

University of Georgia

Weed control with Staple systems in Roundup Ready cotton.

Trial ID: C38-05

Study Dir.: Stanley Culpepper

Location: Attapulgus (pigfld)

Investigator: Stanley Culpepper

Reps: 4

Plots: 12 by 25 feet

Spray vol: 14.8 gal/ac

Mix size: 2 liters (min 1.5434)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Form Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
									1	2	3	4
1	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx	101	208	312	410
	Staple	85	SP	0.8	oz/a	PRE	A	0.8096 g/mx				
	Cotoran	4	L	1.25	qt/a	PRE	A	42.23 ml/mx				
	Roundup WeatherMax	4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx				
	Staple	85	SP	0.8	oz/a	4 lf	B	0.8096 g/mx				
	Layby Pro	4	L	2	pt/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	2	lb ai/a	Layby	D	45.04 ml/mx				
	NIS		L	0.25	% v/v	Layby	D	4.999 ml/mx				
2	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx	102	212	311	407
	Staple	85	SP	0.8	oz/a	PRE	A	0.8096 g/mx				
	Roundup WeatherMax	4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx				
	Staple	85	SP	0.8	oz/a	4 lf	B	0.8096 g/mx				
	Layby Pro	4	L	2	pt/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	2	lb ai/a	Layby	D	45.04 ml/mx				
	NIS		L	0.25	% v/v	Layby	D	4.999 ml/mx				
	3	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx	103	204	307
Roundup WeatherMax		4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx				
Staple		85	SP	0.8	oz/a	4 lf	B	0.8096 g/mx				
Layby Pro		4	L	2	pt/a	Layby	D	33.78 ml/mx				
MSMA		6	L	2	lb ai/a	Layby	D	45.04 ml/mx				
NIS			L	0.25	% v/v	Layby	D	4.999 ml/mx				
4	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx	104	203	304	406
	Staple	85	SP	0.8	oz/a	PRE	A	0.8096 g/mx				
	Roundup WeatherMax	4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx				
	Staple	85	SP	0.8	oz/a	4 lf	B	0.8096 g/mx				
	Roundup WeatherMax	4	L	22	oz/a	Layby	D	23.23 ml/mx				
	Direx	4	L	2	pt/a	Layby	D	33.78 ml/mx				
	5	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx	105	210	309
Staple		85	SP	0.8	oz/a	PRE	A	0.8096 g/mx				
Cotoran		4	L	1.25	qt/a	PRE	A	42.23 ml/mx				
Roundup WeatherMax		4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx				
Staple		85	SP	0.8	oz/a	4 lf	B	0.8096 g/mx				
Roundup WeatherMax		4	L	22	oz/a	Layby	D	23.23 ml/mx				
Direx		4	L	2	pt/a	Layby	D	33.78 ml/mx				
6	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx	106	211	303	412
	Staple	85	SP	0.8	oz/a	PRE	A	0.8096 g/mx				
	Roundup WeatherMax	4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx				
	Staple	85	SP	0.8	oz/a	4 lf	B	0.8096 g/mx				
	Staple	85	SP	0.6	oz/a	7-8 lf	C	0.6072 g/mx				
	Envoke	75	DG	0.1	oz/a	7-8 lf	C	0.1012 g/mx				
	NIS		L	0.25	% v/v	7-8 lf	C	4.999 ml/mx				
	Layby Pro	4	L	2	pt/a	Layby	D	33.78 ml/mx				
	MSMA	6	L	2	lb ai/a	Layby	D	45.04 ml/mx				
	NIS		L	0.25	% v/v	Layby	D	4.999 ml/mx				

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Reps: 4

Plots: 12 by 25 feet

Spray vol: 14.8 gal/ac

Mix size: 2 liters (min 1.5434)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Form Unit	Grow Stg	Appl Code	Amt to Measure	Product	Plot No. By Rep			
										1	2	3	4
7	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx		107	202	308	401
	Staple	85	SP	0.8	oz/a	PRE	A	0.8096 g/mx					
	Roundup WeatherMax	4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx					
	Staple	85	SP	0.6	oz/a	7-8 lf	C	0.6072 g/mx					
	Envoke	75	DG	0.1	oz/a	7-8 lf	C	0.1012 g/mx					
	NIS		L	0.25	% v/v	7-8 lf	C	4.999 ml/mx					
	Layby Pro	4	L	2	pt/a	Layby	D	33.78 ml/mx					
	MSMA	6	L	2	lb ai/a	Layby	D	45.04 ml/mx					
	NIS		L	0.25	% v/v	Layby	D	4.999 ml/mx					
8	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx		108	201	306	402
	Dual Magnum	7.62	L	1.3	pt/a	4-lf	B	21.96 ml/mx					
	Touchdown Total	4.17	L	24	oz/a	4-lf	B	25.34 ml/mx					
	Staple	85	SP	0.6	oz/a	7-8 lf	C	0.6072 g/mx					
	Envoke	75	DG	0.1	oz/a	7-8 lf	C	0.1012 g/mx					
	NIS		L	0.25	% v/v	7-8 lf	C	4.999 ml/mx					
	Suprend	80	DG	1	lb/a	Layby	D	16.19 g/mx					
	NIS		L	0.25	% v/v	Layby	D	4.999 ml/mx					
9	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx		109	205	301	409
	No POST herbicide (NTC)												
10	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx		110	206	302	411
	Dual Magnum	7.62	L	1	pt/a	4-lf	B	16.89 ml/mx					
	Roundup WeatherMax	4.5	L	22	oz/a	4-lf	B	23.23 ml/mx					
	Roundup WeatherMax	4.5	L	22	oz/a	Layby	D	23.23 ml/mx					
	Direx	4	L	1.5	pt/a	Layby	D	25.34 ml/mx					
11	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx		111	207	310	405
	Cotoran	4	L	1.25	qt/a	PRE	A	42.23 ml/mx					
	Roundup WeatherMax	4.5	L	16.5	oz/a	4 lf	B	17.42 ml/mx					
	Staple	85	SP	0.8	oz/a	4 lf	B	0.8096 g/mx					
	Layby Pro	4	L	2	pt/a	Layby	D	33.78 ml/mx					
	MSMA	6	L	2	lb ai/a	Layby	D	45.04 ml/mx					
	NIS		L	0.25	% v/v	Layby	D	4.999 ml/mx					
12	Prowl	3.3	EC	2	pt/a	PRE	A	33.78 ml/mx		112	209	305	404
	Staple	85	SP	0.8	oz/a	4-lf	B	0.8096 g/mx					
	Roundup WeatherMax	4.5	L	22	oz/a	4-lf	B	23.23 ml/mx					
	Roundup WeatherMax	4.5	L	22	oz/a	Layby	D	23.23 ml/mx					
	Direx	4	L	1.5	pt/a	Layby	D	25.34 ml/mx					

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Lot Code
506.703	ml	Prowl 3.3 EC	
16.446	g	Staple 85 SP	
158.345	ml	Cotoran 4 L	
290.330	ml	Roundup WeatherMax 4.5 L	
253.352	ml	Layby Pro 4 L	
337.802	ml	MSMA 6 L	
62.493	ml	NIS L	
58.066	ml	Roundup WeatherMax 4 L	
147.788	ml	Direx 4 L	
0.380	g	Envoke 75 DG	
48.559	ml	Dual Magnum 7.62 L	

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Reps: 4 Plots: 12 by 25 feet
 Spray vol: 14.8 gal/ac Mix size: 2 liters (min 1.5434)

Trt No.	Tr> N>	Form Conc	Form Type	Plot No. By Rep
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Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Lot Code
31.672	ml	Touchdown Total 4.17 L	
20.241	g	Suprend 80 DG	

- * 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 2 liters (mix size basis).
- * Product amount calculations increased 25 % for overage adjustment.
- * 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 2 liters.

Trial Comments

OBJECTIVE: Evaluate weed response to several Staple herbicide programs.

VISUAL RESPONSE:

1. Injury was minimal from all treatments throughout the season. Note that all Staple/glyphosate mixtures were applied to cotton without dew being present.

WEED RESPONSE:

Palmer amaranth:

1. Just prior to the 4-leaf application, all soil applied herbicides provided at least 91% control.
2. All systems, with the exception of Prowl alone, provided at least 91% control at harvest as well.

Sicklepod:

1. Just prior to the 4-leaf application, Prowl + Cotoran and Prowl + Cotoran + Staple provided good to excellent control. Prowl + Staple provided fair control while Prowl alone provided poor control.
2. All programs with either Envoke or Cotoran tended to provide the greatest control (91-100%) which was likely due to residual activity. Excellent residual activity from Envoke was evident in the field.

Smallflower morningglory:

1. Just prior to the 4-leaf application, all programs with Staple or Cotoran PRE provided excellent control.
2. At harvest, control was excellent with all programs except Prowl applied alone.

Large crabgrass:

1. Just prior to the 4-leaf application, Prowl alone provided only 62 to 71% control, Prowl + Staple provided 70 to 81% control, while Prowl + Cotoran or Prowl + Cotoran + Staple provided 92 to 99% control.
2. At harvest, control was excellent with all programs except Prowl applied alone.

YIELD RESPONSE:

1. Weed control was excellent with little cotton injury; thus, little to no differences were noted among herbicide systems.

GENERAL COMMENTS:

1. Irrigation was implemented on May 12 to activate soil-applied herbicides.

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Weed control with Staple systems in Roundup Ready cotton.

Trial ID: C38-05

Study Dir.: Stanley Culpepper

Location: Attapulgus (pigfld)

Investigator: Stanley Culpepper

Weed Code		GOSHI	GOSHI	GOSHI	AMAPA	AMAPA	AMAPA	AMAPA		
Crop Code		injury	injury	injury	control	control	control	control		
Rating Data Type		percent	percent	percent	percent	percent	percent	percent		
Rating Unit										
Rating Date		Jun-03-05	Jun-10-05	Jul-01-05	Jun-03-05	Jul-18-05	Sep-05-05	Jul-06-05		
Trt-Eval Interval		23 DA-A	30 DA-A	51 DA-A	23 DA-A	68 DA-A	117 DA-A	56 DA-A		
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
1	Prowl	2	pt/a	0	0	0	98	99	100	99
	Staple	0.8	oz/a							
	Cotoran	1.25	qt/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
2	Prowl	2	pt/a	0	0	0	99	99	99	96
	Staple	0.8	oz/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
3	Prowl	2	pt/a	0	0	0	98	99	100	98
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
4	Prowl	2	pt/a	0	0	0	99	99	100	91
	Staple	0.8	oz/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Roundup WeatherMax	22	oz/a							
	Direx	2	pt/a							
5	Prowl	2	pt/a	1	0	0	98	99	100	98
	Staple	0.8	oz/a							
	Cotoran	1.25	qt/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Roundup WeatherMax	22	oz/a							
	Direx	2	pt/a							
6	Prowl	2	pt/a	0	0	0	99	99	100	99
	Staple	0.8	oz/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Staple	0.6	oz/a							
	Envoke	0.1	oz/a							
	NIS	0.25	% v/v							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							

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Weed Code			GOSHI	GOSHI	GOSHI	AMAPA	AMAPA	AMAPA	AMAPA
Crop Code			injury	injury	injury	control	control	control	control
Rating Data Type			percent	percent	percent	percent	percent	percent	percent
Rating Unit									
Rating Date			Jun-03-05	Jun-10-05	Jul-01-05	Jun-03-05	Jul-18-05	Sep-05-05	Jul-06-05
Trt-Eval Interval			23 DA-A	30 DA-A	51 DA-A	23 DA-A	68 DA-A	117 DA-A	56 DA-A
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate Unit	1	2	3	4	5	6	7
7	Prowl	2 pt/a	0	0	0	99	99	100	99
	Staple	0.8 oz/a							
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.6 oz/a							
	Envoke	0.1 oz/a							
	NIS	0.25 % v/v							
	Layby Pro	2 pt/a							
	MSMA	2 lb ai/a							
	NIS	0.25 % v/v							
8	Prowl	2 pt/a	0	0	0	99	99	100	99
	Dual Magnum	1.3 pt/a							
	Touchdown Total	24 oz/a							
	Staple	0.6 oz/a							
	Envoke	0.1 oz/a							
	NIS	0.25 % v/v							
	Suprend	1 lb/a							
	NIS	0.25 % v/v							
9	Prowl	2 pt/a	0	0	0	99	69	78	60
	No POST herbicide (NTC)								
10	Prowl	2 pt/a	0	0	0	99	99	100	95
	Dual Magnum	1 pt/a							
	Roundup WeatherMax	22 oz/a							
	Roundup WeatherMax	22 oz/a							
	Direx	1.5 pt/a							
11	Prowl	2 pt/a	0	0	0	99	99	100	92
	Cotoran	1.25 qt/a							
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.8 oz/a							
	Layby Pro	2 pt/a							
	MSMA	2 lb ai/a							
	NIS	0.25 % v/v							
12	Prowl	2 pt/a	0	0	0	91	99	100	94
	Staple	0.8 oz/a							
	Roundup WeatherMax	22 oz/a							
	Roundup WeatherMax	22 oz/a							
	Direx	1.5 pt/a							
LSD (P=.05)			1.0	0.0	0.0	4.3	1.0	1.4	6.2
Standard Deviation			0.7	0.0	0.0	3.0	0.7	1.0	4.3
CV			692.82	0.0	0.0	3.06	0.75	0.98	4.64

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

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Weed Code			CASOB	CASOB	CASOB	CASOB	IAQTA	IAQTA	IAQTA
Crop Code									
Rating Data Type			control	control	control	control	control	control	control
Rating Unit			percent	percent	percent	percent	percent	percent	percent
Rating Date			Jun-03-05	Jul-18-05	Sep-05-05	Jul-06-05	Jun-03-05	Jul-06-05	Jul-18-05
Trt-Eval Interval			23 DA-A	68 DA-A	117 DA-A	56 DA-A	23 DA-A	56 DA-A	68 DA-A
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	8	9	10	11	12	13	14
		Unit							
1	Prowl	2 pt/a	93	99	100	91	98	94	99
	Staple	0.8 oz/a							
	Cotoran	1.25 qt/a							
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.8 oz/a							
	Layby Pro	2 pt/a							
	MSMA	2 lb ai/a							
	NIS	0.25 % v/v							
2	Prowl	2 pt/a	80	99	99	87	95	84	99
	Staple	0.8 oz/a							
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.8 oz/a							
	Layby Pro	2 pt/a							
	MSMA	2 lb ai/a							
	NIS	0.25 % v/v							
3	Prowl	2 pt/a	38	99	100	87	49	91	99
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.8 oz/a							
	Layby Pro	2 pt/a							
	MSMA	2 lb ai/a							
	NIS	0.25 % v/v							
4	Prowl	2 pt/a	83	99	100	89	97	85	99
	Staple	0.8 oz/a							
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.8 oz/a							
	Roundup WeatherMax	22 oz/a							
	Direx	2 pt/a							
5	Prowl	2 pt/a	97	99	100	97	99	99	99
	Staple	0.8 oz/a							
	Cotoran	1.25 qt/a							
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.8 oz/a							
	Roundup WeatherMax	22 oz/a							
	Direx	2 pt/a							
6	Prowl	2 pt/a	71	99	100	99	91	99	99
	Staple	0.8 oz/a							
	Roundup WeatherMax	16.5 oz/a							
	Staple	0.8 oz/a							
	Staple	0.6 oz/a							
	Envoke	0.1 oz/a							
	NIS	0.25 % v/v							
	Layby Pro	2 pt/a							
	MSMA	2 lb ai/a							
	NIS	0.25 % v/v							

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Weed Code	CASOB	CASOB	CASOB	CASOB	IAQTA	IAQTA	IAQTA	
Crop Code								
Rating Data Type	control	control	control	control	control	control	control	
Rating Unit	percent	percent	percent	percent	percent	percent	percent	
Rating Date	Jun-03-05	Jul-18-05	Sep-05-05	Jul-06-05	Jun-03-05	Jul-06-05	Jul-18-05	
Trt-Eval Interval	23 DA-A	68 DA-A	117 DA-A	56 DA-A	23 DA-A	56 DA-A	68 DA-A	
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment	Rate	8	9	10	11	12	13	14
No. Name	Rate Unit							
7 Prowl	2 pt/a	83	99	100	99	92	99	99
Staple	0.8 oz/a							
Roundup WeatherMax	16.5 oz/a							
Staple	0.6 oz/a							
Envoke	0.1 oz/a							
NIS	0.25 % v/v							
Layby Pro	2 pt/a							
MSMA	2 lb ai/a							
NIS	0.25 % v/v							
8 Prowl	2 pt/a	25	99	100	99	49	99	99
Dual Magnum	1.3 pt/a							
Touchdown Total	24 oz/a							
Staple	0.6 oz/a							
Envoke	0.1 oz/a							
NIS	0.25 % v/v							
Suprend	1 lb/a							
NIS	0.25 % v/v							
9 Prowl	2 pt/a	30	0	25	20	40	20	0
No POST herbicide (NTC)								
10 Prowl	2 pt/a	30	99	96	85	48	79	99
Dual Magnum	1 pt/a							
Roundup WeatherMax	22 oz/a							
Roundup WeatherMax	22 oz/a							
Direx	1.5 pt/a							
11 Prowl	2 pt/a	92	99	100	93	99	94	99
Cotoran	1.25 qt/a							
Roundup WeatherMax	16.5 oz/a							
Staple	0.8 oz/a							
Layby Pro	2 pt/a							
MSMA	2 lb ai/a							
NIS	0.25 % v/v							
12 Prowl	2 pt/a	35	99	99	90	45	87	99
Staple	0.8 oz/a							
Roundup WeatherMax	22 oz/a							
Roundup WeatherMax	22 oz/a							
Direx	1.5 pt/a							
LSD (P=.05)		13.7	0.2	21.0	8.0	11.9	6.5	0.0
Standard Deviation		9.5	0.1	14.5	5.5	8.2	4.5	0.0
CV		15.03	0.16	15.56	6.41	10.94	5.22	0.0

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

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Weed Code	IAQTA	DIGSA	DIGSA	DIGSA	DIGSA	GOSHI	GOSHI			
Crop Code						seed yld	seed yld			
Rating Data Type	control	control	control	control	control	lb/plot	lb/A			
Rating Unit	percent	percent	percent	percent	percent					
Rating Date	Sep-05-05	Jun-03-05	Jul-06-05	Jul-18-05	Sep-05-05	Oct-12-05	Oct-12-05			
Trt-Eval Interval	117 DA-A	23 DA-A	56 DA-A	68 DA-A	117 DA-A	154 DA-A	154 DA-A			
ARM Action Codes							TY1			
# Subsamples, Dec.							1			
Trt No.	Treatment Name	Rate	Unit	15	16	17	18	19	20	21
1	Prowl	2	pt/a	100	97	91	97	97	13	3773.7
	Staple	0.8	oz/a							
	Cotoran	1.25	qt/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
2	Prowl	2	pt/a	100	78	86	98	98	13	3701.1
	Staple	0.8	oz/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
3	Prowl	2	pt/a	99	68	86	98	100	15	4210.8
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
4	Prowl	2	pt/a	96	74	84	97	100	15	4341.5
	Staple	0.8	oz/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Roundup WeatherMax	22	oz/a							
	Direx	2	pt/a							
5	Prowl	2	pt/a	100	99	90	99	100	15	4223.1
	Staple	0.8	oz/a							
	Cotoran	1.25	qt/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Roundup WeatherMax	22	oz/a							
	Direx	2	pt/a							
6	Prowl	2	pt/a	100	71	98	99	100	13	3849.3
	Staple	0.8	oz/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Staple	0.6	oz/a							
	Envoke	0.1	oz/a							
	NIS	0.25	% v/v							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							

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Weed Code	IAQTA	DIGSA	DIGSA	DIGSA	DIGSA	GOSHI	GOSHI			
Crop Code						seed yld	seed yld			
Rating Data Type	control	control	control	control	control	lb/plot	lb/A			
Rating Unit	percent	percent	percent	percent	percent					
Rating Date	Sep-05-05	Jun-03-05	Jul-06-05	Jul-18-05	Sep-05-05	Oct-12-05	Oct-12-05			
Trt-Eval Interval	117 DA-A	23 DA-A	56 DA-A	68 DA-A	117 DA-A	154 DA-A	154 DA-A			
ARM Action Codes							TY1			
# Subsamples, Dec.							1			
Trt No.	Treatment Name	Rate	Unit	15	16	17	18	19	20	21
7	Prowl	2	pt/a	99	80	90	96	98	14	4071.4
	Staple	0.8	oz/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.6	oz/a							
	Envoke	0.1	oz/a							
	NIS	0.25	% v/v							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
8	Prowl	2	pt/a	100	65	99	99	100	15	4235.5
	Dual Magnum	1.3	pt/a							
	Touchdown Total	24	oz/a							
	Staple	0.6	oz/a							
	Envoke	0.1	oz/a							
	NIS	0.25	% v/v							
	Suprend	1	lb/a							
	NIS	0.25	% v/v							
9	Prowl	2	pt/a	25	63	20	20	41	3	914.8
	No POST herbicide (NTC)									
10	Prowl	2	pt/a	100	71	89	97	100	14	4004.6
	Dual Magnum	1	pt/a							
	Roundup WeatherMax	22	oz/a							
	Roundup WeatherMax	22	oz/a							
	Direx	1.5	pt/a							
11	Prowl	2	pt/a	100	92	86	99	100	13	3888.5
	Cotoran	1.25	qt/a							
	Roundup WeatherMax	16.5	oz/a							
	Staple	0.8	oz/a							
	Layby Pro	2	pt/a							
	MSMA	2	lb ai/a							
	NIS	0.25	% v/v							
12	Prowl	2	pt/a	97	81	86	99	98	15	4270.3
	Staple	0.8	oz/a							
	Roundup WeatherMax	22	oz/a							
	Roundup WeatherMax	22	oz/a							
	Direx	1.5	pt/a							
LSD (P=.05)				21.1	12.3	6.3	4.6	16.7	2.5	735.24
Standard Deviation				14.6	8.5	4.4	3.2	11.6	1.8	509.20
CV				15.73	10.91	5.21	3.46	12.24	13.43	13.43

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

Column 21: TY1 = 290.4*[C20]

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Weed control with Staple systems in Roundup Ready cotton.

Trial ID: C38-05 Study Dir.: Stanley Culpepper
 Location: Attapulgus (pigfld) 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: Attapulgus **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** excellent
Postal Code: _____ **Initiation Date:** May-11-05
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.	AMAPA	Palmer amaranth	
2.	CASOB	sicklepod	
3.	IAQTA	smallflower morningglory	
4.	DIGSA	large crabgrass	

Crop 1: GOSHI cotton **Variety:** DP 555 B/RR
Planting Date: May-11-05 **Planting Method:** conventional
Rate: 3 per ft **Depth:** 0.5 in **Perennial Age:** _____
Row Spacing: 36 inch **Spacing Within Row:** 4 inch **Seed Bed:** flat
Soil Temperature: 85 F **Soil Moisture:** fair **Emergence Date:** May-17-05

SITE AND DESIGN

Plot Width, Unit: 12 FT **Plot Length, Unit:** 25 FT **Reps:** 4
Site Type: Attapulgus research farm
Tillage Type: conventional tillage **Study Design:** RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

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MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 84	% OM: 1.3	Texture: loamy sand
% Silt: 8	pH: 5.9	Soil Name: _____
% Clay: 8	CEC: _____	Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

No.	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: irrigated

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	May-11-05	Jun-03-05	Jun-23-05	Jul-07-05
Time of Day:	2 pm	4 pm	7 pm	9 am
Application Method:	broadcast	broadcast	broadcast	broadcast
Application Timing:	PRE	4 leaf	7-8 leaf	Layby
Applic. Placement:	on soil	overtop	overtop	directed
Air Temp., Unit:	84 F	82 F	92 F	89 F
% Relative Humidity:	34	48	56	59
Wind Velocity, Unit:	3 mph	2 mph	2 mph	2 mph
Dew Presence (Y/N):	n	n	n	n
Water Hardness:				
Soil Temp., Unit:	85 F	84 F	56 F	88 F
Soil Moisture:	fair/irri	wet	moist	moist
% Cloud Cover:	0	100	0	10

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GOSHI PRE	GOSHI 4 leaf	GOSHI 7-8leaf	GOSHI layby
Stage Scale:	not up	4 leaf	8-9 leaf	12 leaf
Height, Unit:	0 inch	4.5 inch	17 inch	24 inch

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WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	AMAPA PRE	AMAPA 4 leaf	AMAPA 7-8 leaf	AMAPA Layby
Stage Scale:	not up	< 4 inch	< 1 inch	< 8 inch
Density, Unit:	0 ydsq	19 ydsq	12 ydsq	5 ydsq
Weed 2 Code, Stage:	CASOB PRE	CASOB 4 leaf	CASOB 7-8 leaf	CASOB Layby
Stage Scale:	not up	< 4 inch	< 4 inch	< 8 inch
Density, Unit:	0 ydsq	2 ydsq	2 ydsq	3 ydsq
Weed 3 Code, Stage:	IAQTA PRE	IAQTA 4 leaf	IAQTA 7-8 leaf	IAQTA Layby
Stage Scale:	not up	< 4 inch	< 3 inch	< 8 inch
Density, Unit:	0 ydsq	2 ydsq	2 ydsq	2 ydsq
Weed 4 Code, Stage:	DIGSA PRE	DIGSA 4 leaf	DIGSA 7-8 leaf	DIGSA Layby
Stage Scale:	not up	< 7 inch	< 4 inch	< 8 inch
Density, Unit:	0 ydsq	23 ydsq	15 ydsq	8 ydsq

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	backpack	backpack	backpack	backpack
Operating Pressure:	23	23	23	18
Nozzle Type:	flat fan	flat fan	flat fan	flat fan
Nozzle Size:	11002	11002	11002	11002
Nozzle Spacing, Unit:	18 inch	18 inch	18 inch	12 inch
Nozzles/Row:	2	2	2	3
Band Width, Unit:				
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
Incorporation Equip.:				
Hours to Incorp.:				
Incorp. Depth, Unit:				
Carrier:	water	water	water	water
Spray Volume, Unit:	14.8 GPA	14.8 GPA	14.8 GPA	14.8 GPA
Spray pH:				
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	Y	Y	Y	Y

Trt No	Treatment Application Comment