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05-LPORT-GRW

SITE AND DESIGN

Plot Width: 10.0 Unit: FT Plot Length: 30.0 Unit: FT Plot Area: 300.0

Unit: FT2 No Reps: 4 No Treats: 20

County: Miami

Cooperator Name: Jim Wilson

Title: TOUCHDOWN: EVALUATION OF SUSPECT GLYPHOSATE RESISTANT GIANT RAGWEED - INDIANA

Investigator: Dr. Bill Johnson

Title: Associate Professor

Affiliation: Purdue University

CROP DEVELOPMENT

	1.
Date:	May-12-2005
Crop:	1 SOYBEANS
Stand:	NOT EMERGED
	2.
Date:	Jun-08-2005
Crop:	1 SOYBEANS
Stand:	V2
Height From, To, Unit:	4.0 6.0 IN
Height Total (m):	0.13
	3.
Date:	Jun-15-2005
Crop:	1 SOYBEANS
Stand:	V4
	4.
Date:	Jun-22-2005
Crop:	1 SOYBEANS
Stand:	V5-V6
Height From, To, Unit:	10.0 14.0 IN
Height Total (m):	0.3

PEST DEVELOPMENT

	1.
Date:	May-12-2005
Pest:	1 AMBROSIA TRIFIDA WAMBROTRIFI
Density From, To:	3.0 5.0
Unit:	PER SQUARE YARD
Height From, To, Unit:	1.0 IN
	2.
Date:	Jun-08-2005
Pest:	1 AMBROSIA TRIFIDA WAMBROTRIFI
Density From, To:	1.0 20.0
Unit:	PER SQUARE YARD
Height From, To, Unit:	0.5 12.0 IN
Leaves From, To:	2.0 16.0
	3.
Date:	Jun-08-2005
Pest:	3 CHENOPODIUM ALBUM WCHENOALBUM
Density From, To:	6.0 15.0
Unit:	PER SQUARE YARD
Height From, To, Unit:	1.0 3.0 IN
Leaves From, To:	4.0 6.0

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	4.
Date:	Jun-15-2005
Pest:	2 AMBROSIA TRIFIDA WAMBROTRIFI
Dev. Stage From, To:	
Density From, To:	1.0 20.0
Unit:	PER SQUARE YARD
Stand:	
Vigor:	
Height From, To, Unit:	0.5 18.0 IN
	5.
Date:	Jun-15-2005
Pest:	3 CHENOPODIUM ALBUM WCHENOALBUM
Dev. Stage From, To:	
Density From, To:	6.0 15.0
Unit:	PER SQUARE YARD
Height From, To, Unit:	1.0 6.0 IN
	6.
Date:	Jun-22-2005
Pest:	1 AMBROSIA TRIFIDA WAMBROTRIFI
Dev. Stage From, To:	
Density From, To:	3.0 30.0
Unit:	PER SQUARE YARD
Height From, To, Unit:	6.0 24.0 IN
	7.
Date:	Jun-22-2005
Pest:	3 CHENOPODIUM ALBUM WCHENOALBUM
Dev. Stage From, To:	
Density From, To:	5.0 25.0
Unit:	PER SQUARE YARD
Height From, To, Unit:	2.0 10.0 IN
	8.
Date:	Jun-22-2005
Pest:	8 AMARANTHUS RETROFLEXUS WAMARARETRO
Dev. Stage From, To:	
Density From, To:	3.0 10.0
Unit:	PER SQUARE YARD
Height From, To, Unit:	2.0 10.0 IN

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WEATHER DESCRIPTION

1. Date: May-12-2005 **Air Temp. from:** 50.0 **to:** _____ **Unit:** F **% Rel. Humidity:**
 78.0 **Wind Velocity from:** 6.0 **to:** 10.0 **Unit:** MPH
Wind Direction: E **Wind Speed Comment:** _____ **Sky Condition:** 100%
 Cloud Cover **Sky Condition after:** Same
Rain 24 Hours before: _____ **Rain after:** _____ **Rain 24 Hours after:** _____
Meteo Station: _____
Comment:

2. Date: Jun-08-2005 **Air Temp. from:** 88.0 **to:** _____ **Unit:** F **% Rel. Humidity:**
 50.8 **Wind Velocity from:** 0.0 **to:** 5.0 **Unit:** MPH
Wind Direction: S **Wind Speed Comment:** Gusts were 5MPH **Sky Condition:** 40%
 Cloud Cover **Sky Condition after:** Same
Rain 24 Hours before: _____ **Rain after:** _____ **Rain 24 Hours after:** _____
Meteo Station: _____
Comment:

3. Date: Jun-15-2005 **Air Temp. from:** 74.0 **to:** _____ **Unit:** F **% Rel. Humidity:**
 67.2 **Wind Velocity from:** 8.0 **to:** 10.0 **Unit:** MPH
Wind Direction: W **Wind Speed Comment:** _____ **Sky Condition:** 99%
 Cloud Cover **Sky Condition after:** Same
Rain 24 Hours before: _____ **Rain after:** _____ **Rain 24 Hours after:** _____
Meteo Station: _____
Comment:

No.	Date	Soil Temp.	Unit	Soil Moisture Condition
1.	May-12-2005	55.0	F	Moist surface
2.	Jun-08-2005	82.0	F	Dry surface
3.	Jun-15-2005	70.0	F	Moist surface

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APPLICATION

	A	B	C
Application Date/Time:	May-12-2005 10:58 AM	Jun-08-2005 07:58 AM	Jun-12-2005 10:58 AM
Target (Crop):	1		
Application Equipment:	BACSPR	BACSPR	BACSPR
Pressure, Unit:	28.0 PSI	28.0 PSI	28.0 PSI
Nozzle Type:	FLAFAN	FLAFAN	FLAFAN
Nozzle Description:	XR11002VS	XR11002VS	XR11002VS
Nozzle Spacing, Unit:	20.0 IN	20.0 IN	20.0 IN
Ground Speed, Unit:	3.0 MPH	3.0 MPH	3.0 MPH
Nozzle Filter Mesh:	50	50	50
Spray Volume, Unit:	15.0 GPA	15.0 GPA	15.0 GPA
Propellent:	COMCO2	COMCO2	COMCO2
Application Method:	NONINC	NONINC	NONINC
Application Timing:	PREPRE [P	EAPOCR [P	LAPOCR [P
Applic. Placement:	BROSOI	BROFOL	BROFOL

RAINFALL/IRRIGATION

No.	Date/Time	Area	Type	Amount	Unit
1.	May-01-2005 07:30 AM	Trial	RAIN	0.03	IN
2.	May-12-2005 07:30 AM	Trial	RAIN	0.02	IN
3.	May-14-2005 12:00 AM	Trial	RAIN	0.74	IN
4.	May-15-2005 12:00 AM	Trial	RAIN	0.15	IN
5.	May-20-2005 07:30 AM	Trial	RAIN	0.83	IN
6.	May-23-2005 07:30 AM	Trial	RAIN	0.02	IN
7.	May-30-2005 12:00 AM	Trial	RAIN	0.01	IN
8.	Jun-03-2005 07:30 AM	Trial	RAIN	0.37	IN
9.	Jun-05-2005 12:00 AM	Trial	RAIN	0.08	IN
10.	Jun-06-2005 07:30 AM	Trial	RAIN	0.21	IN
11.	Jun-11-2005 07:30 AM	Trial	RAIN	1.39	IN
12.	Jun-12-2005 12:00 AM	Trial	RAIN	0.06	IN
13.	Jun-13-2005 07:30 AM	Trial	RAIN	1.34	IN
14.	Jun-14-2005 07:30 AM	Trial	RAIN	0.11	IN
15.	Jun-16-2005 07:30 AM	Trial	RAIN	0.04	IN
16.	Jun-28-2005 07:30 AM	Trial	RAIN	0.23	IN
17.	Jul-01-2005 07:30 AM	Trial	RAIN	0.12	IN
18.	Jul-05-2005 07:30 AM	Trial	RAIN	0.48	IN
19.	Jul-12-2005 07:30 AM	Trial	RAIN	0.03	IN
20.	Jul-13-2005 07:30 AM	Trial	RAIN	0.05	IN
21.	Jul-14-2005 07:30 AM	Trial	RAIN	0.3	IN
22.	Jul-15-2005 07:30 AM	Trial	RAIN	0.15	IN
23.	Jul-16-2005 07:30 AM	Trial	RAIN	0.06	IN
24.	Jul-17-2005 07:30 AM	Trial	RAIN	0.61	IN
25.	Jul-18-2005 07:30 AM	Trial	RAIN	0.14	IN
26.	Jul-19-2005 07:30 AM	Trial	RAIN	0.95	IN
27.	Jul-21-2005 07:30 AM	Trial	RAIN	0.05	IN
28.	Jul-22-2005 07:30 AM	Trial	RAIN	0.89	IN
29.	Jul-24-2005 12:00 AM	Trial	RAIN	0.03	IN
30.	Jul-27-2005 07:30 AM	Trial	RAIN	1.79	IN

OBJECTIVE NOTES:

- =====
1. COMPARE CONTROL OF SUSPECT GLYPHOSATE RESISTANT GIANT RAGWEED IN CONVENTIONALLY TILLED GLYPHOSATE TOLERANT SOYBEANS WITH POST APPLICATIONS OF GLYPHOSATE
 2. COMPARE CONTROL TO TREATMENTS WITH FLEXSTAR AND TANK MIXTURES OF GLYPHOSATE/FLEXSTAR, GLYPHOSATE/FIRSTRATE

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Title: TOUCHDOWN:EVALUATION OF SUSPECT GLYPHOSATE RESISTANT GIANT RAGWEED - INDIANA

SE Group No.						
SE Name	1	2	3	5	6	7
Crop Code	AMBTR	AMBTR	CHEAL	1 CSOYBE	AMBTR	CHEAL
Part Rated	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM
Rating Unit Scale				IS 1-100	IS 1-100	IS 1-100
Assessment Date	May-26-2005	Jun-08-2005	Jun-08-2005	Jun-08-2005	Jun-15-2005	Jun-15-2005
Assessment Type, Sub-Type	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW
Days After Last Application	14	27	27	27	3	3
Trt Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit	Plot			
1 CHECK UNTREATED			101	0.0	0.0	0.0
			408	0.0	0.0	0.0
			601	0.0	0.0	0.0
			810	0.0	0.0	0.0
Mean =				0.0	0.0	0.0
18 A14972	1.48 KgA/Ha	208	88.0	80.0	100.0	0.0
18 AMMONIUM SULFATE	2.0 %AW/W	405	85.0	95.0	100.0	0.0
18 TOUCHDOWN TOTAL 4.17 SL	1.28 KgAE/Ha	502	87.0	80.0	100.0	0.0
		805	82.0	70.0	100.0	0.0
Mean =			85.5	81.3	100.0	0.0
19 SCEPTER 70DG	137.0 GA/Ha	209	55.0	70.0	100.0	0.0
19 AMMONIUM SULFATE	2.0 %AW/W	304	90.0	100.0	100.0	0.0
19 TOUCHDOWN TOTAL 4.17 SL	1.28 KgAE/Ha	610	50.0	90.0	100.0	0.0
		803	55.0	80.0	100.0	0.0
Mean =			62.5	85.0	100.0	0.0
20 FIRSTRATE 84 WG	44.0 GA/Ha	210	78.0	90.0	100.0	0.0
20 AMMONIUM SULFATE	2.0 %AW/W	401	50.0	100.0	100.0	0.0
20 TOUCHDOWN TOTAL 4.17 SL	1.28 KgAE/Ha	507	80.0	98.0	100.0	0.0
		809	85.0	99.0	100.0	0.0
Mean =			73.3	96.8	100.0	0.0
Mean =				98.5	98.8	100.0

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SE Group No.				8	9	10	11	12	12	
SE Name				AMBTR	CHEAL	AMARE	CI	AMBTR	CI	
Crop Code							1 CSOYBE		1 CSOYBE	
Part Rated				PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	
Rating Unit Scale				IS 1-100						
Assessment Date				Jun-22-2005	Jun-22-2005	Jun-22-2005	Jun-22-2005	Jun-30-2005	Jun-30-2005	
Assessment Type, Sub-Type				NOR RAW						
Days After Last Application				10	10	10	10	18	18	
Trt	Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit	Plot						
10	AMMONIUM SULFATE	2.0	%AW/W	110	93.0	100.0	100.0	12.0	85.0	0.0
10	FLEXSTAR 1.88 EC (A12967A)	197.0	GA/Ha	303	100.0	100.0	100.0	0.0	100.0	0.0
10	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	510	98.0	100.0	100.0	5.0	100.0	10.0
				807	95.0	100.0	100.0	3.0	88.0	20.0
				Mean =	96.5	100.0	100.0	5.0	93.3	7.5
11	AMMONIUM SULFATE	2.0	%AW/W	201	100.0	100.0	100.0	5.0	98.0	0.0
11	FLEXSTAR 1.88 EC (A12967A)	263.0	GA/Ha	402	100.0	100.0	100.0	5.0	90.0	10.0
11	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	505	100.0	100.0	100.0	5.0	98.0	10.0
				708	100.0	100.0	100.0	5.0	100.0	0.0
				Mean =	100.0	100.0	100.0	5.0	96.5	5.0
12	AMMONIUM SULFATE	2.0	%AW/W	202	100.0	100.0	100.0	5.0	100.0	0.0
12	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	309	96.0	100.0	100.0	10.0	80.0	20.0
12	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	608	100.0	100.0	100.0	5.0	100.0	15.0
				706	100.0	100.0	100.0	3.0	99.0	0.0
				Mean =	99.0	100.0	100.0	5.8	94.8	8.8
13	AMMONIUM SULFATE	2.0	%AW/W	203					90.0	10.0
13	FLEXSTAR 1.88 EC (A12967A)	263.0	GA/Ha	406					98.0	20.0
13	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	504					98.0	10.0
				801					80.0	30.0
				Mean =	.	.	.	.	91.5	17.5
14	AMMONIUM SULFATE	2.0	%AW/W	204					100.0	15.0
14	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	403					100.0	25.0
14	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	509					100.0	20.0
				709					100.0	20.0
				Mean =	.	.	.	.	100.0	20.0
15	AMMONIUM SULFATE	2.0	%AW/W	205	100.0	100.0	100.0	10.0	100.0	0.0
15	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	410	96.0	90.0	100.0	10.0	80.0	15.0
15	MSO	1.0	%V/V	506	100.0	100.0	100.0	5.0	100.0	0.0
				703	97.0	95.0	100.0	5.0	85.0	15.0
				Mean =	98.3	96.3	100.0	7.5	91.3	7.5
16	AMMONIUM SULFATE	2.0	%AW/W	206					70.0	20.0
16	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	409					30.0	25.0
16	MSO	1.0	%V/V	606					70.0	25.0
				701					30.0	30.0
				Mean =	.	.	.	.	50.0	25.0
17	AMMONIUM SULFATE	2.0	%AW/W	207	99.0	100.0	100.0	10.0	97.0	10.0
17	FIRSTRATE 84 WG	17.7	GA/Ha	301	98.0	100.0	100.0	0.0	98.0	0.0
17	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	603	98.0	100.0	100.0	5.0	97.0	10.0
				702	100.0	100.0	100.0	5.0	99.0	20.0
				Mean =	98.8	100.0	100.0	5.0	97.8	10.0
18	A14972	1.48	KgA/Ha	208	98.0	100.0	100.0	10.0	95.0	0.0
18	AMMONIUM SULFATE	2.0	%AW/W	405	100.0	100.0	100.0	0.0	100.0	0.0
18	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	502	100.0	100.0	100.0	5.0	100.0	0.0
				805	100.0	100.0	100.0	0.0	98.0	0.0
				Mean =	99.5	100.0	100.0	3.8	98.3	0.0
19	SCEPTER 70DG	137.0	GA/Ha	209	97.0	100.0	100.0	5.0	95.0	0.0
19	AMMONIUM SULFATE	2.0	%AW/W	304	100.0	100.0	100.0	0.0	100.0	0.0
19	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	610	100.0	100.0	100.0	3.0	100.0	0.0
				803	100.0	100.0	100.0	0.0	97.0	5.0
				Mean =	99.3	100.0	100.0	2.0	98.0	1.3
20	FIRSTRATE 84 WG	44.0	GA/Ha	210	98.0	100.0	100.0	5.0	97.0	10.0
20	AMMONIUM SULFATE	2.0	%AW/W	401	100.0	100.0	100.0	0.0	100.0	0.0
20	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	507	100.0	100.0	100.0	5.0	100.0	0.0
				809	100.0	100.0	100.0	5.0	100.0	10.0
				Mean =	99.5	100.0	100.0	3.8	99.3	5.0

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SE Group No.	12	12	13	13	14	14
SE Name	AMBTR	CI	AMBTR	CI	AMBTR	CI
Crop Code		1 CSOYBE		1 CSOYBE		1 CSOYBE
Part Rated	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM
Rating Unit Scale	IS 1-100	IS 1-100	IS 1-100	IS 1-100	IS 1-100	IS 1-100
Assessment Date	Jul-06-2005	Jul-06-2005	Jul-12-2005	Jul-12-2005	Jul-27-2005	Jul-27-2005
Assessment Type, Sub-Type	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW
Days After Last Application	24	24	30	30	45	45
Trt Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit	Plot			
1 CHECK UNTREATED			101	0.0	0.0	0.0
			408	0.0	0.0	10.0
			601	0.0	0.0	0.0
			810	0.0	0.0	0.0
			Mean =	0.0	0.0	2.5
2 AMMONIUM SULFATE	2.0 %AW/W		102	95.0	0.0	96.0
2 TOUCHDOWN TOTAL 4.17 SL	0.62 KgAE/Ha		407	86.0	0.0	0.0
			503	93.0	0.0	96.0
			705	95.0	0.0	97.0
			Mean =	92.3	0.0	72.3
3 AMMONIUM SULFATE	2.0 %AW/W		103	100.0	0.0	100.0
3 TOUCHDOWN TOTAL 4.17 SL	1.28 KgAE/Ha		308	94.0	0.0	94.0
			607	95.0	0.0	98.0
			806	87.0	0.0	92.0
			Mean =	94.0	0.0	96.0
4 AMMONIUM SULFATE	2.0 %AW/W		104	98.0	0.0	98.0
4 TOUCHDOWN TOTAL 4.17 SL	2.48 KgAE/Ha		302	90.0	0.0	100.0
			602	75.0	0.0	70.0
			710	95.0	0.0	96.0
			Mean =	89.5	0.0	91.0
5 AMMONIUM SULFATE	2.0 %AW/W		105	95.0	0.0	93.0
5 TOUCHDOWN TOTAL 4.17 SL	0.62 KgAE/Ha		310	90.0	0.0	96.0
			508	100.0	0.0	100.0
			804	85.0	0.0	93.0
			Mean =	92.5	0.0	95.5
6 AMMONIUM SULFATE	2.0 %AW/W		106	95.0	0.0	96.0
6 TOUCHDOWN TOTAL 4.17 SL	1.28 KgAE/Ha		307	98.0	0.0	95.0
			604	96.0	0.0	97.0
			808	94.0	0.0	96.0
			Mean =	95.8	0.0	96.0
7 AMMONIUM SULFATE	2.0 %AW/W		107	98.0	0.0	98.0
7 TOUCHDOWN TOTAL 4.17 SL	2.48 KgAE/Ha		404	100.0	0.0	100.0
			501	100.0	0.0	100.0
			704	93.0	0.0	95.0
			Mean =	97.8	0.0	98.3
8 AMMONIUM SULFATE	2.0 %AW/W		108	98.0	0.0	99.0
8 TOUCHDOWN TOTAL 4.17 SL	5.1 KgAE/Ha		305	100.0	0.0	98.0
			609	100.0	0.0	100.0
			802	97.0	0.0	98.0
			Mean =	98.8	0.0	98.8
9 AMMONIUM SULFATE	2.0 %AW/W		109	90.0	0.0	95.0
9 FLEXSTAR 1.88 EC (A12967A)	263.0 GA/Ha		306	95.0	0.0	97.0
9 TOUCHDOWN TOTAL 4.17 SL	0.62 KgAE/Ha		605	85.0	0.0	90.0
			707	100.0	0.0	99.0
			Mean =	92.5	0.0	95.3

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SE Group No.				12	12	13	13	14	14	
SE Name				AMBTR	CI	AMBTR	CI	AMBTR	CI	
Crop Code					1 CSOYBE		1 CSOYBE		1 CSOYBE	
Part Rated				PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	
Rating Unit Scale				IS 1-100						
Assessment Date				Jul-06-2005	Jul-06-2005	Jul-12-2005	Jul-12-2005	Jul-27-2005	Jul-27-2005	
Assessment Type, Sub-Type				NOR RAW						
Days After Last Application				24	24	30	30	45	45	
Trt	Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit	Plot						
10	AMMONIUM SULFATE	2.0	%AW/W	110	97.0	0.0	98.0	0.0	85.0	0.0
10	FLEXSTAR 1.88 EC (A12967A)	197.0	GA/Ha	303	100.0	0.0	100.0	0.0	100.0	0.0
10	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	510	100.0	0.0	100.0	0.0	100.0	0.0
				807	89.0	0.0	92.0	0.0	86.0	0.0
				Mean =	96.5	0.0	97.5	0.0	92.8	0.0
11	AMMONIUM SULFATE	2.0	%AW/W	201	98.0	0.0	99.0	0.0	97.0	0.0
11	FLEXSTAR 1.88 EC (A12967A)	263.0	GA/Ha	402	97.0	0.0	99.0	0.0	98.0	0.0
11	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	505	100.0	0.0	100.0	0.0	100.0	0.0
				708	95.0	0.0	98.0	0.0	99.0	0.0
				Mean =	97.5	0.0	99.0	0.0	98.5	0.0
12	AMMONIUM SULFATE	2.0	%AW/W	202	100.0	0.0	100.0	0.0	99.0	0.0
12	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	309	92.0	0.0	91.0	0.0	80.0	0.0
12	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	608	100.0	0.0	100.0	0.0	100.0	0.0
				706	95.0	0.0	98.0	0.0	96.0	0.0
				Mean =	96.8	0.0	97.3	0.0	93.8	0.0
13	AMMONIUM SULFATE	2.0	%AW/W	203	95.0	0.0	98.0	0.0	99.0	0.0
13	FLEXSTAR 1.88 EC (A12967A)	263.0	GA/Ha	406	99.0	0.0	96.0	0.0	100.0	0.0
13	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	504	95.0	0.0	100.0	0.0	95.0	0.0
				801	90.0	0.0	92.0	0.0	75.0	10.0
				Mean =	94.8	0.0	96.5	0.0	92.3	2.5
14	AMMONIUM SULFATE	2.0	%AW/W	204	97.0	0.0	100.0	0.0	93.0	0.0
14	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	403	100.0	0.0	100.0	0.0	100.0	0.0
14	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	509	100.0	0.0	100.0	0.0	100.0	10.0
				709	96.0	0.0	97.0	0.0	98.0	0.0
				Mean =	98.3	0.0	99.3	0.0	97.8	2.5
15	AMMONIUM SULFATE	2.0	%AW/W	205	100.0	0.0	100.0	0.0	100.0	0.0
15	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	410	85.0	0.0	99.0	0.0	80.0	0.0
15	MSO	1.0	%V/V	506	100.0	0.0	100.0	0.0	99.0	0.0
				703	85.0	0.0	90.0	0.0	80.0	0.0
				Mean =	92.5	0.0	97.3	0.0	89.8	0.0
16	AMMONIUM SULFATE	2.0	%AW/W	206	75.0	0.0	80.0	0.0	58.0	0.0
16	FLEXSTAR 1.88 EC (A12967A)	395.0	GA/Ha	409	30.0	0.0	88.0	0.0	25.0	0.0
16	MSO	1.0	%V/V	606	50.0	0.0	85.0	0.0	55.0	0.0
				701	50.0	0.0	50.0	0.0	30.0	0.0
				Mean =	51.3	0.0	75.8	0.0	42.0	0.0
17	AMMONIUM SULFATE	2.0	%AW/W	207	90.0	0.0	93.0	0.0	88.0	0.0
17	FIRSTRATE 84 WG	17.7	GA/Ha	301	90.0	0.0	95.0	0.0	90.0	0.0
17	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	603	94.0	0.0	96.0	0.0	95.0	0.0
				702	96.0	0.0	97.0	0.0	93.0	0.0
				Mean =	92.5	0.0	95.3	0.0	91.5	0.0
18	A14972	1.48	KgA/Ha	208	85.0	0.0	88.0	0.0	88.0	0.0
18	AMMONIUM SULFATE	2.0	%AW/W	405	100.0	0.0	100.0	0.0	100.0	0.0
18	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	502	100.0	0.0	92.0	0.0	99.0	0.0
				805	97.0	0.0	96.0	0.0	96.0	0.0
				Mean =	95.5	0.0	94.0	0.0	95.8	0.0
19	SCEPTER 70DG	137.0	GA/Ha	209	85.0	0.0	95.0	0.0	86.0	0.0
19	AMMONIUM SULFATE	2.0	%AW/W	304	100.0	0.0	100.0	0.0	100.0	0.0
19	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	610	100.0	0.0	100.0	0.0	99.0	5.0
				803	90.0	0.0	95.0	0.0	75.0	0.0
				Mean =	93.8	0.0	97.5	0.0	90.0	1.3
20	FIRSTRATE 84 WG	44.0	GA/Ha	210	90.0	0.0	95.0	0.0	88.0	0.0
20	AMMONIUM SULFATE	2.0	%AW/W	401	96.0	0.0	98.0	0.0	93.0	0.0
20	TOUCHDOWN TOTAL 4.17 SL	1.28	KgAE/Ha	507	100.0	0.0	100.0	0.0	100.0	0.0
				809	100.0	0.0	100.0	0.0	100.0	0.0
				Mean =	96.5	0.0	98.3	0.0	95.3	0.0

Purdue University

Title: TOUCHDOWN:EVALUATION OF SUSPECT GLYPHOSATE RESISTANT GIANT RAGWEED - INDIANA							
SE Group No.	1	2	3	5	6	7	
SE Name	AMBTR	AMBTR	CHEAL	CI	AMBTR	CHEAL	
Crop Code				1 CSOYBE			
Part Rated	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	PLADAM	
Rating Unit Scale				IS 1-100	IS 1-100	IS 1-100	
Assessment Date	May-26-2005	Jun-08-2005	Jun-08-2005	Jun-08-2005	Jun-15-2005	Jun-15-2005	
Assessment Type, Sub-Type	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW	
Days After Last Application	14	27	27	27	3	3	
Trt Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit					
1 CHECK UNTREATED	0.0 b	0.0 c	0.0 b	0.0 a	0.0 b	0.0 b	
17 AMMONIUM SULFATE FIRSTRATE 84 WG TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 17.7 GA/Ha 1.28 KgAE/Ha						
18 A14972 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	1.48 KgA/Ha 2.0 %AW/W 1.28 KgAE/Ha	85.5 a	81.3 b	100.0 a	0.0 a	98.8 a 100.0 a	
19 SCEPTER 70DG AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	137.0 GA/Ha 2.0 %AW/W 1.28 KgAE/Ha	62.5 a	85.0 b	100.0 a	0.0 a	98.0 a 100.0 a	
20 FIRSTRATE 84 WG AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	44.0 GA/Ha 2.0 %AW/W 1.28 KgAE/Ha	73.3 a	96.8 a	100.0 a	0.0 a	98.5 a 100.0 a	
LSD (P=.05)	22.52	11.16	0.00	0.00	1.47	0.00	
Standard Deviation	14.08	6.98	0.00	0.00	0.92	0.00	
CV	25.46	10.61	0.0	0.0	1.24	0.0	
Bartlett's X2	7.645	2.752	0.0	0.0	1.661	0.0	
P(Bartlett's X2)	0.022*	0.253	.	.	0.436	.	
Replicate F	0.014	3.038	0.000	0.000	3.248	0.000	
Replicate Prob(F)	0.9976	0.0855	1.0000	1.0000	0.0741	1.0000	
Treatment F	29.212	161.503	0.000	0.000	11527.413	0.000	
Treatment Prob(F)	0.0001	0.0001	1.0000	1.0000	0.0001	1.0000	

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

Purdue University

SE Group No.			8	9	10	11	12	12	
SE Name			AMBTR	CHEAL	AMARE	CI	AMBTR	CI	
Crop Code									
Part Rated			PLADAM	PLADAM	PLADAM	1 CSOYBE	PLADAM	1 CSOYBE	
Rating Unit Scale			IS 1-100	IS 1-100	IS 1-100	IS 1-100	IS 1-100	IS 1-100	
Assessment Date			Jun-22-2005	Jun-22-2005	Jun-22-2005	Jun-22-2005	Jun-30-2005	Jun-30-2005	
Assessment Type, Sub-Type			NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW	
Days After Last Application			10	10	10	10	18	18	
Trt	Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit						
1	CHECK UNTREATED			0.0 b	0.0 c	0.0 b	0.0 b	0.0 d	2.5 de
2	AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 0.62 KgAE/Ha		96.5 a	100.0 a	100.0 a	3.3 ab	94.8 ab	1.3 de
3	AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 1.28 KgAE/Ha		99.0 a	100.0 a	100.0 a	2.5 ab	96.8 ab	10.0 b-e
4	AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 2.48 KgAE/Ha		97.5 a	100.0 a	100.0 a	5.8 ab	97.0 ab	6.3 b-e
5	AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 0.62 KgAE/Ha						78.3 b	7.5 b-e
6	AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 1.28 KgAE/Ha						88.8 ab	11.3 b-e
7	AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 2.48 KgAE/Ha						98.3 ab	8.8 b-e
8	AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 5.1 KgAE/Ha						99.3 a	21.3 ab
9	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 263.0 GA/Ha 0.62 KgAE/Ha		95.8 a	100.0 a	100.0 a	7.5 a	90.0 ab	6.3 b-e
10	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 197.0 GA/Ha 1.28 KgAE/Ha		96.5 a	100.0 a	100.0 a	5.0 ab	93.3 ab	7.5 b-e
11	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 263.0 GA/Ha 1.28 KgAE/Ha		100.0 a	100.0 a	100.0 a	5.0 ab	96.5 ab	5.0 cde
12	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 395.0 GA/Ha 1.28 KgAE/Ha		99.0 a	100.0 a	100.0 a	5.8 ab	94.8 ab	8.8 b-e
13	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 263.0 GA/Ha 1.28 KgAE/Ha						91.5 ab	17.5 a-d
14	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 395.0 GA/Ha 1.28 KgAE/Ha						100.0 a	20.0 abc
15	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) MSO	2.0 %AW/W 395.0 GA/Ha 1.0 %V/V		98.3 a	96.3 b	100.0 a	7.5 a	91.3 ab	7.5 b-e
16	AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) MSO	2.0 %AW/W 395.0 GA/Ha 1.0 %V/V						50.0 c	25.0 a
17	AMMONIUM SULFATE FIRSTRATE 84 WG TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 17.7 GA/Ha 1.28 KgAE/Ha		98.8 a	100.0 a	100.0 a	5.0 ab	97.8 ab	10.0 b-e
18	A14972 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	1.48 KgA/Ha 2.0 %AW/W 1.28 KgAE/Ha		99.5 a	100.0 a	100.0 a	3.8 ab	98.3 ab	0.0 e
19	SCEPTER 70DG AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	137.0 GA/Ha 2.0 %AW/W 1.28 KgAE/Ha		99.3 a	100.0 a	100.0 a	2.0 ab	98.0 ab	1.3 de
20	FIRSTRATE 84 WG AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	44.0 GA/Ha 2.0 %AW/W 1.28 KgAE/Ha		99.5 a	100.0 a	100.0 a	3.8 ab	99.3 a	5.0 cde
LSD (P=.05)			3.00	1.90	0.00	3.97	11.52	9.14	
Standard Deviation			2.10	1.33	0.00	2.78	8.14	6.46	
CV			2.31	1.44	0.0	63.63	9.29	70.83	
Bartlett's X2			14.857	0.0	0.0	7.572	65.984	12.981	
P(Bartlett's X2)			0.137	.	.	0.671	0.001*	0.793	
Replicate F			1.044	1.000	0.000	5.659	1.652	3.541	
Replicate Prob(F)			0.3848	0.4040	1.0000	0.0028	0.1876	0.0201	
Treatment F			677.964	1737.000	0.000	2.369	33.201	4.553	
Treatment Prob(F)			0.0001	0.0001	1.0000	0.0228	0.0001	0.0001	

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

Purdue University

SE Group No.	12	12	13	13	14	14		
SE Name	AMBTR	CI	AMBTR	CI	AMBTR	CI		
Crop Code		1		1		1		
Part Rated	PLADAM	CSOYBE	PLADAM	CSOYBE	PLADAM	CSOYBE		
Rating Unit Scale	IS 1-100	IS 1-100	IS 1-100	IS 1-100	IS 1-100	IS 1-100		
Assessment Date	Jul-06-2005	Jul-06-2005	Jul-12-2005	Jul-12-2005	Jul-27-2005	Jul-27-2005		
Assessment Type, Sub-Type	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW	NOR RAW		
Days After Last Application	24	24	30	30	45	45		
Trt Treatment/Product Name	Product/AI Rate	Product/AI Rate Unit						
1 CHECK UNTREATED			0.0 c	0.0 a	2.5 b	0.0 a	0.0 c	0.0 a
2 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 0.62 KgAE/Ha		92.3 a	0.0 a	72.3 a	0.0 a	89.3 a	0.0 a
3 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 1.28 KgAE/Ha		94.0 a	0.0 a	96.0 a	0.0 a	84.5 a	0.0 a
4 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 2.48 KgAE/Ha		89.5 a	0.0 a	91.0 a	0.0 a	84.8 a	2.5 a
5 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 0.62 KgAE/Ha		92.5 a	0.0 a	95.5 a	0.0 a	80.0 a	0.0 a
6 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 1.28 KgAE/Ha		95.8 a	0.0 a	96.0 a	0.0 a	88.3 a	2.5 a
7 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 2.48 KgAE/Ha		97.8 a	0.0 a	98.3 a	0.0 a	91.8 a	3.8 a
8 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 5.1 KgAE/Ha		98.8 a	0.0 a	98.8 a	0.0 a	93.0 a	6.3 a
9 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 263.0 GA/Ha 0.62 KgAE/Ha		92.5 a	0.0 a	95.3 a	0.0 a	90.5 a	0.0 a
10 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 197.0 GA/Ha 1.28 KgAE/Ha		96.5 a	0.0 a	97.5 a	0.0 a	92.8 a	0.0 a
11 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 263.0 GA/Ha 1.28 KgAE/Ha		97.5 a	0.0 a	99.0 a	0.0 a	98.5 a	0.0 a
12 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 395.0 GA/Ha 1.28 KgAE/Ha		96.8 a	0.0 a	97.3 a	0.0 a	93.8 a	0.0 a
13 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 263.0 GA/Ha 1.28 KgAE/Ha		94.8 a	0.0 a	96.5 a	0.0 a	92.3 a	2.5 a
14 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 395.0 GA/Ha 1.28 KgAE/Ha		98.3 a	0.0 a	99.3 a	0.0 a	97.8 a	2.5 a
15 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) MSO	2.0 %AW/W 395.0 GA/Ha 1.0 %V/V		92.5 a	0.0 a	97.3 a	0.0 a	89.8 a	0.0 a
16 AMMONIUM SULFATE FLEXSTAR 1.88 EC (A12967A) MSO	2.0 %AW/W 395.0 GA/Ha 1.0 %V/V		51.3 b	0.0 a	75.8 a	0.0 a	42.0 b	0.0 a
17 AMMONIUM SULFATE FIRSTRATE 84 WG TOUCHDOWN TOTAL 4.17 SL	2.0 %AW/W 17.7 GA/Ha 1.28 KgAE/Ha		92.5 a	0.0 a	95.3 a	0.0 a	91.5 a	0.0 a
18 A14972 AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	1.48 KgA/Ha 2.0 %AW/W 1.28 KgAE/Ha		95.5 a	0.0 a	94.0 a	0.0 a	95.8 a	0.0 a
19 SCEPTER 70DG AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	137.0 GA/Ha 2.0 %AW/W 1.28 KgAE/Ha		93.8 a	0.0 a	97.5 a	0.0 a	90.0 a	1.3 a
20 FIRSTRATE 84 WG AMMONIUM SULFATE TOUCHDOWN TOTAL 4.17 SL	44.0 GA/Ha 2.0 %AW/W 1.28 KgAE/Ha		96.5 a	0.0 a	98.3 a	0.0 a	95.3 a	0.0 a
LSD (P=.05)			9.35	0.00	17.62	0.00	14.06	4.63
Standard Deviation			6.61	0.00	12.46	0.00	9.94	3.27
CV			7.52	0.0	13.9	0.0	11.83	307.97
Bartlett's X2			40.75	0.0	133.945	0.0	38.034	3.833
P(Bartlett's X2)			0.002*	.	0.001*	.	0.004*	0.699
Replicate F			0.857	0.000	0.386	0.000	1.921	1.430
Replicate Prob(F)			0.4688	1.0000	0.7633	1.0000	0.1364	0.2434
Treatment F			48.387	0.000	12.183	0.000	21.499	1.123
Treatment Prob(F)			0.0001	1.0000	0.0001	1.0000	0.0001	0.3547

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