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Flex response to extremely high rates of several glyphosate products.

Trial ID: C45-05 Study Dir.: Stanley Culpepper
Location: Ponder Farm Investigator: Stanley Culpepper

Reps: 3 Plots: 6 by 30 feet
Spray vol: 14.8 gal/ac Mix size: 1 liters (min .69451)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep 1	2	3
1	Roundup WeatherMax	4.5	L	88	oz/a	POST 1	A	46.45 ml/mx	101	202	304
	Roundup WeatherMax	4.5	L	88	oz/a	POST 2	B	46.45 ml/mx			
2	MON 3539	4.5	L	88	oz/a	POST 1	A	46.45 ml/mx	102	204	302
	MON 3539	4.5	L	88	oz/a	POST 2	B	46.45 ml/mx			
3	Generic + NIS (0.25%)	4	L	128	oz/a	POST1	A	67.57 ml/mx	103	201	303
	Generic + NIS (0.25%)	4	L	128	oz/a	POST2	B	67.57 ml/mx			
4	Non-treated								104	203	301

Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Lot Code
116.132	ml	Roundup WeatherMax 4.5 L	
116.132	ml	MON 3539 4.5 L	
168.919	ml	Generic + NIS (0.25%) 4 L	

* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1 liters (mix size basis).
* Product amount calculations increased 25 % for overage adjustment.

Trial Comments

OBJECTIVE: Evalute RR Flex cotton response to several glyphosate formulations.

VISUAL COTTON RESPONSE:
1. Applications made at the POST 1 timing caused no visual injury.
2. WeatherMax and the Generic formulation caused 27-28% necrotic leaf burn at 9 d after the POST 2. Only 6% injury was noted with MON 3539.
3. By 28 d after the POST 2, significant injury was still detected with the WeatherMax and the Generic applications.

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Trt No.	Treatment Name	Rate	Rate Unit	1	2	3
	Crop Code			GOSHI	GOSHI	GOSHI
	Rating Data Type			injury	injury	injury
	Rating Unit			percent	percent	percent
	Rating Date			May-30-05	Jun-22-05	Jun-14-05
	Trt-Eval Interval			6 DA-A	29 DA-A	21 DA-A
1	Roundup WeatherMax	88	oz/a	0	27	16
	Roundup WeatherMax	88	oz/a			
2	MON 3539	88	oz/a	0	6	7
	MON 3539	88	oz/a			
3	Generic + NIS (0.25%)	128	oz/a	0	28	27
	Generic + NIS (0.25%)	128	oz/a			
4	Non-treated			0	0	0
	LSD (P=.05)			0.0	10.2	9.1
	Standard Deviation			0.0	5.1	4.6
	CV			0.0	33.4	36.56

Means followed by same letter do not significantly differ (P=.05, LSD)

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Trial ID: C45-05 Study Dir.: Stanley Culpepper
Location: Ponder Farm Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794

Investigator: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: Univ. of Georgia
Postal Code: 31794

TRIAL LOCATION

City: TyTy **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** good
Postal Code: 31794 **Initiation Date:** Apr-28-05
Country: USA **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:

Conclusions:

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	.		

Crop 1: GOSHI cotton **Variety:** RR Flex from monsanto
Planting Date: Apr-28-05 **Planting Method:** hill drop
Rate: 2 8 inch **Depth:** 0.5 in **Perennial Age:** ____ _____
Row Spacing: 36 inch **Spacing Within Row:** ____ _____ **Seed Bed:** bedded
Soil Temperature: 78 F **Soil Moisture:** moist **Emergence Date:** May-04-05

SITE AND DESIGN

Plot Width, Unit: 6 FT **Plot Length, Unit:** 30 FT **Reps:** 3
Site Type: Ponder research farm
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 94 **% OM:** 1.3 **Texture:** sand
% Silt: 2 **pH:** 5.9 **Soil Name:** Tifton sandy loam
% Clay: 4 **CEC:** _____ **Fert. Level:** _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: irrigated
Closest Weather Station: _____ **Distance:** _____ **Unit:** __

APPLICATION DESCRIPTION

	A	B
Application Date:	May-24-05	Jun-13-05
Time of Day:	7 pm	12 pm
Application Method:	broadcast	broadcast
Application Timing:	POST 1	POST 2
Applic. Placement:	overtop	overtop
Air Temp., Unit:	74 F	87 F
% Relative Humidity:	36	54
Wind Velocity, Unit:	2 mph	1 mph
Dew Presence (Y/N):	n	n
Water Hardness:		
Soil Temp., Unit:	88 F	85 F
Soil Moisture:	moist	moist
% Cloud Cover:	0	30

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GOSHI POST 1	GOSHI POST 2
Stage Scale:	12 leaf	16 leaf
Height, Unit:	15 inch	28 inch

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	.	
Stage Scale:	.	
Density, Unit:	. .	

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APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	backpack	backpack
Operating Pressure:	23	23
Nozzle Type:	flat fan	flat fan
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	18 inch	18 inch
Nozzles/Row:	2	2
Band Width, Unit:		
Boom Length, Unit:	4.5 feet	4.5 feet
Boom Height, Unit:	15 inch	15 inch
Ground Speed, Unit:	3 mph	3 mph
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:	water	water
Spray Volume, Unit:	14.8 GPA	14.8 GPA
Spray pH:		
Propellant:	CO2	CO2
Tank Mix (Y/N):	Y	Y

Trt No	Treatment Application Comment