Cotton and weed response to Reflex and Caparol applied PRE.

Trial ID: C13-05 Study Dir.: Stanley Culpepper
Location: Jones Farm Investigator: Stanley Culpepper

Reps: 3 Plots: 6 by 25 feet

Spray vol: 14.8 gal/ac Mix size: 1 liters (min .57876)

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Trt	Treatment	Form	Form		Rate	Grow	Appl	Amt Product	Plot N	lo. By I	Rep
No.	Name	Conc	Туре	Rate	Unit	Stg	Code	to Measure	1	2	3
1	Non-treated								203	315	412
2	Caparol	4	L	1	lb ai/a	PRE	Α	16.89 ml/mx	216	313	407
3	Caparol	4	L	1.25	lb ai/a	PRE	Α	21.11 ml/mx	213	303	406
4	Caparol	4	L	1.5	lb ai/a	PRE	Α	25.34 ml/mx	205	301	409
5	Reflex	2	L	0.185	lb ai/a	PRE	Α	6.249 ml/mx	214	310	404
6	Reflex	2	L	0.25	lb ai/a	PRE	Α	8.445 ml/mx	212	309	413
7	Reflex	2	L	0.37	lb ai/a	PRE	Α	12.5 ml/mx	201	307	410
8	Caparol	4			lb ai/a		Α	16.89 ml/mx	202	308	416
	Reflex	2	L	0.185	lb ai/a	PRE	Α	6.249 ml/mx			
9	Caparol	4	L		lb ai/a			16.89 ml/mx	208	312	408
	Reflex	2	L	0.25	lb ai/a	PRE	Α	8.445 ml/mx			
10	Caparol	4	L		lb ai/a			16.89 ml/mx	209	304	405
	Reflex	2	L	0.37	lb ai/a	PRE	Α	12.5 ml/mx			
11	Caparol	4	L		lb ai/a			21.11 ml/mx	206	302	411
	Reflex	2	L	0.185	lb ai/a	PRE	Α	6.249 ml/mx			
12	Caparol	4	L		lb ai/a			21.11 ml/mx	215	311	414
	Reflex	2	L	0.25	lb ai/a	PRE	Α	8.445 ml/mx			
13	Caparol	4	L	1.25	lb ai/a	PRE	Α	21.11 ml/mx	207	306	402
	Reflex	2	L	0.25	lb ai/a	PRE	Α	8.445 ml/mx			
14	Cotoran	4			lb ai/a			16.89 ml/mx	210	305	403
	Prowl H20	3.8	L	0.93	lb ai/a	PRE	Α	16.53 ml/mx			
15	Cotoran	4		_	lb ai/a		Α	25.34 ml/mx	211	316	415
	Prowl H20	3.8	L	0.93	lb ai/a	PRE	Α	16.53 ml/mx			
16	Direx	4			lb ai/a			16.89 ml/mx	204	314	401
	Prowl H20	3.8	L	0.93	lb ai/a	PRE	Α	16.53 ml/mx			

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Lot Code
221.683	ml	Caparol 4 L	
96.907	ml	Reflex 2 L	
52.782	ml	Cotoran 4 L	
62.004	ml	Prowl H20 3.8 L	
21.113	ml	Direx 4 L	

^{* &#}x27;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.

Mar-03-06 (C13-05) Trial Comments Page 2 of 6

University of Georgia

Cotton and weed response to Reflex and Caparol applied PRE.

Trial ID: C13-05 Study Dir.: Stanley Culpepper Location: Jones Farm Investigator: Stanley Culpepper

Trial Comments

OBJECTIVE: Evaluate cotton and weed response to Reflex and Caparol PRE.

Cotton Response:

- 1) Within 2 days several heavy rains occurred followed by cool/cold weather.
- 2) Injury was similar among treatments ranging from 3 to 13% at 24 DAT.
- 3) There did tend to be more injury with higher rates of each herbicide.

Palmer amaranth:

- 1) All Reflex programs provided excellent control throughout the trial.
- 2) Caparol provided excellent control at 24 DAT but control was fair and on the way down at 35 DAT.
- 3) By 35 DAT, 1.5 lb of Cotoran was significantly more effective than 1.0 lb of Cotoran when mixed with Prowl.

Large crabgrass:

- 1) Excellent control by all programs was noted at 24 DAT.
- 2) By 35 DAT, control was excellent with Cotoran or Direx + Prowl, Caparol at 1.5 lb, and Caparol at 1.0 lb + Reflex at 0.37 lb

Florida pusley:

- 1) Caparol and Reflex applied alone provided good control for 24 d; however, poor control was noted by 35 DAT.
- 2) At 35 DAT, excellent control was noted with Cotoran 1.5 lb or Direx + Prowl while good control was noted with Caparol at 1.25 lb plus Reflex at 0.25 lb and Cotoran at 1 lb + Prowl.

CONCLUSIONS:

- 1) Reflex would be a great tool for cotton. Use rate should be 0.25 lb ai/A applied PRE.
- 2) Combinations of Prowl, Cotoran, or Direx + Reflex would likely be more effective than Reflex + Caparol.

GENERAL COMMENTS:

1. Gramoxone at 1.5 pt/A was applied over the trial area on April 15 to kill mature wheat that was only 20 inches tall.

Cotton and weed response to Reflex and Caparol applied PRE.

Trial ID: C13-05 Study Dir.: Stanley Culpepper Location: Jones Farm Investigator: Stanley Culpepper

	ed Code					AMAPA	AMAPA	DIGSA	DIGSA	RCHSC	RCHSC
	o Code			GOSHI	GOSHI						
	ng Data Type)		injury	injury	control	control	control	control		control
	ng Unit ng Date			percent May-13-05	percent	percent	percent May-24-05	percent			percent
	ng Date Eval Interval			28 DA-A	39 DA-A	28 DA-A	39 DA-A	28 DA-A	39 DA-A	28 DA-A	39 DA-A
_			D-4-	20 DA-A	39 DA-A	20 DA-A	39 DA-A	20 DA-A	39 DA-A	20 DA-A	39 DA-A
	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7	8
	Non-treated			0	0	0	0	0	0	0	0
2	Caparol	1	lb ai/a	7	0	99	78	94	45	80	60
3	Caparol	1.25	lb ai/a	10	3	99	75	96	63	86	50
4	Caparol	1.5	lb ai/a	6	8	97	78	96	94	87	55
5	Reflex	0.185	lb ai/a	7	2	99	97	99	60	81	13
6	Reflex	0.25	lb ai/a	10	0	99	98	89	60	79	37
7	Reflex	0.37	lb ai/a	8	3	99	98	94	70	81	50
8	Caparol Reflex		lb ai/a lb ai/a	10	4	98	96	96	45	92	65
9	Caparol Reflex		lb ai/a lb ai/a	12	3	99	98	97	76	91	70
10	Caparol Reflex		lb ai/a lb ai/a	13	8	99	99	99	99	86	69
11	Caparol Reflex		lb ai/a lb ai/a	8	5	98	96	99	88	97	47
12	Caparol Reflex	1.25	lb ai/a lb ai/a	5	0	99	99	89	91	97	88
13	Caparol Reflex		lb ai/a lb ai/a	4	3	99	95	95	89	86	83
14	Cotoran Prowl H20		lb ai/a lb ai/a	4	0	97	84	99	98	98	86
15	Cotoran Prowl H20		lb ai/a lb ai/a	10	5	99	95	94	98	97	99
16	Direx Prowl H20		lb ai/a lb ai/a	3	0	99	95	98	99	99	98
	(P=.05)			11.8	7.2	2.7	11.2	10.2	16.8	12.1	16.6
	ndard Deviation	on		7.1	4.3	1.6	6.7	6.1	10.0	7.3	9.9
CV				98.25	152.73	1.73	7.8	6.8	13.7	8.71	16.38

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

Country: USA		Cotton and wee	ed response to Reflex and Caparol ap	oplied PRE.					
Investigator: Stanley Culpepper GENERAL TRIAL INFORMATION	rial ID: C13-05 Study Dir.: Stanley Culpepper								
GENERAL TRIAL INFORMATION Study Director: Stanley Culpepper									
Study Director: Stanley Culpepper Univ. of Georgia Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Objective: Title: Ext. Weed Science Obje	201100								
### Affiliation: Univ. of Georgia 31794 #### Convestigator: Stanley Culpepper	Chudu Dimostani			Caionas					
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Title: Ext. Weed Science Miffiliation: Univ. of Georgia Stanley Culpepper Title: Ext. Weed Science Miffiliation: Univ. of Georgia Stanley Code: 31794 Trial Status: completed Geate/Prov.: GA									
### TRIAL LOCATION TRIAL LOCATION	Postal Code:	31/94							
TRIAL LOCATION Trial Status: completed State/Prov.: GA	Investigator:	Stanley Culpepper	Title: Ext. Weed	Science					
TRIAL LOCATION City: Tifton	Affiliation:	Univ. of Georgia							
Trial Status: completed State/Prov.: GA	Postal Code:	31794							
Trial Status: completed State/Prov.: GA		TRI	AL LOCATION						
State/Prov.: GA	City: Ti			completed					
Country: USA	State/Prov.: GA		Trial Reliability:	-					
Country: USA	Postal Code: 31	794							
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Guidelines: Guideline Description:									
Objective:	Conducted Under	GLP (Y/N): N	Conducted Under GEP (Y/N): N						
	Guidelines:	Guideline D	Description:						
Conclusions:	Objective:	ojective:							
	Conclusions:								

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	AMAPA	Palmer amaranth	
2.	DIGSA	large crabgrass	
3.	RCHSC	Florida pusley	

Crop 1: GOSHI cotton

Planting Date: Apr-15-05

Rate: 3 per ft

Depth: 0.5 in

Perennial Age: ______

Row Spacing: 36 inch

Spacing Within Row: 4 inch

Soil Temperature: 77

F Soil Moisture: moist

SITE AND DESIGN

Plot Width, Unit: 6

FT Plot Length, Unit: 25

FT Reps: 3

Site Type: on farm

Tillage Type: strip tillage

Study Design: RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 95	% OM: 0.67	Texture: sandy loam	
% Silt: 2	pH: 5.8	Soil Name: Tifton sandy loam	
% Clay: 3	CEC:	Fert. Level:	

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Туре	Interval	Unit
1.							

Closest	Weather	Station:		Distance:	Unit:
Overall	Moisture	conditions:	wet		

APPLICATION DESCRIPTION

	A
Application Date:	Apr-19-05
Time of Day:	11 am
Application Method:	broadcast
Application Timing:	PRE
Applic. Placement:	soil/resi
Air Temp., Unit:	74 F
% Relative Humidity:	49
Wind Velocity, Unit:	0 mph
Dew Presence (Y/N):	n
Water Hardness:	
Soil Temp., Unit:	77 F
Soil Moisture:	moist
% Cloud Cover:	0

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	GOSHI PRE
Stage Scale:	not up
Height, Unit:	0 inch

WEED STAGE AT EACH APPLICATION

	WEED DINGE 1
	A
Weed 1 Code, Stage:	AMAPA PRE
Stage Scale:	not up
Density, Unit:	8 ydsq
Weed 2 Code, Stage:	DIGSA PRE
Stage Scale:	not up
Density, Unit:	18 ydsq
Weed 3 Code, Stage:	RCHSC PRE
Stage Scale:	not up
Density, Unit:	12 ydsq

APPLICATION EQUIPMENT

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

Trt No	Treatment Application Comment