

University of Georgia

ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN	
Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER Location: PONDER FARM Investigator: Eric P. Prostko	

Reps: 3 Plots: 6 by 25 feet
 Appl. Amount: 15 GAL/AC Mix Size: 1.5 L (total for 3 plots; minimum=0.5866 L)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Diluent	Rep 1	2	3
1	CHECK	UNBEHA											
2	ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a		POST A	10.0 mL/mx	1445.0 mL	102	209	311
	OUTLOOK	720 GA/L	EC		65611	12.8 fl oz/a		POST A	10.0 mL/mx				
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	25.0 mL/mx				
	SENTRIS					0.42 % v/v		POST A	6.299 mL/mx				
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A	3.75 mL/mx				
3	ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a		POST A	10.0 mL/mx	1453.0 mL	103	206	313
	ZIDUA SC	500 GA/L	SC		82001	2.5 fl oz/a		POST A	1.953 mL/mx				
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	25.0 mL/mx				
	SENTRIS					0.42 % v/v		POST A	6.299 mL/mx				
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A	3.75 mL/mx				
4	ENGENIA	600.0 GA/L	SL		18322	12.8 fl oz/a		POST A	10.0 mL/mx	1452.4 mL	104	201	308
	ZIDUA SC	500.0 GA/L	SC		82001	3.25 fl oz/a		POST A	2.539 mL/mx				
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	25.0 mL/mx				
	SENTRIS					0.42 % v/v		POST A	6.299 mL/mx				
	SURFACTANT-NONIONIC	100.0 %	SL		88926	0.25 % v/v		POST A	3.75 mL/mx				
5	TAVIUM PLUS VAPORGRIP	405 GA/L	CS		97070	56.5 fl oz/a		POST A	44.14 mL/mx	1420.8 mL	105	203	307
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	25.0 mL/mx				
	SENTRIS					0.42 % v/v		POST A	6.299 mL/mx				
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A	3.75 mL/mx				
6	XTENDIMAX WITH VAPORGRIP TECHN WARRANT	350 GA/L	SL		18325	22.0 fl oz/a		POST A	17.19 mL/mx		1410.3 mL	106	202
	ROUNDUP POWERMAX	360 GA/L	CS		9066A	48.0 fl oz/a		POST A	37.5 mL/mx				
	SENTRIS	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	25.0 mL/mx				
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A	6.299 mL/mx				
7	ENGENIA PRIME	627.9 GA/L	SC		87200	16.0 fl oz/a		POST A	12.5 mL/mx	1452.5 mL		107	208
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	25.0 mL/mx				
	SENTRIS					0.42 % v/v		POST A	6.299 mL/mx				
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A	3.75 mL/mx				
8	LIBERTY	2.34	SL			32.0 oz/a		POST A	25.0 mL/mx		1473.0 mL	108	211
	ZIDUA	4.17	SC			2.5 oz/a		POST A	1.953 mL/mx				
9	LIBERTY	2.34	SL			32.0 oz/a		POST A	25.0 mL/mx	1465 mL	109	207	309
	OUTLOOK	6	EC			12.8 oz/a		POST A	10.0 mL/mx				
10	LIBERTY	2.34	SL			32.0 oz/a		POST A	25.0 mL/mx	1462.5 mL	110	212	310
	DUAL MAGNUM	7.62	EC			16.0 oz/a		POST A	12.5 mL/mx				
11	LIBERTY	2.34	SL			32.0 oz/a		POST A	25.0 mL/mx	1437.5 mL	111	210	303
	WARRANT	3	ME			48.0 oz/a		POST A	37.5 mL/mx				
12	REFLEX	2	SL			24.0 oz/a		POST A	18.75 mL/mx	1475.6 mL	112	213	301
	CLASSIC	25	DG			0.50 oz/a		POST A	0.3745 g/mx				
	BUTYRAC 200 (2,4-DB)	2	SL			2.0 oz/a		POST A	1.562 mL/mx				
	NIS					0.25 % v/v		POST A	3.75 mL/mx				
13	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	25.0 mL/mx	1475 mL	113	205	306

Sort Order: Treatment

Trial Comments
SENTRIS @ 8 OZ/A = 0.42% V/V NIS = INDUCE (HELENA) TAVIUM = S-METOLACHLOR (2.26 LBS AI/GAL) + DICAMBA (1.12 LBS AE/GAL) ENGENIA PRIME = DICAMBA (4 LBS AE/GAL) + PYROXASULFONE (0.85 LBS AI/GAL) + IMAZETHAPYR (0.38 LBS AI/GAL) TTI NOZZLES FOR TRTS 2-7 AND 13 AIXR NOZZLES FOR TRTS 8-12 ON JUNE 3, ~25% OF PALMER AMARANTH PLANTS WERE >3"

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
Location: PONDER FARM Investigator: Eric P. Prostko

SUMMARY:

1) AT 6 DAT, ALL TREATMENTS CAUSED SIGNIFICANT SOYBEAN STUNTING EXCEPT LIBERTY + WARRANT AND XTENDIMAX + WARRANT + ROUNDUP P-MAX + SENTRIS + NIS.

2) AT 6 DAT, ALL TREATMENTS CAUSES SIGNIFICANT SOYBEAN LEAF NECROSIS/BURN. THE GREATEST AMOUNT OF LEAF NECROSIS OCCURRED REFLEX + CLASSIC + 2,4-DB (28%), ENGENIA + OUTLOOK + ROUNDUP P-MAX + SENTRIS + NIS (18%), AND TAVIUM + ROUNDUP P-MAX + SENTRIS + NIS (18%).

3) BY 20 DAT, THE SOYBEANS RECOVERED FROM ALL INJURY EXCEPT FOR THE REFLEX + CLASSIC + 2,4-DB (12% STUNTING).

4) AT 20 DAT, ALL TREATMENTS PROVIDED 99% CONTROL OF ANNUAL GRASSES EXCEPT REFLEX + CLASSIC + 2,4-DB (78% CONTROL) AND ROUNDUP P-MAX (72% CONTROL)

5) AT 46 DAT, ALL TREATMENTS PROVIDED AT LEAST 96% CONTROL OF PALMER AMARANTH EXCEPT FOR ROUNDUP P-MAX (81% CONTROL).

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 Location: PONDER FARM Investigator: Eric P. Prostko

GENERAL TRIAL INFORMATION

Study Director: Shawn Beam **Title:** _____
Affiliation: _____
Postal Code: _____

Investigator: Eric P. Prostko **Title:** _____
Affiliation: _____
Postal Code: _____

TRIAL LOCATION

City: _____ **Trial Status:** E
State/Prov.: _____ **Trial Reliability:** _____
Postal Code: _____ **Initiation Date:** _____
Country: _____ **Planned Completion Date:** _____
E-Longitude of LL Corner °: _____ **N-Latitude of LL Corner °:** _____
Altitude of LL Corner: _____ **Unit:** _____ **Angle y-axis to North °:** _____
Directions: _____

COOPERATOR/LANDOWNER

Cooperator: _____ **Country:** _____
Org: _____ **Phone No:** _____
Address 1: _____ **Fax No:** _____
Address 2: _____
City: _____
State/Prov: _____
Postal Code: _____

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N
Guidelines: _____ **Guideline Description:** _____

Objective: To evaluate Engenia and BASF group 15 herbicides to competitive dicamba and group 15 mixtures.

Conclusions:

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name	
1.	AMAPA	Am	aranthus Palmeri	Amaranth, Palmer
2.	AGRASS	Gr	asses, Annual	Grasses, Annual
3.		An	nual Broad-Leaved Plants	Plants, Annual Broad-Leaved
4.		GI	ycine Max (L.) Merr.	Soybean

Crop 1: GLYMA SOYBEAN **Variety:** AG55XFO
Planting Date: May-17-21 **Planting Method:** MONOSEM VACUUM
Rate: 8 SEED/FT **Depth:** 1.5 IN **Perennial Age:** _____
Row Spacing: 36 IN **Spacing Within Row:** _____ **Seed Bed:** _____
Soil Temperature: _____ **Soil Moisture:** OPTIMUM **Emergence Date:** _____

SITE AND DESIGN

Plot Width, Unit: 6 FT **Plot Length, Unit:** 25 FT **Reps:** 3
Site Type: _____
Tillage Type: CONVENTIONAL **Study Design:** RACOBL

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.	PEANUT		2020

MAINTENANCE

Field Prep./Maintenance: 300 LBS/A 5-15-30 PREPLANT;

No.	Date	Maintenance Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit
1.							

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SOIL DESCRIPTION

% Sand: 94 % OM: 0.93 Texture: SAND
 % Silt: 4 pH: 6.0 Soil Name: TIFTON
 % Clay: 2 CEC: 3.7 Fert. Level: GOOD

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.	May-18-21		0.3	IN	SPRINKLER - LATERAL MOVE		
2.	May-24-21		0.5	IN	SPRINKLER - LATERAL MOVE		
3.	Jun-1-21		0.5	IN	SPRINKLER - LATERAL MOVE		
4.	Jun-4-21		0.45	IN	SPRINKLER - LATERAL MOVE		
5.	Jun-4-21		0.6	IN	RAINFALL		
6.	Jun-6-21		0.4	IN	RAINFALL		
7.	Jun-7-21		1.25	IN	RAINFALL		
8.	Jun-8-21		0.15	IN	RAINFALL		
9.	Jun-11-21		0.3	IN	RAINFALL		
10.	Jun-15-21		0.3	IN	RAINFALL		
11.	Jun-17-21		0.46	IN	SPRINKLER - LATERAL MOVE		
12.	Jun-20-21		1.0	IN	RAINFALL		
13.	Jun-21-21		2.4	IN	RAINFALL		

Overall Moisture Conditions: _____
 Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

A	
Application Date:	Jun-3-21
Time of Day:	7:00 AM
Application Method:	BROADCAST
Application Timing:	POST
Applic. Placement:	FOLIAGE
Air Temp., Unit:	71 F
% Relative Humidity:	87
Wind Velocity, Unit:	0 MPH
Dew Presence (Y/N):	Y
Water Hardness:	--
Soil Temp., Unit:	75 F
Soil Moisture:	OPTIMUM
% Cloud Cover:	95

CROP STAGE AT EACH APPLICATION

A	
Crop 1 Code, Stage:	GLYMA,
Stage Scale:	V2
Height, Unit:	5, IN

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 Location: PONDER FARM Investigator: Eric P. Prostko

WEED STAGE AT EACH APPLICATION

A	
Weed 1 Code, Stage:	AMAPA,
Stage Scale:	1-9"
Density, Unit:	
Weed 2 Code, Stage:	AGRAS,
Stage Scale:	1-2"
Density, Unit:	
Weed 3 Code, Stage:	,
Stage Scale:	
Density, Unit:	
Weed 4 Code, Stage:	,
Stage Scale:	
Density, Unit:	

APPLICATION EQUIPMENT

A	
Appl. Equipment:	BACKPACK
Operating Pressure:	36
Nozzle Type:	AIXR/TTI
Nozzle Size:	11002
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	
Band Width, Unit:	
Boom Length, Unit:	60 IN
Boom Height, Unit:	20 IN
Ground Speed, Unit:	3.5 MPH
Incorporation Equip.:	
Hours to Incorp.:	
Incorp. Depth, Unit:	
Carrier:	WATER
Spray Volume, Unit:	15 GPA
Spray pH:	
Propellant:	CO2
Tank Mix (Y/N):	

Trt No	Treatment Application Comment

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Trial ID: SB-04-21		Study Dir.: Shawn Beam/ABRAHAM FULMER									
Location: PONDER FARM		Investigator: Eric P. Prostko									
Weed Code								----- Glyma	----- Glyma	Amapa -----	
Crop Code								Stunt %	Necrosis %	Control %	
Part Rated								Jun-9-21	Jun-9-21	Jun-9-21	
Rating Data Type											
Rating Unit											
Rating Date											
Trt-Eval Interval								6 DA-A	6 DA-A	6 DA-A	
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate	Grow Stg	Appl Code	1	2	3
1	CHECK				UNBEHA				0.0 e	0.0 f	0.0 c
2	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A		6.7 bc	18.3 b	91.7 a
	OUTLOOK	720	GA/L	EC	65611	12.8 fl oz/a	POST A				
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A				
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
3	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A		6.7 bc	15.0 c	91.0 a
	ZIDUA SC	500	GA/L	SC	82001	2.5 fl oz/a	POST A				
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A				
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
4	ENGENIA	600.0	GA/L	SL	18322	12.8 fl oz/a	POST A		5.0 cd	15.0 c	91.0 a
	ZIDUA SC	500.0	GA/L	SC	82001	3.25 fl oz/a	POST A				
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A				
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100.0	%	SL	88926	0.25 % v/v	POST A				
5	TAVIUM PLUS VAPORGRIP	405	GA/L	CS	97070	56.5 fl oz/a	POST A		5.0 cd	18.3 b	87.7 a
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A				
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
6	XTENDIMAX WITH VAPORGRIP TECHN	350	GA/L	SL	18325	22.0 fl oz/a	POST A		3.3 cde	13.3 c	96.0 a
	WARRANT	360	GA/L	CS	9066A	48.0 fl oz/a	POST A				
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A				
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
7	ENGENIA PRIME	627.9	GA/L	SC	87200	16.0 fl oz/a	POST A		10.0 b	13.3 c	97.7 a
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A				
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
8	LIBERTY	2.34		SL		32.0 oz/a	POST A		10.0 b	10.0 d	96.3 a
	ZIDUA	4.17		SC		2.5 oz/a	POST A				
9	LIBERTY	2.34		SL		32.0 oz/a	POST A		6.7 bc	8.3 d	99.0 a
	OUTLOOK	6		EC		12.8 oz/a	POST A				
10	LIBERTY	2.34		SL		32.0 oz/a	POST A		5.0 cd	10.0 d	99.0 a
	DUAL MAGNUM	7.62		EC		16.0 oz/a	POST A				
11	LIBERTY	2.34		SL		32.0 oz/a	POST A		3.3 cde	8.3 d	94.3 a
	WARRANT	3		ME		48.0 oz/a	POST A				
12	REFLEX	2		SL		24.0 oz/a	POST A		16.7 a	28.3 a	99.0 a
	CLASSIC	25		DG		0.50 oz/a	POST A				
	BUTYRAC 200 (2,4-DB)	2		SL		2.0 oz/a	POST A				
	NIS					0.25 % v/v	POST A				
13	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A		1.7 de	3.3 e	71.3 b
LSD P=.10									4.52	3.08	13.60
Standard Deviation									3.24	2.20	9.73
CV									52.58	17.73	11.36
Grand Mean									6.15	12.44	85.69
Bartlett's X2^									4.752	12.001	19.278
P(Bartlett's X2)									0.966	0.446	0.082

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Could not calculate LSD (% mean diff) for columns 6 because error mean square = 0.
 ^Calculated from residual.

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN										
Trial ID: SB-04-21		Study Dir.: Shawn Beam/ABRAHAM FULMER								
Location: PONDER FARM		Investigator: Eric P. Prostko								
Weed Code								Agrass		
Crop Code								-----	-----	
Part Rated									Glyma	
Rating Data Type								Control		
Rating Unit								%	Stunting	
Rating Date								Jun-9-21	%	
									Jun-23-21	
									Necrosis	
									%	
									Jun-23-21	
Trt-Eval Interval								6 DA-A	20 DA-A	
Trt Treatment								4	5	
No. Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate	Grow Stg	Appl Code			
									6	
1 CHECK				UNBEHA				0.0 c	0.0 c	0.0 a
2 ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a	POST A		99.0 a	0.0 c	0.0 a
OUTLOOK	720 GA/L	EC		65611	12.8 fl oz/a	POST A				
ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A				
SENTRIS					0.42 % v/v	POST A				
SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A				
3 ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a	POST A		99.0 a	0.0 c	0.0 a
ZIDUA SC	500 GA/L	SC		82001	2.5 fl oz/a	POST A				
ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A				
SENTRIS					0.42 % v/v	POST A				
SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A				
4 ENGENIA	600.0 GA/L	SL		18322	12.8 fl oz/a	POST A		99.0 a	1.7 bc	0.0 a
ZIDUA SC	500.0 GA/L	SC		82001	3.25 fl oz/a	POST A				
ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A				
SENTRIS					0.42 % v/v	POST A				
SURFACTANT-NONIONIC	100.0 %	SL		88926	0.25 % v/v	POST A				
5 TAVIUM PLUS VAPORGRIP	405 GA/L	CS		97070	56.5 fl oz/a	POST A		99.0 a	0.0 c	0.0 a
ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A				
SENTRIS					0.42 % v/v	POST A				
SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A				
6 XTENDIMAX WITH VAPORGRIP TECHN	350 GA/L	SL		18325	22.0 fl oz/a	POST A		99.0 a	0.0 c	0.0 a
WARRANT	360 GA/L	CS		9066A	48.0 fl oz/a	POST A				
ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A				
SENTRIS					0.42 % v/v	POST A				
SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A				
7 ENGENIA PRIME	627.9 GA/L	SC		87200	16.0 fl oz/a	POST A		99.0 a	0.0 c	0.0 a
ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A				
SENTRIS					0.42 % v/v	POST A				
SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A				
8 LIBERTY	2.34	SL			32.0 oz/a	POST A		99.0 a	1.7 bc	0.0 a
ZIDUA	4.17	SC			2.5 oz/a	POST A				
9 LIBERTY	2.34	SL			32.0 oz/a	POST A		99.0 a	3.3 b	0.0 a
OUTLOOK	6	EC			12.8 oz/a	POST A				
10 LIBERTY	2.34	SL			32.0 oz/a	POST A		99.0 a	1.7 bc	0.0 a
DUAL MAGNUM	7.62	EC			16.0 oz/a	POST A				
11 LIBERTY	2.34	SL			32.0 oz/a	POST A		99.0 a	0.0 c	0.0 a
WARRANT	3	ME			48.0 oz/a	POST A				
12 REFLEX	2	SL			24.0 oz/a	POST A		86.3 b	11.7 a	0.0 a
CLASSIC	25	DG			0.50 oz/a	POST A				
BUTYRAC 200 (2,4-DB)	2	SL			2.0 oz/a	POST A				
NIS					0.25 % v/v	POST A				
13 ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		99.0 a	0.0 c	0.0 a
LSD P=.10								4.67	3.24	.
Standard Deviation								3.34	2.32	0.00
CV								3.7	150.98	0.0
Grand Mean								90.41	1.54	0.00
Bartlett's X2^								46.349	41.822	.
P(Bartlett's X2)								0.00*	0.00*	.

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Could not calculate LSD (% mean diff) for columns 6 because error mean square = 0.
 ^Calculated from residual.

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Location: PONDER FARM		Investigator: Eric P. Prostko							
Weed Code	Crop Code	Part Rated	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	Amapa ----- Control % Jun-23-21 20 DA-A	Agrass ----- Control % Jun-23-21 20 DA-A	Amapa ----- Control % Jul-19-21 46 DA-A
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code	
1	CHECK				UNBEHA				0.0 c 0.0 c 0.0 c
2	ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a	POST A		99.0 a 99.0 a 99.0 a
	OUTLOOK	720 GA/L	EC		65611	12.8 fl oz/a	POST A		
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A		
3	ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a	POST A		99.0 a 99.0 a 99.0 a
	ZIDUA SC	500 GA/L	SC		82001	2.5 fl oz/a	POST A		
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A		
4	ENGENIA	600.0 GA/L	SL		18322	12.8 fl oz/a	POST A		97.7 a 99.0 a 99.0 a
	ZIDUA SC	500.0 GA/L	SC		82001	3.25 fl oz/a	POST A		
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100.0 %	SL		88926	0.25 % v/v	POST A		
5	TAVIUM PLUS VAPORGRIP	405 GA/L	CS		97070	56.5 fl oz/a	POST A		99.0 a 99.0 a 99.0 a
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A		
6	XTENDIMAX WITH VAPORGRIP TECHN	350 GA/L	SL		18325	22.0 fl oz/a	POST A		99.0 a 96.0 a 99.0 a
	WARRANT	360 GA/L	CS		9066A	48.0 fl oz/a	POST A		
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A		
7	ENGENIA PRIME	627.9 GA/L	SC		87200	16.0 fl oz/a	POST A		99.0 a 99.0 a 99.0 a
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v	POST A		
8	LIBERTY	2.34	SL			32.0 oz/a	POST A		99.0 a 99.0 a 93.3 a
	ZIDUA	4.17	SC			2.5 oz/a	POST A		
9	LIBERTY	2.34	SL			32.0 oz/a	POST A		99.0 a 99.0 a 99.0 a
	OUTLOOK	6	EC			12.8 oz/a	POST A		
10	LIBERTY	2.34	SL			32.0 oz/a	POST A		99.0 a 99.0 a 96.3 a
	DUAL MAGNUM	7.62	EC			16.0 oz/a	POST A		
11	LIBERTY	2.34	SL			32.0 oz/a	POST A		97.7 a 99.0 a 97.7 a
	WARRANT	3	ME			48.0 oz/a	POST A		
12	REFLEX	2	SL			24.0 oz/a	POST A		99.0 a 78.0 b 99.0 a
	CLASSIC	25	DG			0.50 oz/a	POST A		
	BUTYRAC 200 (2,4-DB)	2	SL			2.0 oz/a	POST A		
	NIS					0.25 % v/v	POST A		
13	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a	POST A		63.3 b 71.7 b 81.3 b
LSD P=.10							9.08	10.70	10.73
Standard Deviation							6.50	7.66	7.68
CV							7.35	8.76	8.61
Grand Mean							88.44	87.44	89.28
Bartlett's X2^							45.549	30.676	50.281
P(Bartlett's X2)							0.00*	0.002*	0.00*

Means followed by same letter or symbol do not significantly differ (P=.10, LSD).
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Could not calculate LSD (% mean diff) for columns 6 because error mean square = 0.
 ^Calculated from residual.

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
 Location: PONDER FARM Investigator: Eric P. Prostko

Randomized Complete Block (RCB) AOV For ----- Glyma Stunt % Jun-9-21 6 DA-A (Data Column 1)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	1073.076923			
Replicate	2	165.384615	82.692308	7.898	0.0023
Treatment	12	656.410256	54.700855	5.224	0.0003
Error	24	251.282051	10.470085		

Randomized Complete Block (RCB) AOV For ----- Glyma Necrosis % Jun-9-21 6 DA-A (Data Column 2)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	1993.589744			
Replicate	2	16.666667	8.333333	1.714	0.2014
Treatment	12	1860.256410	155.021368	31.890	0.0001
Error	24	116.666667	4.861111		

Randomized Complete Block (RCB) AOV For Amapa ----- Control % Jun-9-21 6 DA-A (Data Column 3)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	28914.307692			
Replicate	2	798.000000	399.000000	4.211	0.0271
Treatment	12	25842.307692	2153.525641	22.729	0.0001
Error	24	2274.000000	94.750000		

Randomized Complete Block (RCB) AOV For Agrass ----- Control % Jun-9-21 6 DA-A (Data Column 4)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	27297.435897			
Replicate	2	22.358974	11.179487	1.000	0.3827
Treatment	12	27006.769231	2250.564103	201.312	0.0001
Error	24	268.307692	11.179487		

Randomized Complete Block (RCB) AOV For ----- Glyma Stunting % Jun-23-21 20 DA-A (Data Column 5)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	507.692308			
Replicate	2	3.846154	1.923077	0.356	0.7038
Treatment	12	374.358974	31.196581	5.782	0.0001
Error	24	129.487179	5.395299		

Randomized Complete Block (RCB) AOV For ----- Glyma Necrosis % Jun-23-21 20 DA-A (Data Column 6)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	0.000000000000			
Replicate	2	0.000000000000	0.000000000000	0.000	1.0000
Treatment	12	0.000000000000	0.000000000000	0.000	1.0000
Error	24	0.000000000000	0.000000000000		

Randomized Complete Block (RCB) AOV For Amapa ----- Control % Jun-23-21 20 DA-A (Data Column 7)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	29965.589744			
Replicate	2	74.666667	37.333333	0.884	0.4261
Treatment	12	28877.589744	2406.465812	56.995	0.0001
Error	24	1013.333333	42.222222		

Randomized Complete Block (RCB) AOV For Agrass ----- Control % Jun-23-21 20 DA-A (Data Column 8)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	29373.589744			
Replicate	2	186.820513	93.410256	1.592	0.2242
Treatment	12	27778.923077	2314.910256	39.463	0.0001
Error	24	1407.846154	58.660256		

Randomized Complete Block (RCB) AOV For Amapa ----- Control % Jul-19-21 46 DA-A (Data Column 9)

Source	DF	Sum of Squares	Mean Square	F	Prob(F)
Total	38	28297.897436			
Replicate	2	101.589744	50.794872	0.860	0.4357
Treatment	12	26779.230769	2231.602564	37.795	0.0001
Error	24	1417.076923	59.044872		

Rating Unit
 % = PERCENT

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
 Location: PONDER FARM Investigator: Eric P. Prostko

							----- Glyma	----- Glyma		
							Stunt %	Necrosis %		
							Jun-9-21 6 DA-A	Jun-9-21 6 DA-A		
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code Plot		
1	CHECK				UNBEHA			101 204 305 Mean =	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0
2	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A	102	0.0	15.0
	OUTLOOK	720	GA/L	EC	65611	12.8 fl oz/a	POST A	209	10.0	20.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	311	10.0	20.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	6.7	18.3
3	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A	103	0.0	15.0
	ZIDUA SC	500	GA/L	SC	82001	2.5 fl oz/a	POST A	206	10.0	15.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	313	10.0	15.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	6.7	15.0
4	ENGENIA	600.0	GA/L	SL	18322	12.8 fl oz/a	POST A	104	0.0	15.0
	ZIDUA SC	500.0	GA/L	SC	82001	3.25 fl oz/a	POST A	201	10.0	15.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	308	5.0	15.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100.0	%	SL	88926	0.25 % v/v	POST A			
								Mean =	5.0	15.0
5	TAVIUM PLUS VAPORGRIP	405	GA/L	CS	97070	56.5 fl oz/a	POST A	105	5.0	20.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	203	5.0	15.0
	SENTRIS					0.42 % v/v	POST A	307	5.0	20.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	5.0	18.3
6	XTENDIMAX WITH VAPORGRIP TECHN	350	GA/L	SL	18325	22.0 fl oz/a	POST A	106	0.0	15.0
	WARRANT	360	GA/L	CS	9066A	48.0 fl oz/a	POST A	202	5.0	15.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	304	5.0	10.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	3.3	13.3
7	ENGENIA PRIME	627.9	GA/L	SC	87200	16.0 fl oz/a	POST A	107	10.0	15.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	208	15.0	15.0
	SENTRIS					0.42 % v/v	POST A	302	5.0	10.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	10.0	13.3
8	LIBERTY	2.34		SL		32.0 oz/a	POST A	108	10.0	10.0
	ZIDUA	4.17		SC		2.5 oz/a	POST A	211	10.0	10.0
								312	10.0	10.0
								Mean =	10.0	10.0
9	LIBERTY	2.34		SL		32.0 oz/a	POST A	109	0.0	10.0
	OUTLOOK	6		EC		12.8 oz/a	POST A	207	10.0	10.0
								309	10.0	5.0
								Mean =	6.7	8.3
10	LIBERTY	2.34		SL		32.0 oz/a	POST A	110	0.0	10.0
	DUAL MAGNUM	7.62		EC		16.0 oz/a	POST A	212	10.0	10.0
								310	5.0	10.0
								Mean =	5.0	10.0

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN											
Trial ID: SB-04-21		Study Dir.: Shawn Beam/ABRAHAM FULMER									
Location: PONDER FARM		Investigator: Eric P. Prostko									
Weed Code								Amapa -----	Agrass -----		
Crop Code								Control %	Control %		
Part Rated								Jun-9-21	Jun-9-21		
Rating Data Type								6 DA-A	6 DA-A		
Rating Unit											
Rating Date											
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate	Grow Stg	Appl Code	Plot	3	4
1	CHECK				UNBEHA				101	0.0	0.0
									204	0.0	0.0
									305	0.0	0.0
									Mean =	0.0	0.0
2	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A		102	95.0	99.0
	OUTLOOK	720	GA/L	EC	65611	12.8 fl oz/a	POST A		209	85.0	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A		311	95.0	99.0
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
									Mean =	91.7	99.0
3	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A		103	99.0	99.0
	ZIDUA SC	500	GA/L	SC	82001	2.5 fl oz/a	POST A		206	75.0	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A		313	99.0	99.0
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
									Mean =	91.0	99.0
4	ENGENIA	600.0	GA/L	SL	18322	12.8 fl oz/a	POST A		104	99.0	99.0
	ZIDUA SC	500.0	GA/L	SC	82001	3.25 fl oz/a	POST A		201	75.0	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A		308	99.0	99.0
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100.0	%	SL	88926	0.25 % v/v	POST A				
									Mean =	91.0	99.0
5	TAVIUM PLUS VAPORGRIP	405	GA/L	CS	97070	56.5 fl oz/a	POST A		105	99.0	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A		203	65.0	99.0
	SENTRIS					0.42 % v/v	POST A		307	99.0	99.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
									Mean =	87.7	99.0
6	XTENDIMAX WITH VAPORGRIP TECHN	350	GA/L	SL	18325	22.0 fl oz/a	POST A		106	99.0	99.0
	WARRANT	360	GA/L	CS	9066A	48.0 fl oz/a	POST A		202	90.0	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A		304	99.0	99.0
	SENTRIS					0.42 % v/v	POST A				
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
									Mean =	96.0	99.0
7	ENGENIA PRIME	627.9	GA/L	SC	87200	16.0 fl oz/a	POST A		107	99.0	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A		208	99.0	99.0
	SENTRIS					0.42 % v/v	POST A		302	95.0	99.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A				
									Mean =	97.7	99.0
8	LIBERTY	2.34		SL		32.0 oz/a	POST A		108	95.0	99.0
	ZIDUA	4.17		SC		2.5 oz/a	POST A		211	99.0	99.0
									312	95.0	99.0
									Mean =	96.3	99.0
9	LIBERTY	2.34		SL		32.0 oz/a	POST A		109	99.0	99.0
	OUTLOOK	6		EC		12.8 oz/a	POST A		207	99.0	99.0
									309	99.0	99.0
									Mean =	99.0	99.0
10	LIBERTY	2.34		SL		32.0 oz/a	POST A		110	99.0	99.0
	DUAL MAGNUM	7.62		EC		16.0 oz/a	POST A		212	99.0	99.0
									310	99.0	99.0
									Mean =	99.0	99.0

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
 Location: PONDER FARM Investigator: Eric P. Prostko

							Amapa	Agrass		
							-----	-----		
							Control	Control		
							%	%		
							Jun-9-21	Jun-9-21		
							6 DA-A	6 DA-A		
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code Plot		
11	LIBERTY WARRANT	2.34		SL		32.0 oz/a	POST A	111	99.0	99.0
		3		ME		48.0 oz/a	POST A	210	85.0	99.0
								303	99.0	99.0
								Mean =	94.3	99.0
12	REFLEX CLASSIC	2		SL		24.0 oz/a	POST A	112	99.0	99.0
	BUTYRAC 200 (2,4-DB)	25		DG		0.50 oz/a	POST A	213	99.0	75.0
	NIS	2		SL		2.0 oz/a	POST A	301	99.0	85.0
						0.25 % v/v	POST A			
								Mean =	99.0	86.3
13	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	113	50.0	99.0
								205	65.0	99.0
								306	99.0	99.0
								Mean =	71.3	99.0

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN										
Trial ID: SB-04-21		Study Dir.: Shawn Beam/ABRAHAM FULMER								
Location: PONDER FARM		Investigator: Eric P. Prostko								
							----- Glyma	----- Glyma		
							Stunting %	Necrosis %		
							Jun-23-21 20 DA-A	Jun-23-21 20 DA-A		
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code Plot	5	6
1	CHECK				UNBEHA			101	0.0	0.0
								204	0.0	0.0
								305	0.0	0.0
								Mean =	0.0	0.0
2	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A	102	0.0	0.0
	OUTLOOK	720	GA/L	EC	65611	12.8 fl oz/a	POST A	209	0.0	0.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	311	0.0	0.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	0.0	0.0
3	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A	103	0.0	0.0
	ZIDUA SC	500	GA/L	SC	82001	2.5 fl oz/a	POST A	206	0.0	0.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	313	0.0	0.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	0.0	0.0
4	ENGENIA	600.0	GA/L	SL	18322	12.8 fl oz/a	POST A	104	0.0	0.0
	ZIDUA SC	500.0	GA/L	SC	82001	3.25 fl oz/a	POST A	201	5.0	0.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	308	0.0	0.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100.0	%	SL	88926	0.25 % v/v	POST A			
								Mean =	1.7	0.0
5	TAVIUM PLUS VAPORGRIP	405	GA/L	CS	97070	56.5 fl oz/a	POST A	105	0.0	0.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	203	0.0	0.0
	SENTRIS					0.42 % v/v	POST A	307	0.0	0.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	0.0	0.0
6	XTENDIMAX WITH VAPORGRIP TECHN	350	GA/L	SL	18325	22.0 fl oz/a	POST A	106	0.0	0.0
	WARRANT	360	GA/L	CS	9066A	48.0 fl oz/a	POST A	202	0.0	0.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	304	0.0	0.0
	SENTRIS					0.42 % v/v	POST A			
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	0.0	0.0
7	ENGENIA PRIME	627.9	GA/L	SC	87200	16.0 fl oz/a	POST A	107	0.0	0.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	208	0.0	0.0
	SENTRIS					0.42 % v/v	POST A	302	0.0	0.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A			
								Mean =	0.0	0.0
8	LIBERTY	2.34		SL		32.0 oz/a	POST A	108	0.0	0.0
	ZIDUA	4.17		SC		2.5 oz/a	POST A	211	5.0	0.0
								312	0.0	0.0
								Mean =	1.7	0.0
9	LIBERTY	2.34		SL		32.0 oz/a	POST A	109	0.0	0.0
	OUTLOOK	6		EC		12.8 oz/a	POST A	207	0.0	0.0
								309	10.0	0.0
								Mean =	3.3	0.0
10	LIBERTY	2.34		SL		32.0 oz/a	POST A	110	0.0	0.0
	DUAL MAGNUM	7.62		EC		16.0 oz/a	POST A	212	5.0	0.0
								310	0.0	0.0
								Mean =	1.7	0.0

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN											
Trial ID: SB-04-21		Study Dir.: Shawn Beam/ABRAHAM FULMER									
Location: PONDER FARM		Investigator: Eric P. Prostko									
Weed Code	Crop Code	Part Rated	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	Amapa ----- Control % Jun-23-21 20 DA-A	Agrass ----- Control % Jun-23-21 20 DA-A			
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate	Grow Unit	Appl Stg	Code Plot		
1	CHECK				UNBEHA				101 204 305 Mean =	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0
2	ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a		POST A	102	99.0	99.0
	OUTLOOK	720 GA/L	EC		65611	12.8 fl oz/a		POST A	209	99.0	99.0
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	311	99.0	99.0
	SENTRIS					0.42 % v/v		POST A			
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A			
									Mean =	99.0	99.0
3	ENGENIA	600 GA/L	SL		18322	12.8 fl oz/a		POST A	103	99.0	99.0
	ZIDUA SC	500 GA/L	SC		82001	2.5 fl oz/a		POST A	206	99.0	99.0
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	313	99.0	99.0
	SENTRIS					0.42 % v/v		POST A			
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A			
									Mean =	99.0	99.0
4	ENGENIA	600.0 GA/L	SL		18322	12.8 fl oz/a		POST A	104	99.0	99.0
	ZIDUA SC	500.0 GA/L	SC		82001	3.25 fl oz/a		POST A	201	95.0	99.0
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	308	99.0	99.0
	SENTRIS					0.42 % v/v		POST A			
	SURFACTANT-NONIONIC	100.0 %	SL		88926	0.25 % v/v		POST A			
									Mean =	97.7	99.0
5	TAVIUM PLUS VAPORGRIP	405 GA/L	CS		97070	56.5 fl oz/a		POST A	105	99.0	99.0
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	203	99.0	99.0
	SENTRIS					0.42 % v/v		POST A	307	99.0	99.0
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A			
									Mean =	99.0	99.0
6	XTENDIMAX WITH VAPORGRIP TECHN	350 GA/L	SL		18325	22.0 fl oz/a		POST A	106	99.0	99.0
	WARRANT	360 GA/L	CS		9066A	48.0 fl oz/a		POST A	202	99.0	90.0
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	304	99.0	99.0
	SENTRIS					0.42 % v/v		POST A			
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A			
									Mean =	99.0	96.0
7	ENGENIA PRIME	627.9 GA/L	SC		87200	16.0 fl oz/a		POST A	107	99.0	99.0
	ROUNDUP POWERMAX	540 GA/L	SL		683SP	32.0 fl oz/a		POST A	208	99.0	99.0
	SENTRIS					0.42 % v/v		POST A	302	99.0	99.0
	SURFACTANT-NONIONIC	100 %	SL		88926	0.25 % v/v		POST A			
									Mean =	99.0	99.0
8	LIBERTY	2.34	SL			32.0 oz/a		POST A	108	99.0	99.0
	ZIDUA	4.17	SC			2.5 oz/a		POST A	211	99.0	99.0
									312	99.0	99.0
									Mean =	99.0	99.0
9	LIBERTY	2.34	SL			32.0 oz/a		POST A	109	99.0	99.0
	OUTLOOK	6	EC			12.8 oz/a		POST A	207	99.0	99.0
									309	99.0	99.0
									Mean =	99.0	99.0
10	LIBERTY	2.34	SL			32.0 oz/a		POST A	110	99.0	99.0
	DUAL MAGNUM	7.62	EC			16.0 oz/a		POST A	212	99.0	99.0
									310	99.0	99.0
									Mean =	99.0	99.0

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
 Location: PONDER FARM Investigator: Eric P. Prostko

							Amapa -----	Agrass -----			
							Control %	Control %			
							Jun-23-21 20 DA-A	Jun-23-21 20 DA-A			
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code Plot	7	8	
11	LIBERTY	2.34		SL		32.0 oz/a	POST A	111	95.0	99.0	
	WARRANT	3		ME		48.0 oz/a	POST A	210	99.0	99.0	
									303	99.0	99.0
									Mean =	97.7	99.0
12	REFLEX	2		SL		24.0 oz/a	POST A	112	99.0	99.0	
	CLASSIC	25		DG		0.50 oz/a	POST A	213	99.0	85.0	
	BUTYRAC 200 (2,4-DB)	2		SL		2.0 oz/a	POST A	301	99.0	50.0	
	NIS					0.25 % v/v	POST A				
								Mean =	99.0	78.0	
13	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	113	50.0	85.0	
								205	90.0	65.0	
								306	50.0	65.0	
								Mean =	63.3	71.7	

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
 Location: PONDER FARM Investigator: Eric P. Prostko

							Amapa		

							Control		
							%		
							Jul-19-21		
							46 DA-A		
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code Plot	
1	CHECK				UNBEHA			101	0.0
								204	0.0
								305	0.0
								Mean =	0.0
2	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A	102	99.0
	OUTLOOK	720	GA/L	EC	65611	12.8 fl oz/a	POST A	209	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	311	99.0
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A		
								Mean =	99.0
3	ENGENIA	600	GA/L	SL	18322	12.8 fl oz/a	POST A	103	99.0
	ZIDUA SC	500	GA/L	SC	82001	2.5 fl oz/a	POST A	206	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	313	99.0
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A		
								Mean =	99.0
4	ENGENIA	600.0	GA/L	SL	18322	12.8 fl oz/a	POST A	104	99.0
	ZIDUA SC	500.0	GA/L	SC	82001	3.25 fl oz/a	POST A	201	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	308	99.0
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100.0	%	SL	88926	0.25 % v/v	POST A		
								Mean =	99.0
5	TAVIUM PLUS VAPORGRIP	405	GA/L	CS	97070	56.5 fl oz/a	POST A	105	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	203	99.0
	SENTRIS					0.42 % v/v	POST A	307	99.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A		
								Mean =	99.0
6	XTENDIMAX WITH VAPORGRIP TECHN	350	GA/L	SL	18325	22.0 fl oz/a	POST A	106	99.0
	WARRANT	360	GA/L	CS	9066A	48.0 fl oz/a	POST A	202	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	304	99.0
	SENTRIS					0.42 % v/v	POST A		
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A		
								Mean =	99.0
7	ENGENIA PRIME	627.9	GA/L	SC	87200	16.0 fl oz/a	POST A	107	99.0
	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	208	99.0
	SENTRIS					0.42 % v/v	POST A	302	99.0
	SURFACTANT-NONIONIC	100	%	SL	88926	0.25 % v/v	POST A		
								Mean =	99.0
8	LIBERTY	2.34		SL		32.0 oz/a	POST A	108	95.0
	ZIDUA	4.17		SC		2.5 oz/a	POST A	211	90.0
								312	95.0
								Mean =	93.3
9	LIBERTY	2.34		SL		32.0 oz/a	POST A	109	99.0
	OUTLOOK	6		EC		12.8 oz/a	POST A	207	99.0
								309	99.0
								Mean =	99.0
10	LIBERTY	2.34		SL		32.0 oz/a	POST A	110	99.0
	DUAL MAGNUM	7.62		EC		16.0 oz/a	POST A	212	95.0
								310	95.0
								Mean =	96.3

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
 Location: PONDER FARM Investigator: Eric P. Prostko

Weed Code							Amapa		
Crop Code							----		
Part Rated									
Rating Data Type							Control		
Rating Unit							%		
Rating Date							Jul-19-21		
Trt-Eval Interval							46 DA-A		
Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Re-Entry Interval	Rate Rate Unit	Grow Stg	Appl Code Plot	
									9
11	LIBERTY	2.34		SL		32.0 oz/a	POST A	111	95.0
	WARRANT	3		ME		48.0 oz/a	POST A	210	99.0
								303	99.0
								Mean =	97.7
12	REFLEX	2		SL		24.0 oz/a	POST A	112	99.0
	CLASSIC	25		DG		0.50 oz/a	POST A	213	99.0
	BUTYRAC 200 (2,4-DB)	2		SL		2.0 oz/a	POST A	301	99.0
	NIS					0.25 % v/v	POST A		
								Mean =	99.0
13	ROUNDUP POWERMAX	540	GA/L	SL	683SP	32.0 fl oz/a	POST A	113	50.0
								205	99.0
								306	95.0
								Mean =	81.3

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ENGENIA/LIBERTY GROUP 15 COMPARISON IN SOYBEAN

Trial ID: SB-04-21 Study Dir.: Shawn Beam/ABRAHAM FULMER
Location: PONDER FARM Investigator: Eric P. Prostko

Rating Unit
% = PERCENT