University of Georgia

Tropical spiderwort response to RR Flex programs.

Trial ID: C13-03	Study Dir.: Culpepper, York
Location: Grady Co Loc 1	Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION Study Director: Culpepper Title: ext. weed science Affiliation: University of Georgia Postal Code: 31794 **Investigator:** Stanley Culpepper Title: ext. weed science Affiliation: University of Georgia Postal Code: 31794 TRIAL LOCATION City: Cairo (Location 1) Trial Status: completed Trial Reliability: excellent State/Prov.: Ga Initiation Date: Postal Code: 31795 Apr-30-03 Country: U.S.A.

Conducted Under GLP (Y/N): N Conducted Under GEP (Y/N): N

CROP A	AND WEED DESCRIPTION								
Weed Code Common Name	Scientific Name								
1. COMBE tropical spiderwort									
Crop 1: GOSHI cotton Variety: DP 555 B/RR Planting Date: Apr-30-03 Planting Method: conventional									
Rate: 3 seed/ft Dept	th: 0.5 in								
Row Spacing: 36 in Spacin	ng Within Row: 4 inch Seed Bed: bedded								
Soil Temperature: 74 F Soil	-								
-	• •								
S	SITE AND DESIGN								
Plot Width, Unit: 12 FT	Plot Length, Unit: 25 FT Reps: 4								
Site Type: on farm									
Tillage Type: conventional	Study Design: RANDOMIZED COMPLETE BLOCK								
s	SOIL DESCRIPTION								

% OM: 0. Texture: pH: 0.

Overall Moisture Conditions: wet

APPLICATION DESCRIPTION

		A		в		С		D
Application Date:	Apı	2-30-03	May	-20-03	Jun	-05-03	Jun	-21-03
Time of Day:	2 p	om	9 a	m	2 pm		12 pm	
Application Method:	bro	badcast	bro	adcast	bro	adcast	bro	adcast
Application Timing:	PRE	2	POT	1	POT	2	SPD	IR
Applic. Placement:	on	soil	ove	rtop	ove	rtop	dir	ected
Air Temp., Unit:	74	F	80	F	87	F	84	F
<pre>% Relative Humidity:</pre>	32		40		47		57	
Wind Velocity, Unit:	3	mph	2	mph	2	mph	2	mph
Dew Presence (Y/N):	n		n		n		n	
Soil Temp., Unit:	70	F	77	F	87	F	86	F
Soil Moisture:	fair		moist		wet		moist	
<pre>% Cloud Cover:</pre>	100)	100		100		0	

CROP STAGE AT EACH APPLICATION

	A	В	С	D
Crop 1 Code, Stage:	GOSHI PRE	GOSHI POT1	GOSHI POT2	GOSHI SPDIR
Stage Scale:	•	V1	V5-V6	V11
Height, Unit:	0	2 inch	9 inch	24 inch

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WEED STAGE AT EACH APPLICATION

	A	В	С	D
Weed 1 Code, Stage:	COMBE PRE	COMBE POT1	COMBE POT	COMBE SPDIR
Stage Scale:	•	<2 inch	3-7 inch	<6 inch
Density, Unit:	• •	100 sqyd	100 sqyd	110 sqyd

APPLICATION EQUIPMENT

		A		в		С		D
Appl. Equipment:	backp	back	backp	back	back	pack	back	back
Operating Pressure:	22		22		22		18	
Nozzle Type:	flat	fan	flat	fan	flat	fan	flat	fan
Nozzle Size:	11002	2	11002	2	1100	2	11002	2
Nozzle Spacing, Unit:	18	inch	18	inch	18	inch	12	inch
Nozzles/Row:	2		2		2		3	
Boom Length, Unit:	4.5	feet	4.5	feet	4.5	feet	2	feet
Boom Height, Unit:	15	inch	15	inch	15	inch	12	inch
Ground Speed, Unit:	3	mph	3	mph	3	mph	3	mph
Carrier:	water	-	wate	<u>_</u>	wate	r	wate	<u>r</u>
Spray Volume, Unit:	14.8	GPA	14.8	GPA	14.8	GPA	14.8	GPA
Propellant:	CO2		CO2		CO2		CO2	
Tank Mix (Y/N):	Y		Y		Y		Y	

University of Georgia Tropical spiderwort response to RR Flex programs.

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Trial ID: C13-03			Stud	dy Dir.: (Culpepper,	York			
Location: Grady Co Loc	2 1		Invest	tigator: S	Stanley Cu	lpepper			
Weed Code						COMBE	COMBE	COMBE	COMBE
Crop Code			GOSHI	GOSHI	GOSHI				
Rating Data Type			injury	injury	injury	control	control	control	control
Rating Unit			percent	percent	percent	percent	percent	percent	percent
Rating Date			May-28-03	Jun-12-03	Jun-26-03	Jun-15-03	Jul-04-03	Jul-15-03	Sep-25-03
Trt-Eval Interval			44 DA-A	44 DA-A	44 DA-A		52 DA-A		
Trt Treatment	F	Rate							
No. Name	Rate L	Jnit	1	2	3	4	5	6	7
1 Prowl	2 p		0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Prowl	2 p	ot/a	0.0	0.0	0.0	91.8	81.3	80.5	67.5
Roundup WeatherMax	0.75 lt								
Roundup WeatherMax	0.75 lt	o ai/a							
Roundup WeatherMax	0.75 lt	o ai/a							
3 Prowl	2 p	ot/a	0.0	0.0	0.0	90.3	85.0	80.5	64.8
Roundup WeatherMax	1.125 lt	o ai/a							
Roundup WeatherMax	1.125 lt	o ai/a							
Roundup WeatherMax	1.125 lt								
4 Prowl	2 p	ot/a	0.0	0.0	0.0	90.8	87.8	81.8	66.0
Roundup WeatherMax	1.5 lt	o ai/a							
Roundup WeatherMax	1.5 lt	o ai/a							
Roundup WeatherMax	1.5 lt	o ai/a							
5 Prowl	2 p	ot/a	0.0	0.0	0.0	89.5	89.0	81.0	64.8
Roundup WeatherMax	3 lt	o ai/a							
Roundup WeatherMax	3 lt	o ai/a							
Roundup WeatherMax	3 lt	o ai/a							
LSD (P=.05)			0.00	0.00	0.00	1.73	3.80	2.08	9.24
Standard Deviation			0.00	0.00	0.00	1.12	2.47	1.35	6.00
CV			0.0	0.0	0.0	1.55	3.6	2.08	11.4
Bartlett's X2			0.0	0.0	0.0	1.56	7.249	3.32	4.614
P(Bartlett's X2)						0.669	0.064	0.345	0.202

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Crop Code Rating Data Typecontrol percentRating UnitpercentRating DateOct-07-03Trt-Eval IntervalTrtTrt TreatmentRateNo. NameRateUnit2Prowl2pt/a0.02Prowl2pt/aRoundup WeatherMax0.75Noundup WeatherMax0.75Noundup WeatherMax0.75Roundup WeatherMax1.125Noundup WeatherMax1.125Noundup WeatherMax1.125Noundup WeatherMax1.125Noundup WeatherMax1.125Noundup WeatherMax1.5Noundup WeatherMax1.5Noundup WeatherMax1.5Noundup WeatherMax1.5Noundup WeatherMax1.5Noundup WeatherMax1.5Noundup WeatherMax1.5Noundup WeatherMax1.5Noundup WeatherMax3Noundup WeatherMax3Nound	Weed Code		COMBE
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Standard Deviation5.56CV12.28	Roundup WeatherMax	3 lb ai/a	
CV 12.28	LSD (P=.05)		8.57
	Standard Deviation		5.56
The second	CV		12.28
Bartlett's X2 5.269	Bartlett's X2		5.269
P(Bartlett's X2) 0.153	P(Bartlett's X2)		0.153

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Trial Comments

OBJECTIVE: Evaluate Roundup Ready Flex programs for the control of tropical spiderwort.

CROP TOLERANCE:

1) No visual injury was detected by any herbicide treatment.

SPIDERWORT RESPONSE:

1) Sequential glyphosate applications provided excellent control of emerged spiderwort.

2) Spiderwort emerged the day after each application.

3) There was a slight rate effect on controlling emerged plants with greater rates providing better control, however, this is not evident in the data because the continual emergence of spiderwort masked the control of emerged plants at time of applications.

4) Poor control was noted with all systems at seasons end.

5) Cotton was not picked because it was not Flex technology.

6) Flex technology will not be the answer to controlling this pest; HOWEVER, it will be beneficial having the technology and utilizing residual herbicide chemistry in the system.