

# Purdue University

## Controlling volunteer glyphosate-resistant corn in Roundup Ready soybean

Trial ID: 07S-SEP-CTS-51  
Location: SEPAC

Protocol ID: 07S-SEP-CTS-51  
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:** 47097 **E-mail:** wgj@purdue.edu

### Trial Location

**City:** Butlerville **Trial Status:** ESTABLISHED  
**State/Prov.:** IN  
**Postal Code:** 47223  
**Country:** USA  
**Directions:**  
Field U3

### Objectives:

Controlling volunteer glyphosate-resistant corn in Roundup Ready soybeans.

### Cooperator/Landowner

**Cooperator:** Southeast Purdue Ag Center **Country:** USA  
**Organization:** Purdue University **Phone No:** 812-458-6977  
**Address 1:** 4425 E Co Rd 350 N **Fax No:** 812-458-6979  
**Address 2:** PO Box 216  
**City:** Butlerville  
**State/Prov:** IN  
**Postal Code:** 47223

### Crop Description

**Crop 1:** GLXMA Glycine max Soybean  
**Variety:** P93M95 **Description:** Roundup Ready  
**BBCH Scale:** BSOY **Planting Date:** May/08/2007  
**Planting Method:** Direct Drilled **Rate, Unit:** 120000 seeds/acre  
**Depth, Unit:** 2 in  
**Row Spacing, Unit:** 30 inche  
**Seed Bed:** MEDIUM **Soil Temperature, Unit:** 70 F  
**Soil Moisture:** DRY **Emergence Date:** May/15/2007

### Pest Description

**Pest 1 Type:** W **Code:** ZEAMX Zea mays  
**Common Name:** Corn  
**Description:** Volunteer RR Corn

### 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

### Soil Description

**Description Name:** SEPAC U3  
**% OM:** 2 **Texture:** SILT LOAM  
**pH:** 6.7 **Soil Name:** Clermont  
**CEC:** 5.3

### Additional Measured Elements

Element	Quantity	Unit
P	11	PPM
K	68	PPM
CA	750	PPM
MG	156	PPM

### Moisture and Weather Conditions

**Overall Moisture Conditions:** SLIGHTLY DRY  
**Closest Weather Station:** On Research Station **Distance:** 0.0 **Unit:** MI

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## Application Description

	A	B
Application Date:	Jun/06/2007	Jun/20/2007
Time of Day:	6:50-7 PM	10:15 PM
Application Method:	SPRAY	SPRAY
Application Timing:	EAPOWE	LAPOWE
Application Placement:	BROFOL	BROFOL
Applied By:	VMD GK	VD VM
Air Temperature, Unit:	82 F	78 F
% Relative Humidity:	30	70
Wind Velocity, Unit:	1.5 MPH	0 MPH
Wind Direction:	NE	W
Dew Presence (Y/N):	N	Y
Water Hardness:	Hard TPAC	Hard TPAC
Soil Temperature, Unit:	80 F	70 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	25	0

## Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	V2	V3
Stage Minimum, Percent:	V2	V3
Stage Maximum, Percent:	V3	V4
Height, Unit:	4 IN	9 IN
Height Minimum, Maximum:	3 5	8 10

## Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	ZEAMX W	ZEAMX W
Stage Majority, Percent:	V5	V5-V8
Stage Minimum, Percent:	V5	V5-V8
Stage Maximum, Percent:	V5	V5-V8
Height, Unit:	9 IN	18 IN
Height Minimum, Maximum:	6 12	12 24
Density, Unit:	15 YD2	20 YD2

## Application Equipment

	A	B
Appl. Equipment:	Back Pack	Back Pack
Operating Pressure, Unit:	17 PSI	17 PSI
Nozzle Type:	XR	XR
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	15 IN	15 IN
Nozzles/Row:	6	6
Boom Length, Unit:	7.5 FT	7.5 FT
Boom Height, Unit:	15 IN	15 IN
Ground Speed, Unit:	3 MPH	3 MPH
Incorporation Equip.:	None	None
Hours to Incorp.:	0	0
Incorp. Depth, Unit:	0 IN	0 IN
Carrier:	TPAC H2O	TPAC H2O
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	1.8 Liters	1.8 Liters
Propellant:	CO2	CO2
Tank Mix (Y/N):	Y	Y

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Trt No	Treatment	Application	Comment
	906	had a miss spray.	Taken out of the protocol.

Date	By	Notes
Jun/07/2007	Vince Davis	Broadcast DKC 63-74RR for volunteer corn and used soil finisher very shallow 2 hours before planting soybeans.

Trial Comments

5/8/07: Broadcast DKC 63-74RR for volunteer corn and used soil finisher very shallow 2 hours before planting.

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## Controlling volunteer glyphosate-resistant corn in Roundup Ready soybean

Trial ID: 07S-SEP-CTS-51  
 Location: SEPAC

Protocol ID: 07S-SEP-CTS-51  
 Study Director: Vince Davis / Kevin Westerfeld  
 Investigator: Dr. William G. Johnson

								W Weed	W Weed	W Weed	W Weed	
								ZEAMX	ZEAMX	ZEAMX	ZEAMX	
								Corn	Corn	Corn	Corn	
								GLXMA	GLXMA	GLXMA	GLXMA	
								BSOY	BSOY	BSOY	BSOY	
								Soybean	Soybean	Soybean	Soybean	
								P93M95	P93M95	P93M95	P93M95	
								RR	RR	RR	RR	
								Jun/20/2007	Jul/03/2007	Jul/17/2007	Aug/13/2007	
								CONTRO	CONTRO	CONTRO	CONTRO	
								%	%	%	%	
								18	36	20	54	
								IN	IN	IN	IN	
								R1	R2		R5-R6	
								BBCH	BBCH	BBCH	BBCH	
								V5-V8	V11		GrainFil	
								20 YD2	20 YD2	20 YD2	20 YD2	
								GK KW	AW	AW VM MK	KW VMD	
								0 DAT	14 DAT	28 DAT	56 DAT	
								14 0	27 13	41 27	68 54	
								43 DP-1	56 DP-1	70 DP-1	97 DP-1	
Trit No.	Treatment Name	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot	1	2	3	4
1	Fusilade EX 2 EC	0.094	lb ai/a	6	fl oz/a	EAPOWE A	A	101	83.0	99.0	99.0	100.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A	307	90.0	99.0	100.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A	704	93.0	99.0	100.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A	803	90.0	99.0	100.0	100.0
								Mean =	89.0	99.0	99.8	100.0
2	Select Max	0.094	lb ai/a	12	fl oz/a	EAPOWE A	A	102	95.0	100.0	100.0	100.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A	305	95.0	100.0	100.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A	607	97.0	99.0	100.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A	1002	90.0	99.0	100.0	100.0
								Mean =	94.3	99.5	100.0	100.0
3	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE A	A	103	20.0	15.0	20.0	10.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A	406	18.0	0.0	0.0	0.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A	602	15.0	25.0	37.0	65.0
								905	20.0	65.0	30.0	45.0
								Mean =	18.3	26.3	21.8	30.0
4	Raptor	0.039	lb ai/a	5	fl oz/a	EAPOWE A	A	104	55.0	99.0	99.0	100.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A	401	50.0	98.0	99.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A	706	50.0	88.0	98.0	99.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A	904	45.0	98.0	99.0	100.0
								Mean =	50.0	95.8	98.8	99.8
5	Assure II	0.0413	lb ai/a	6	fl oz/a	EAPOWE A	A	105	90.0	99.0	100.0	100.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A	505	98.0	100.0	100.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A	701	97.0	100.0	100.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A	805	98.0	100.0	100.0	100.0
								Mean =	95.8	99.8	100.0	100.0
6	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE A	A	106	50.0	98.0	95.0	95.0
	Fusilade EX 2 EC	0.094	lb ai/a	6	fl oz/a	EAPOWE A	A	504	58.0	98.0	94.0	95.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A	606	55.0	98.0	85.0	95.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A	1001	50.0	90.0	98.0	97.0
								Mean =	53.3	96.0	93.0	95.5
7	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE A	A	107	55.0	98.0	99.0	100.0
	Select Max	0.094	lb ai/a	12	fl oz/a	EAPOWE A	A	402	60.0	99.0	100.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A	703	78.0	99.0	100.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A	907	80.0	98.0	99.0	100.0
								Mean =	68.3	98.5	99.5	100.0

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									W Weed	W Weed	W Weed	W Weed
									ZEAMX	ZEAMX	ZEAMX	ZEAMX
									Corn	Corn	Corn	Corn
									GLXMA	GLXMA	GLXMA	GLXMA
									BSOY	BSOY	BSOY	BSOY
									Soybean	Soybean	Soybean	Soybean
									P93M95	P93M95	P93M95	P93M95
									RR	RR	RR	RR
									Jun/20/2007	Jul/03/2007	Jul/17/2007	Aug/13/2007
									CONTRO	CONTRO	CONTRO	CONTRO
									%	%	%	%
									18	36	20	54
									IN	IN	IN	IN
									R1	R2		R5-R6
									BBCH	BBCH	BBCH	BBCH
									V5-V8	V11		GrainFil
									20 YD2	20 YD2	20 YD2	20 YD2
									GK KW	AW	AW VM MK	KW VMD
									0 DAT	14 DAT	28 DAT	56 DAT
									14 0	27 13	41 27	68 54
									43 DP-1	56 DP-1	70 DP-1	97 DP-1
Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot	1	2	3	4
8	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE	A	201	95.0	100.0	100.0	100.0
	Assure II	0.0413	lb ai/a	6	fl oz/a	EAPOWE	A	502	95.0	99.0	100.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE	A	507	93.0	100.0	100.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE	A	1003	95.0	100.0	99.0	100.0
								Mean =	94.5	99.8	99.8	100.0
9	Fusilade EX 2 EC	0.094	lb ai/a	6	fl oz/a	LAPOWE	B	202	0.0	90.0	95.0	100.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	LAPOWE	B	304	0.0	90.0	95.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	707	0.0	75.0	94.0	98.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	806	0.0	75.0	90.0	98.0
								Mean =	0.0	82.5	93.5	99.0
10	Select Max	0.094	lb ai/a	12	fl oz/a	LAPOWE	B	203	0.0	90.0	95.0	97.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	LAPOWE	B	503	0.0	70.0	97.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	601	0.0	75.0	95.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	1005	0.0	90.0	99.0	100.0
								Mean =	0.0	81.3	96.5	99.3
11	Extreme	0.81	lb ai/a	3	pt/a	LAPOWE	B	204	0.0	40.0	37.0	65.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	306	0.0	35.0	40.0	60.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	604	0.0	40.0	27.0	40.0
								903	0.0	35.0	27.0	50.0
								Mean =	0.0	37.5	32.8	53.8
12	Raptor	0.039	lb ai/a	5	fl oz/a	LAPOWE	B	205	0.0	50.0	83.0	98.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	LAPOWE	B	405	0.0	65.0	92.0	99.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	705	0.0	50.0	90.0	99.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	906	.	.	.	.
								Mean =	0.0	55.0	88.3	98.7
13	Assure II	0.0413	lb ai/a	6	fl oz/a	LAPOWE	B	206	0.0	85.0	76.0	90.0
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	LAPOWE	B	501	0.0	65.0	83.0	93.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	801	0.0	65.0	83.0	95.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	804	0.0	80.0	77.0	93.0
								Mean =	0.0	73.8	79.8	92.8
14	Extreme	0.81	lb ai/a	3	pt/a	LAPOWE	B	207	0.0	85.0	90.0	97.0
	Fusilade EX 2 EC	0.094	lb ai/a	6	fl oz/a	LAPOWE	B	403	0.0	90.0	95.0	100.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	702	0.0	73.0	90.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	807	0.0	65.0	88.0	98.0
								Mean =	0.0	78.3	90.8	98.8
15	Extreme	0.81	lb ai/a	3	pt/a	LAPOWE	B	301	0.0	70.0	93.0	98.0
	Select Max	0.094	lb ai/a	12	fl oz/a	LAPOWE	B	407	0.0	75.0	90.0	98.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	605	0.0	60.0	90.0	100.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	901	0.0	40.0	91.0	98.0
								Mean =	0.0	61.3	91.0	98.5

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Pest Name	Corn	Corn	Corn	Corn
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY
Crop Name	Soybean	Soybean	Soybean	Soybean
Crop Variety	P93M95	P93M95	P93M95	P93M95
Description	RR	RR	RR	RR
Rating Date	Jun/20/2007	Jul/03/2007	Jul/17/2007	Aug/13/2007
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size	18	36	20	54
Sample Size Unit	IN	IN	IN	IN
Crop Stage	R1	R2		R5-R6
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH
Pest Stage	V5-V8	V11		GrainFil
Pest Density, Unit	20 YD2	20 YD2	20 YD2	20 YD2
Assessed By	GK KW	AW	AW VM MK	KW VMD
Rating Timing	0 DAT	14 DAT	28 DAT	56 DAT
Days After First/Last Applic.	14 0	27 13	41 27	68 54
Plant-Eval Interval	43 DP-1	56 DP-1	70 DP-1	97 DP-1

  

Trt No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Plot	1	2	3	4
16	Extreme	0.81	lb ai/a	3	pt/a	LAPOWE	B	302	0.0	80.0	95.0	97.0
	Assure II	0.0413	lb ai/a	6	fl oz/a	LAPOWE	B	404	0.0	85.0	95.0	99.0
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B	603	0.0	70.0	87.0	95.0
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B	902	0.0	45.0	90.0	98.0
								Mean =	0.0	70.0	91.8	97.3
17	Untreated Check							303	0.0	0.0	0.0	0.0
								506	0.0	0.0	0.0	0.0
								802	0.0	0.0	0.0	0.0
								1004	0.0	0.0	0.0	0.0
								Mean =	0.0	0.0	0.0	0.0

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Protocol ID: 07S-SEP-CTS-51  
 Study Director: Vince Davis / Kevin Westerfeld  
 Investigator: Dr. William G. Johnson

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Pest Name	Corn	Corn	Corn	Corn
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY
Crop Name	Soybean	Soybean	Soybean	Soybean
Crop Variety	P93M95	P93M95	P93M95	P93M95
Description	RR	RR	RR	RR
Rating Date	Jun/20/2007	Jul/03/2007	Jul/17/2007	Aug/13/2007
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size	18	36	20	54
Sample Size Unit	IN	IN	IN	IN
Crop Stage	R1	R2		R5-R6
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH
Pest Stage	V5-V8	V11		GrainFil
Pest Density, Unit	20 YD2	20 YD2	20 YD2	20 YD2
Assessed By	GK KW	AW	AW VM MK	KW VMD
Rating Timing	0 DAT	14 DAT	28 DAT	56 DAT
Days After First/Last Applic.	14 0	27 13	41 27	68 54
Plant-Eval Interval	43 DP-1	56 DP-1	70 DP-1	97 DP-1

  

Trit No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4
1	Fusilade EX 2 EC	0.094	lb ai/a	6	fl oz/a	EAPOWE A	A	89.0 a	99.0 a	99.8 a	100.0 a
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A				
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
2	Select Max	0.094	lb ai/a	12	fl oz/a	EAPOWE A	A	94.3 a	99.5 a	100.0 a	100.0 a
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A				
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
3	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE A	A	18.3 d	26.3 e	21.8 d	30.0 c
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
4	Raptor	0.039	lb ai/a	5	fl oz/a	EAPOWE A	A	50.0 c	95.8 ab	98.8 a	99.8 a
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A				
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
5	Assure II	0.0413	lb ai/a	6	fl oz/a	EAPOWE A	A	95.8 a	99.8 a	100.0 a	100.0 a
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	EAPOWE A	A				
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
6	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE A	A	53.3 c	96.0 ab	93.0 a	95.5 a
	Fusilade EX 2 EC	0.094	lb ai/a	6	fl oz/a	EAPOWE A	A				
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
7	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE A	A	68.3 b	98.5 a	99.5 a	100.0 a
	Select Max	0.094	lb ai/a	12	fl oz/a	EAPOWE A	A				
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
8	Extreme	0.81	lb ai/a	3	pt/a	EAPOWE A	A	94.5 a	99.8 a	99.8 a	100.0 a
	Assure II	0.0413	lb ai/a	6	fl oz/a	EAPOWE A	A				
	NIS	0.25	% v/v	0.25	% v/v	EAPOWE A	A				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	EAPOWE A	A				
9	Fusilade EX 2 EC	0.094	lb ai/a	6	fl oz/a	LAPOWE B	B	0.0 e	82.5 abc	93.5 a	99.0 a
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	LAPOWE B	B				
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE B	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE B	B				
10	Select Max	0.094	lb ai/a	12	fl oz/a	LAPOWE B	B	0.0 e	81.3 abc	96.5 a	99.3 a
	Touchdown Total	0.78	lb ae/a	24	fl oz/a	LAPOWE B	B				
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE B	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE B	B				

# Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Pest Name	Corn	Corn	Corn	Corn
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA
BBCH Scale	BSOY	BSOY	BSOY	BSOY
Crop Name	Soybean	Soybean	Soybean	Soybean
Crop Variety	P93M95	P93M95	P93M95	P93M95
Description	RR	RR	RR	RR
Rating Date	Jun/20/2007	Jul/03/2007	Jul/17/2007	Aug/13/2007
Rating Data Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Sample Size	18	36	20	54
Sample Size Unit	IN	IN	IN	IN
Crop Stage	R1	R2		R5-R6
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH
Pest Stage	V5-V8	V11		GrainFil
Pest Density, Unit	20 YD2	20 YD2	20 YD2	20 YD2
Assessed By	GK KW	AW	AW VM MK	KW VMD
Rating Timing	0 DAT	14 DAT	28 DAT	56 DAT
Days After First/Last Applic.	14 0	27 13	41 27	68 54
Plant-Eval Interval	43 DP-1	56 DP-1	70 DP-1	97 DP-1

  

Trit No.	Treatment Name	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4
11	Extreme NIS	0.81	lb ai/a	3	pt/a	LAPOWE	B	0.0 e	37.5 e	32.8 c	53.8 b
	Ammonium Sulfate	0.25	% v/v	0.25	% v/v	LAPOWE	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B				
12	Raptor Touchdown Total	0.039	lb ai/a	5	fl oz/a	LAPOWE	B	0.0 e	55.0 d	88.3 a	98.7 a
	NIS	0.78	lb ae/a	24	fl oz/a	LAPOWE	B				
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B				
13	Assure II Touchdown Total	0.0413	lb ai/a	6	fl oz/a	LAPOWE	B	0.0 e	73.8 bcd	79.8 b	92.8 a
	NIS	0.78	lb ae/a	24	fl oz/a	LAPOWE	B				
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B				
14	Extreme Fusilade EX 2 EC	0.81	lb ai/a	3	pt/a	LAPOWE	B	0.0 e	78.3 abc	90.8 a	98.8 a
	NIS	0.094	lb ai/a	6	fl oz/a	LAPOWE	B				
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B				
15	Extreme Select Max	0.81	lb ai/a	3	pt/a	LAPOWE	B	0.0 e	61.3 cd	91.0 a	98.5 a
	NIS	0.094	lb ai/a	12	fl oz/a	LAPOWE	B				
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B				
16	Extreme Assure II	0.81	lb ai/a	3	pt/a	LAPOWE	B	0.0 e	70.0 cd	91.8 a	97.3 a
	NIS	0.0413	lb ai/a	6	fl oz/a	LAPOWE	B				
	NIS	0.25	% v/v	0.25	% v/v	LAPOWE	B				
	Ammonium Sulfate	17	lb ai/100 gal	17	lb/100 gal	LAPOWE	B				
17	Untreated Check							0.0 e	0.0 f	0.0 e	0.0 d

  

LSD (P=.05)	5.44	15.19	7.24	11.58
Standard Deviation	3.81	10.63	5.06	8.11
CV	11.48	14.41	6.25	9.42
Bartlett's X2	20.164	77.511	69.245	97.896
P(Bartlett's X2)	0.005*	0.001*	0.001*	0.001*
Replicate F	0.881	0.690	0.010	0.390
Replicate Prob(F)	0.4576	0.5627	0.9986	0.7608
Treatment F	458.749	30.821	150.069	52.608
Treatment Prob(F)	0.0001	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.