP-CTS-62
Study Director: Vince Davis/ Kevin Westerfeld
Investigator: Dr. William G. Johnson

Pest Type	W Weed	W Weed		W Weed	W Weed	W Weed						
Pest Code	AMBTR	CHEAL		AMBTR	CHEAL	AMBTR						
Pest Name	Giant ragwe>	Common lamb>		Giant ragwe>	Common lamb>	Giant ragwe>						
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA						
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY						
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean						
Crop Variety	AG3305	AG3305	AG3305	AG3305	AG3305	AG3305						
Description	RR	RR	RR	RR	RR	RR						
Rating Date	Jun/18/2007	Jun/18/2007	Jun/18/2007	Jul/02/2007	Jul/02/2007	Aug/02/2007						
Rating Data Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO						
Rating Unit	%	%	%	%	%	%						
Crop Stage	8-12"	8-12"	8-12"	16-20"	16-20"	3-3.5'						
Crop Stage Scale	R1	R1	R1	R1	R1	R5						
Pest Stage	6-30"	1-8"		6-48"	4-36"	2-7"						
Pest Density, Unit	2.5 YD2	1 YD2		2.5 YD2	1 YD2	2.5 YD2						
Assessed By	GK	GK	GK	VMD	VMD	KW AW						
Rating Timing	14 DAT	14 DAT	14 DAT	28 DAT	28 DAT	56 DAT						
Days After First/Last Applic.	13 13	13 13	13 13	27 27	27 27	58 58						
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	27 DA-A	27 DA-A	58 DA-A						
Plant-Eval Interval	48 DP-1	48 DP-1	48 DP-1	62 DP-1	62 DP-1	93 DP-1						
Trt No.	Treatment	Rate	Other Rate	Other Rate	Growth Stage	Appl Code	1	2	3	4	5	6
1	Roundup Original Max	0.77 lb ae/a	22 fl oz/a	22 fl oz/a	LAPOWE A	A	93.8 a	100.0 a	0.0 a	93.3 a	97.5 a	95.0 a
2	Roundup Original Max Alliance (AMS Liquid)	0.77 lb ae/a 1.25 % v/v	22 fl oz/a 1.25 % v/v	22 fl oz/a 1.25 % v/v	LAPOWE A LAPOWE A	A	89.8 a	100.0 a	0.0 a	87.0 a	100.0 a	97.5 a
3	Roundup Original Max Alliance (AMS Liquid) Preference	0.77 lb ae/a 1.25 % v/v 0.25 % v/v	22 fl oz/a 1.25 % v/v 0.25 % v/v	22 fl oz/a 1.25 % v/v 0.25 % v/v	LAPOWE A LAPOWE A LAPOWE A	A	93.8 a	100.0 a	0.0 a	88.8 a	100.0 a	96.5 a
4	Roundup Original Max Alliance (AMS Liquid) Interlock	0.77 lb ae/a 1.25 % v/v 0.26 lb ai/a	22 fl oz/a 1.25 % v/v 4 fl oz/a	22 fl oz/a 1.25 % v/v 4 fl oz/a	LAPOWE A LAPOWE A LAPOWE A	A	97.3 a	100.0 a	0.0 a	98.0 a	100.0 a	97.5 a
5	Roundup Original Max Alliance (AMS Liquid) Powerlock	0.77 lb ae/a 1.25 % v/v 0.418 lb ai/a	22 fl oz/a 1.25 % v/v 6.4 fl oz/a	22 fl oz/a 1.25 % v/v 6.4 fl oz/a	LAPOWE A LAPOWE A LAPOWE A	A	89.0 a	100.0 a	0.0 a	88.0 a	100.0 a	96.3 a
6	Roundup Original Max AG06097	0.77 lb ae/a 2.5 % v/v	22 fl oz/a 2.5 % v/v	22 fl oz/a 2.5 % v/v	LAPOWE A LAPOWE A	A	96.3 a	100.0 a	0.0 a	93.8 a	100.0 a	97.0 a
7	Roundup Original Max	0.77 lb ae/a	22 fl oz/a	22 fl oz/a	LAPOWE A	A	93.8 a	100.0 a	0.0 a	88.3 a	100.0 a	94.8 a
8	Roundup Original Max Alliance (AMS Liquid)	0.77 lb ae/a 1.25 % v/v	22 fl oz/a 1.25 % v/v	22 fl oz/a 1.25 % v/v	LAPOWE A LAPOWE A	A	96.5 a	100.0 a	0.0 a	88.8 a	100.0 a	93.3 a
9	Roundup Original Max Alliance (AMS Liquid) Preference	0.77 lb ae/a 1.25 % v/v 0.25 % v/v	22 fl oz/a 1.25 % v/v 0.25 % v/v	22 fl oz/a 1.25 % v/v 0.25 % v/v	LAPOWE A LAPOWE A LAPOWE A	A	94.8 a	100.0 a	0.0 a	86.8 a	100.0 a	93.8 a
10	Roundup Original Max Alliance (AMS Liquid) Interlock	0.77 lb ae/a 1.25 % v/v 0.26 lb ai/a	22 fl oz/a 1.25 % v/v 4 fl oz/a	22 fl oz/a 1.25 % v/v 4 fl oz/a	LAPOWE A LAPOWE A LAPOWE A	A	97.3 a	100.0 a	0.0 a	95.0 a	99.3 a	96.3 a
11	Roundup Original Max Alliance (AMS Liquid) Powerlock	0.77 lb ae/a 1.25 % v/v 0.418 lb ai/a	22 fl oz/a 1.25 % v/v 6.4 fl oz/a	22 fl oz/a 1.25 % v/v 6.4 fl oz/a	LAPOWE A LAPOWE A LAPOWE A	A	97.5 a	100.0 a	0.0 a	93.5 a	100.0 a	96.5 a
12	Roundup Original Max AG06097	0.77 lb ae/a 2.5 % v/v	22 fl oz/a 2.5 % v/v	22 fl oz/a 2.5 % v/v	LAPOWE A LAPOWE A	A	98.5 a	100.0 a	0.0 a	95.3 a	100.0 a	95.8 a
13	Untreated Check						0.0 b	0.0 b	0.0 a	0.0 b	0.0 b	0.0 b
14	Roundup WeatherMAX Ammonium Sulfate	0.77 lb ae/a 17 lb ai/100 gal	22 fl oz/a 17 lb/100 gal	22 fl oz/a 17 lb/100 gal	LAPOWE A LAPOWE A	A	95.8 a	100.0 a	0.0 a	93.0 a	96.3 a	95.0 a
15	Roundup WeatherMAX Ammonium Sulfate	0.77 lb ae/a 17 lb ai/100 gal	22 fl oz/a 17 lb/100 gal	22 fl oz/a 17 lb/100 gal	LAPOWE A LAPOWE A	A	98.0 a	100.0 a	0.0 a	94.8 a	99.3 a	95.8 a
LSD (P=.05)		9.94	0.00	0.00			9.94	0.00	0.00	10.89	3.19	5.72
Standard Deviation		6.95	0.00	0.00			6.95	0.00	0.00	7.62	2.23	4.00
CV		7.83	0.0	0.0			7.83	0.0	0.0	8.9	2.4	4.48
Bartlett's X2		33.313	0.0	0.0			33.313	0.0	0.0	15.099	9.895	17.651
P(Bartlett's X2)		0.002*	.	.			0.002*	.	.	0.301	0.019*	0.171

Purdue University

Pest Type	W Weed	W Weed		W Weed	W Weed	W Weed
Pest Code	AMBTR	CHEAL		AMBTR	CHEAL	AMBTR
Pest Name	Giant ragwe>	Common lamb>		Giant ragwe>	Common lamb>	Giant ragwe>
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY	BSOY	BSOY
Crop Name	Soybean	Soybean	Soybean	Soybean	Soybean	Soybean
Crop Variety	AG3305	AG3305	AG3305	AG3305	AG3305	AG3305
Description	RR	RR	RR	RR	RR	RR
Rating Date	Jun/18/2007	Jun/18/2007	Jun/18/2007	Jul/02/2007	Jul/02/2007	Aug/02/2007
Rating Data Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Crop Stage	8-12"	8-12"	8-12"	16-20"	16-20"	3-3.5'
Crop Stage Scale	R1	R1	R1	R1	R1	R5
Pest Stage	6-30"	1-8"		6-48"	4-36"	2-7"
Pest Density, Unit	2.5 YD2	1 YD2		2.5 YD2	1 YD2	2.5 YD2
Assessed By	GK	GK	GK	VMD	VMD	KW AW
Rating Timing	14 DAT	14 DAT	14 DAT	28 DAT	28 DAT	56 DAT
Days After First/Last Applic.	13 13	13 13	13 13	27 27	27 27	58 58
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	27 DA-A	27 DA-A	58 DA-A
Plant-Eval Interval	48 DP-1	48 DP-1	48 DP-1	62 DP-1	62 DP-1	93 DP-1
Replicate F	2.836	0.000	0.000	7.208	3.216	17.048
Replicate Prob(F)	0.0495	1.0000	1.0000	0.0005	0.0323	0.0001
Treatment F	50.563	0.000	0.000	39.500	530.446	152.942
Treatment Prob(F)	0.0001	1.0000	1.0000	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Purdue University

Pest Type	W Weed	
Pest Code	CHEAL	
Pest Name	Common lamb->	
Crop Code	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY
Crop Name	Soybean	Soybean
Crop Variety	AG3305	AG3305
Description	RR	RR
Rating Date	Aug/02/2007	Aug/02/2007
Rating Data Type	CONTRO	PHYGEN
Rating Unit	%	%
Crop Stage	3-3.5'	3-3.5'
Crop Stage Scale	R5	R5
Pest Stage	3-5'	
Pest Density, Unit	1 YD2	
Assessed By	KW AW	KW AW
Rating Timing	56 DAT	56 DAT
Days After First/Last Applic.	58 58	58 58
Trt-Eval Interval	58 DA-A	58 DA-A
Plant-Eval Interval	93 DP-1	93 DP-1

Trt No.	Treatment Name	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code	7	8
1	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	97.5 a	0.0 b
2	Roundup Original Max Alliance (AMS Liquid)	0.77 1.25	lb ae/a % v/v	22 1.25	fl oz/a % v/v	LAPOWE LAPOWE	A A	98.8 a	0.0 b
3	Roundup Original Max Alliance (AMS Liquid) Preference	0.77 1.25 0.25	lb ae/a % v/v % v/v	22 1.25 0.25	fl oz/a % v/v % v/v	LAPOWE LAPOWE LAPOWE	A A A	97.5 a	0.0 b
4	Roundup Original Max Alliance (AMS Liquid) Interlock	0.77 1.25 0.26	lb ae/a % v/v lb ai/a	22 1.25 4	fl oz/a % v/v fl oz/a	LAPOWE LAPOWE LAPOWE	A A A	100.0 a	0.0 b
5	Roundup Original Max Alliance (AMS Liquid) Powerlock	0.77 1.25 0.418	lb ae/a % v/v lb ai/a	22 1.25 6.4	fl oz/a % v/v fl oz/a	LAPOWE LAPOWE LAPOWE	A A A	100.0 a	0.0 b
6	Roundup Original Max AG06097	0.77 2.5	lb ae/a % v/v	22 2.5	fl oz/a % v/v	LAPOWE LAPOWE	A A	100.0 a	0.0 b
7	Roundup Original Max	0.77	lb ae/a	22	fl oz/a	LAPOWE	A	100.0 a	0.0 b
8	Roundup Original Max Alliance (AMS Liquid)	0.77 1.25	lb ae/a % v/v	22 1.25	fl oz/a % v/v	LAPOWE LAPOWE	A A	97.5 a	0.0 b
9	Roundup Original Max Alliance (AMS Liquid) Preference	0.77 1.25 0.25	lb ae/a % v/v % v/v	22 1.25 0.25	fl oz/a % v/v % v/v	LAPOWE LAPOWE LAPOWE	A A A	100.0 a	0.0 b
10	Roundup Original Max Alliance (AMS Liquid) Interlock	0.77 1.25 0.26	lb ae/a % v/v lb ai/a	22 1.25 4	fl oz/a % v/v fl oz/a	LAPOWE LAPOWE LAPOWE	A A A	98.8 a	0.0 b
11	Roundup Original Max Alliance (AMS Liquid) Powerlock	0.77 1.25 0.418	lb ae/a % v/v lb ai/a	22 1.25 6.4	fl oz/a % v/v fl oz/a	LAPOWE LAPOWE LAPOWE	A A A	100.0 a	0.0 b
12	Roundup Original Max AG06097	0.77 2.5	lb ae/a % v/v	22 2.5	fl oz/a % v/v	LAPOWE LAPOWE	A A	100.0 a	0.0 b
13	Untreated Check							0.0 b	5.0 a
14	Roundup WeatherMAX Ammonium Sulfate	0.77 17	lb ae/a lb ai/100 gal	22 17	fl oz/a lb/100 gal	LAPOWE LAPOWE	A A	93.8 a	0.0 b
15	Roundup WeatherMAX Ammonium Sulfate	0.77 17	lb ae/a lb ai/100 gal	22 17	fl oz/a lb/100 gal	LAPOWE LAPOWE	A A	98.8 a	0.0 b

LSD (P=.05)	4.96	0.00
Standard Deviation	3.47	0.00
CV	3.76	0.0
Bartlett's X2	13.77	0.0
P(Bartlett's X2)	0.032*	.
Replicate F	6.792	0.000
Replicate Prob(F)	0.0008	1.0000
Treatment F	217.238	0.000
Treatment Prob(F)	0.0001	1.0000

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.