## **University of Georgia**

Cotton response to Prowl 3.3, Prowl H20, and Dual Magnum in mixture with WMax.

Trial ID: C41-06 Study Dir.: Stanley Culpepper Location: Attapulgus Investigator: Stanley Culpepper

Reps: 4 Plots: 12 by 25 feet

Spray vol: 14.8 gal/ac Mix size: 2 liters (min 1.5434)

Spray	y voi: 14.8 gai/ac	IVIIX	SIZE. Z	liters	(111111)	.5454								
Trt	Treatment			Form			Grow		Amt Product	Plot N	lo. By I	Rep		
No.	Name	Conc	Unit	Type	Rate	Unit	Stg	Code	to Measure	1	2	3	4	
	Prowl EC Roundup WeatherMax 4 leaf cotton	3.3 4.5		EC L		OZ/A OZ/A		A A A	76.01 ml/mx 33.78 ml/mx	101	202	305	407	
	Prowl EC Roundup WeatherMax 8 leaf cotton	3.3 4.5		EC L		OZ/A OZ/A		B B B	76.01 ml/mx 33.78 ml/mx	102	201	306	408	
	Prowl H20 Roundup WeatherMax 4 leaf cotton	3.8 4.5		EC L		OZ/A OZ/A		A A A	33.78 ml/mx 33.78 ml/mx	103	208	303	403	
	Prowl H20 Roundup WeatherMax 8 leaf cotton	3.8 4.5		EC L		OZ/A OZ/A		B B B	33.78 ml/mx 33.78 ml/mx	104	207	304	404	
	Prowl H20 Roundup WeatherMax 4 leaf cotton	3.8 4.5		EC L		OZ/A OZ/A		A A A	67.57 ml/mx 33.78 ml/mx	105	205	309	412	
	Prowl H20 Roundup WeatherMax 8 leaf cotton	3.8 4.5		EC L		OZ/A OZ/A		B B B	67.57 ml/mx 33.78 ml/mx	106	206	310	411	
	Dual Magnum Roundup WeatherMax 4 leaf cotton	7.64 4.5		L L		OZ/A OZ/A		A A A	16.89 ml/mx 33.78 ml/mx	107	204	307	401	
	Dual Magnum Roundup WeatherMax 8 leaf cotton	7.64 4.5		L L		OZ/A OZ/A		B B B	16.89 ml/mx 33.78 ml/mx	108	203	308	402	
	Dual Magnum Roundup WeatherMax 4 leaf cotton	7.64 4.5		L L		OZ/A OZ/A		A A A	33.78 ml/mx 33.78 ml/mx	109	210	311	406	
	Dual Magnum Roundup WeatherMax 8 leaf cotton	7.64 4.5		L L		OZ/A OZ/A		B B B	33.78 ml/mx 33.78 ml/mx	110	209	312	405	
	Roundup WeatherMax 4 leaf cotton			L		OZ/A		A A	33.78 ml/mx	111	211	301	409	
	Roundup WeatherMax 8 leaf cotton	4.5		L	32	OZ/A		B B	33.78 ml/mx	112	212	302	410	

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
190.034	ml	Prowl EC	3.3	EC	
506.758	ml	Roundup WeatherMax	4.5	L	
253.379	ml	Prowl H20	3.8	EC	
126.689	ml	Dual Magnum	7.64	L	

<sup>\* &#</sup>x27;Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 2 liters (mix size basis).

<sup>\*</sup> Product amount calculations increased 25 % for overage adjustment.

## Feb-21-07 (C41-06) Trial Comments Page 2 of 6

## **University of Georgia**

Cotton response to Prowl 3.3, Prowl H20, and Dual Magnum in mixture with WMax.

Trial ID: C41-06 Study Dir.: Stanley Culpepper Location: Attapulgus Investigator: Stanley Culpepper

Trial Comments

OBJECTIVE: Determine cotton response to glyphosate/Prowl H20 mixtures applied topically.

### VISUAL COTTON RESPONSE:

- 1. Mixing Prowl EC at 72 oz/A with WeatherMax and applying to 4 leaf cotton caused up to 17% leaf chlorosis and malformation. The new cotton growth was not damaged by he treatment.
- 2. Four and eight leaf cotton were more tolerant to Prowl H20 mixtures than Prowl EC mixtures.
- 3. Mixing Dual Magnum with glyphosate caused the typical speckling often noted with this mixture. Injury was greater with Dual Magnum at 32 oz/A as compared to 16 oz/A.

## SEED COTTON YIELD:

1. No treatment impacted cotton seed yield. There was a slight trend for less yield from four leaf cotton treated with the Prowl EC system.

### **GENERAL COMMENTS:**

1. WeatherMax was applied over the trial area when cotton was in the 12 leaf stage of growth to remove late season weeds.

Feb-21-07 (C41-06) AOV Means Table Page 3 of 6

## **University of Georgia**

Cotton response to Prowl 3.3, Prowl H20, and Dual Magnum in mixture with WMax.

Trial ID: C41-06 Study Dir.: Stanley Culpepper Location: Attapulgus Investigator: Stanley Culpepper

Loc	ation: Attapulgus		Inv	restigatoi	r: Stanle	y Culpepi	per		
Wee	ed Code							Seed Yld	Seed Yld
Cro	o Code		GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI
Rati	ng Data Type		injury	injury	injury	injury	injury	wt/plot	YIELD
Rati	ng Unit		percent	percent	percent	percent	percent	lb	LB/A
	ng Date		Jun-12-06	Jun-27-06	Jul-06-06	Jul-10-06	Aug-02-06	Sep-05-06	Sep-05-06
	Eval Interval		6 DA-A	21 DA-A	30 DA-A	34 DA-A	57 DA-A		
	Action Codes								TY1
# Sı	ıbsamples, Dec.								1
	Treatment	Rate							
No.	Name	Rate Unit	1	2	3	4	5	6	7
1	Prowl EC	72 OZ/A	16 a	18 a	8 b	7 b	0 b	11 b	3227.8 b
	Roundup WeatherMax	32 OZ/A							
	4 leaf cotton								
2	Prowl EC	72 OZ/A	0 c	13 abc	17 a	19 a	5 a	13 ab	3643.1 ab
	Roundup WeatherMax	32 OZ/A							
	8 leaf cotton								
3	Prowl H20	32 OZ/A	8 b	8 cde	5 bc	0 d	0 b	13 ab	3847.8 ab
	Roundup WeatherMax	32 OZ/A							
	4 leaf cotton								
4	Prowl H20	32 OZ/A	0 с	2 fg	0 d	0 d	0 b	13 ab	3804.2 ab
	Roundup WeatherMax	32 OZ/A							
	8 leaf cotton								
5	Prowl H20	64 OZ/A	8 b	10 bcd	2 cd	3 c	0 b	13 ab	3776.7 ab
	Roundup WeatherMax	32 OZ/A							
	4 leaf cotton								
6	Prowl H20	64 OZ/A	0 с	6 def	0 d	0 d	0 b	13 ab	3889.9 ab
	Roundup WeatherMax								
	8 leaf cotton								
7	Dual Magnum	16 OZ/A	9 b	3 efg	1 cd	0 d	0 b	13 ab	3840.5 ab
	Roundup WeatherMax			J					
	4 leaf cotton								
8	Dual Magnum	16 OZ/A	1 c	10 bcd	0 d	1 d	0 b	14 a	3972.7 a
	Roundup WeatherMax								
	8 leaf cotton								
9	Dual Magnum	32 OZ/A	15 a	2 fg	0 d	0 d	0 b	13 ab	3830.4 ab
	Roundup WeatherMax			9	0 4		0.0		33331. u.s
	4 leaf cotton								
10	Dual Magnum	32 OZ/A	1 c	14 ab	0 d	0 d	0 b	13 ab	3820.2 ab
	Roundup WeatherMax	32 OZ/A		11 00	0 4	0 4	0.2	10 40	0020.2 45
	8 leaf cotton								
11	Roundup WeatherMax	32 OZ/A	0 с	0 g	0 d	0 d	0 b	13 ab	3788.3 ab
1	4 leaf cotton	02 02/N		~ 9		J		.0 40	5. 55.5 ab
12	Roundup WeatherMax	32 OZ/A	0 с	0 g	2 cd	0 d	0 b	12 ab	3628.5 ab
'-	8 leaf cotton	02 0 <u>2</u> K		~ 9	2 00	J	0.0	12 40	5525.0 as
LCD			2.2	4.0	2.0	2.0	2.4	2.0	502.27
	(P=.05) ndard Deviation		3.3 2.3	4.9 3.4	3.9 2.7	2.8 1.9	2.4 1.7	2.0 1.4	592.27 410.18
CV	iuaiu DeviailUH		2.3 47.83	3. <del>4</del> 48.65		77.49	400.0	10.92	10.18
	lett's X2		30.829	22.73		6.774	0.0	17.656	17.655
	artlett's X2)		0.001*	0.007*	0.343	0.079	0.0	0.09	0.09
. \5			0.001	5.00.	3.0.0	3.0.0		0.00	0.00

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

Column 7: TY1 = 290.4\*[6]

Feb-21-07 (C41-06) Site Description Page 4 of 6

## **University of Georgia**

Cotton response to	Prowl 3.3, Prowl H20, and Dual Magnum in mixture with WMax.	
Trial ID: C41-06	Study Dir.: Stanley Culpepper	
Location: Attapulgus	Investigator: Stanley Culpepper	
1 0		
<del></del>	RAL TRIAL INFORMATION	
Study Director: Stanley Culpep		
Affiliation: Univ. of Georg	ila	
Postal Code: 31794		
Investigator: Stanley Culpep	oper Title: Ext. Weed Science	
Affiliation: Univ. of Georg		
Postal Code: 31794	la	
Postal Code: 31794		
	TRIAL LOCATION	
City: Attapulgus	Trial Status: completed	
State/Prov.: GA	Trial Reliability: good	
Postal Code:	Initiation Date: May-19-06	
Country: USA	Planned Completion Date: N-Latitude of LL Corner °:	
	Unit: Angle y-axis to North °:	
Directions:		
	OOPERATOR/LANDOWNER	
Cooperator:	Country:	
Org:	Phone No:	
_ , ,	Fax No:	
3.33		
Address 2: City:		
State/Prov:		
Postal Code:		
Postal Code:		
Conducted Index CID (V/N). N	Conducted Under GEP (Y/N): N	
	conducted under GEP (1/N): N	
datacrines datac		
Objective:		
Conclusions:		
CROP	AND WEED DESCRIPTION	
Weed Code Common Nam	me Scientific Name	
1		
Crop 1: GOSHI cotton	Variety: WR 485 Flex	
Planting Date: May-19-06	Planting Method: Conventional	
Rate: 3 per ft De	pth: 0.5 in Perennial Age:	
Row Spacing: 36 inch Spac		
Soil Temperature: 85 F Soil		
-	•	
	SITE AND DESIGN	
Plot Width, Unit: 12 FT	Plot Length, Unit: 25 FT Reps: 4	
Site Type: Research Farm	-	
Tillage Type: Conventional	Study Design: SPLIT-PLOT	
	-	
Trial Initiation Comments:		
Previous Crops	Previous Pesticides Year	

## **University of Georgia**

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

Texture: Loamy sand

SOIL DESCRIPTION

% Sand: 84 % OM: 1.3 Texture: L

% Silt: 8 pH: 6.0 Soil Name: \_

% Clay: 8 CEC: \_\_\_\_ Fert. Level: Fert. Level: \_\_\_\_

### ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

### MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Туре	Interval	Unit
1.							

Overall Moisture Conditions: irrigated

Closest Weather Station: \_\_\_\_\_ Distance: \_\_\_\_ Unit: \_\_

## APPLICATION DESCRIPTION

	A	В
Application Date:	Jun-06-06	Jun-22-06
Time of Day:	2 pm	2 pm
Application Method:	broadcast	broadcast
Application Timing:	4 leaf	8 leaf
Applic. Placement:	overtop	overtop
Air Temp., Unit:	85 F	100 F
% Relative Humidity:	48	39
Wind Velocity, Unit:	4 mph	3 mph
Dew Presence (Y/N):	n	n
Water Hardness:		
Soil Temp., Unit:	92 F	101 F
Soil Moisture:	moist	moist
% Cloud Cover:	0	40

### CROP STAGE AT EACH APPLICATION

	A	В
Crop 1 Code, Stage:	GOSHI 4 leaf	GOSHI 8 leaf
Stage Scale:	3 leaf	8 leaf
Height, Unit:	3.5 inch	12 inch

### WEED STAGE AT EACH APPLICATION

	A	В
Weed 1 Code, Stage:	•	
Stage Scale:		
Density, Unit:		

# **University of Georgia**

## APPLICATION EQUIPMENT

			111011	DQ O T I MILL
		A		В
Appl. Equipment:	backp	ack	backr	pack
Operating Pressure:	23		23	
Nozzle Type:	flat	fan	flat	fan
Nozzle Size:	11002		11002	2
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		wateı	2
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