

University of Georgia

Intercropping watermelon and cotton with multiple herbicide systems & plantings.

Trial ID: Veg6-11

Study Dir.: Peter Eure, Brian Tankersley

Location: Ponder farm

Investigator: Stanley Culpepper

Use 2 liters(s) per treatment mixture to spray 14.8 gal/ac

Plots: 6 by 50 feet

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt to Measure	Product	Plot No. By Rep			
										1	2	3	4
1	Watermelon PD 1: 3/20 Cotton intercrop None									101	213	304	410
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	4	L	2	pt/a	preplant	A	33.78 ml/mx		102	212	302	411
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	4 2	L L	2 1	pt/a pt/a	preplant preplant	A A	33.78 ml/mx 16.89 ml/mx		103	211	303	412
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	4 2 80	L L DF	2 1 4	pt/a pt/a oz/a	preplant preplant preplant	A A A	33.78 ml/mx 16.89 ml/mx 4.048 g/mx		104	210	301	413
5	Watermelon PD 2: 4/10 Cotton intercrop None									110	204	313	403
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	4	L	2	pt/a	preplant	B	33.78 ml/mx		111	203	310	404
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	4 2	L L	2 1	pt/a pt/a	preplant preplant	B B	33.78 ml/mx 16.89 ml/mx		112	202	312	402
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	4 2 80	L L DF	2 1 4	pt/a pt/a oz/a	preplant preplant preplant	B B B	33.78 ml/mx 16.89 ml/mx 4.048 g/mx		113	201	311	401
9	Watermelon PD 1:3/20 Sonalan Reflex Cotton PD4: AH	4 2	L L	2 1	pt/a pt/a	preplant preplant	A A	33.78 ml/mx 16.89 ml/mx		108	205	306	409
10	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	4 2	L L	2 1	pt/a pt/a	preplant preplant	B B	33.78 ml/mx 16.89 ml/mx		109	206	305	408
11	Cotton only PD 1:									105	208	307	406
12	Cotton only PD 2:									106	209	308	407
13	Cotton only PD 3: Ideal									107	207	309	405

Sort Order: Treatment

University of Georgia

Intercropping watermelon and cotton with multiple herbicide systems & plantings.

Trial ID: Veg6-11

Study Dir.: Peter Eure, Brian Tankersley

Location: Ponder farm

Investigator: Stanley Culpepper

Trial Comments

OBJECTIVE: Determine the most effective cotton/watermelon intercropping system in areas infested with Palmer amaranth.

Watermelon Injury:

1. No herbicide program injured watermelon.

Cotton Injury:

1. Sonalan and Reflex did not injure cotton.
2. Sinbar killed cotton.

Palmer Control:

1. At the end of the watermelon season 6/1/2011:
 - A. Greater than 90% control was noted with all Reflex systems when melons and cotton were planted during PD 1 and PD 2.
 - B. Sonalan system provided poor control (40 to 50%).
2. At the end of the cotton season:
 - A. The most effective program was Sonalan + Reflex, 87 to 88% with PD1 or PD2 plantings and 73 to 78% control with melons planted PD1 or PD2 and cotton planted at PD4.
 - B. Sonalan alone provided poor control.
 - C. The Sinbar system provided excellent control during early season but when the herbicide killed the cotton it allowed Palmer to emerge and grow without competition.

Wild Radish Control:

1. All Reflex programs provided excellent control.
2. Sonalan only systems were far less effective with only 15 to 23% control at melon harvest.

Large CrabGrass:

1. Control was excellent with all herbicide systems throughout the season.
2. Select was applied over the entire trial during mid-season.

WEED COUNTS:

1. The number of weeds for each plot were counted. Trends in weed counts were similar to those for percent control.

WATERMELON VINE GROWTH:

1. Ten plants per plot were measured on April 13 and April 27.
2. Planting date impacted growth but herbicide system had no influence.

COTTON GROWTH:

1. Plant date obviously had a great impact.
2. Sinbar eliminated cotton from growing.
3. In late July, the cotton planted alone in the ideal planting window was the tallest cotton followed by cotton planted during PD 1 or PD 2 when Reflex + Sonalan were the watermelon herbicide program.

WATERMELON YIELD:

1. Watermelons were harvested 3 times.
2. Yield followed trends in Palmer control with highest yields being in Reflex systems.
3. Yields from watermelon in Reflex systems were similar when cotton was intercropped and when it was not.

COTTON YIELD:

1. Weed free cotton yields were greater than intercropping cotton most likely due to the difference in Palmer amaranth control as well as some crop competition.

WATERMELON VALUE:

1. Value was determined by using \$0.15 per lb of watermelon produced.
2. Greatest value was noted in the Sonalan + Reflex systems in watermelon alone or intercropped with cotton.

COTTON VALUE:

1. Value was determined by using an input cost of \$530 per acre from UGA cotton budget and 0.92 cents per lb of lint cotton.

University of Georgia

2. Greatest value was noted in the cotton alone systems followed closely by PD 1 intercropping (off 200-300 lb) followed by PD 2 planting (off 500 to 600 lb).

BOTH CROP VALUE:

1. Greatest value was noted with intercropping systems with Sonalan + Reflex.

NOTE: After the final watermelon harvest, Roundup + Warrant was applied over the study followed 20 minutes later with Ignite to kill all watermelon plants.

GENERAL COMMENTS

16/2/11

3/4/11

1/5/11

2/5/11

AND PD2 ONLY

5/5/11

22/5/11

TELONE II 12 GPA APPLIED OVER ENTIRE TRIAL

GRAMOXONE 1.5 PT/ACRE INCLUDED WITH ALL TREATMENTS

IGNITE SPRAYED 18 OZ/ACRE OVER COTTON PLOTS ONLY

DUAL MAGNUM SPRAYED 1 PT/ACRE OVER COTTON PLOTS PD1

OVERSPRAY ENTIRE TRIAL WITH SELECTMAX 14 OZ/ACRE

ROUNDUP AND WARRENT 2.5 PT/ACRE APPLIED OVER COTTON ONLY PLOTS

IGNITE APPLIED 20 MINUTES LATER OVER COTTON ONLY PLOTS

GENERAL COMMENTS:

FERTILIZER APPLIED AT 800 LB/A:

300lbs of 3-9-18

100lbs of MAP

75lbs of Ammonium Nitrate

250lbs of Kmag

University of Georgia

Intercropping watermelon and cotton with multiple herbicide systems & plantings.

Trial ID: Veg6-11

Study Dir.: Peter Eure, Brian Tankersley

Location: Ponder farm

Investigator: Stanley Culpepper

Weed Code

Crop Code

Part Rated

Rating Data Type

Rating Unit

Rating Date

Crop Stage

Crop Stage Scale

Assessed By

ARM Action Codes

Subsamples, Dec.

CITLA	CITLA	CITLA	CITLA	GOSHI	GOSHI	GOSHI
PLANT	PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
%	%	%	%	%	%	%
4/14/2011	4/27/2011	5/12/2011	6/1/2011	4/14/2011	4/27/2011	6/1/2011

Trt No.	Treatment Name	Rate	Unit	Rate								
				1	2	3	4	5	6	7	8	
1	Watermelon PD 1: 3/20 Cotton intercrop None			0.0	a 0.0	a 0.0	a 0.0	a	0.0	a 0.0	b 0.0	b
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	0.0	a 0.0	a 0.0	a 0.0	a	0.0	a 0.0	b 0.0	b
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	0.0	a 0.0	a 0.0	a 0.0	a	0.0	a 0.0	b 0.0	b
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	1	pt/a	0.0	a 0.0	a 0.0	a 0.0	a	0.0	a 73.8	a 96.8	a
5	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	4	oz/a	0.0	a 0.0	a 0.0	a 0.0	a	0.0		b 0.0	b
6	Watermelon PD 2: 4/10 Cotton intercrop None			0.0	a 0.0	a 0.0	a 0.0	a		0.0	b 0.0	b
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	0.0	a 0.0	a 0.0	a 0.0	a		0.0	b 0.0	b
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	1	pt/a	0.0	a 0.0	a 0.0	a 0.0	a		0.0	b 96.0	a
9	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	4	oz/a	0.0	0.0	0.0	0.0					
10	Watermelon PD 1: 3/20 Sonalan Reflex Cotton PD4: AH	1	pt/a	0.0	0.0	0.0	0.0					
11	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	2	pt/a	0.0	0.0	0.0	0.0					
12	Cotton only PD 1:	1	pt/a						0.0	0.0	0.0	
13	Cotton only PD 2:	1	pt/a							0.0	0.0	
	Cotton only PD 3: Ideal										0.0	
	LSD (P=.05)			0.00	0.00	0.00	0.00	.	0.00	1.31	2.59	
	Friedman's X2			0.00	0.00	0.00	0.00	.	0.00	1.15	2.12	
	Standard Deviation			0.00	0.00	0.00	0.00	.	0.00	0.88	1.74	
	CV			0.0	0.0	0.0	0.0	.	0.0	11.98	9.94	
	Bartlett's X2			0.0	0.0	0.0	0.0	.	0.0	0.0	1.766	
	P(Bartlett's X2)			.	.	.	.	.	.	.	0.184	

University of Georgia

Weed Code	CITLA	CITLA	CITLA	CITLA	GOSHI	GOSHI	GOSHI
Crop Code	PLANT	PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Part Rated							
Rating Data Type	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY
Rating Unit	%	%	%	%	%	%	%
Rating Date	4/14/2011	4/27/2011	5/12/2011	6/1/2011	4/14/2011	4/27/2011	6/1/2011
Crop Stage							
Crop Stage Scale							
Assessed By							
ARM Action Codes							
# Subsamples, Dec.							

Trt No.	Treatment Name	Rate								
		Unit	1	2	3	4	5	6	7	8
	Replicate F		0.000	0.000	0.000	0.000	0.000	0.000	0.800	0.907
	Replicate Prob(F)		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.5099	0.4570
	Treatment F		0.000	0.000	0.000	0.000	0.000	0.000	2784.800	2005.649
	Treatment Prob(F)		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code		AMAPA	AMAPA	AMAPA	AMAPA	AMAPA
Crop Code	GOSHI					
Part Rated	PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%
Rating Date	9/8/2011	4/14/2011	4/27/2011	5/12/2011	6/1/2011	9/8/2011
Crop Stage						
Crop Stage Scale						
Assessed By						
ARM Action Codes						
# Subsamples, Dec.						

Trt	Treatment	Rate	Unit	9	10	11	12	13	14	15	16
No.	Name	Rate	Unit	9	10	11	12	13	14	15	16

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	RAPRA	RAPRA	RAPRA	RAPRA	RAPRA	DIGSA
Crop Code						
Part Rated	PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%
Rating Date	4/14/2011	4/27/2011	5/12/2011	6/1/2011	9/8/2011	4/14/2011
Crop Stage						
Crop Stage Scale						
Assessed By						
ARM Action Codes						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	17	18	19	20	21	22	23	
1	Watermelon PD 1: 3/20 Cotton intercrop None			0.0	d 0.0	d 0.0	d 0.0	d 0.0	b	0.0	b
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	25.0	c 48.3	c 20.0	c 15.0	c 99.0	a	97.8	a
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	99.0	a 99.0	a 100.0	a 99.0	a 99.0	a	98.3	a
	Reflex	1	pt/a								
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	99.0	a 99.0	a 100.0	a 99.0	a 99.0	a	99.0	a
	Reflex	1	pt/a								
	Sinbar	4	oz/a								
5	Watermelon PD 2: 4/10 Cotton intercrop None			0.0	d 0.0	d 0.0	d 0.0	d 0.0	b	0.0	b
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	45.0	b 76.3	b 50.0	b 22.5	b 99.0	a	99.0	a
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	99.0	a 98.8	a 100.0	a 96.8	a 99.0	a	99.0	a
	Reflex	1	pt/a								
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	99.0	a 98.5	a 100.0	a 99.0	a 99.0	a	99.0	a
	Reflex	1	pt/a								
	Sinbar	4	oz/a								
9	Watermelon PD 1:3/20 Sonalan	2	pt/a	99.0	99.0	100.0	99.0	99.0		99.0	
	Reflex	1	pt/a								
	Cotton PD4: AH										
10	Watermelon PD2: 4/10 Sonalan	2	pt/a	98.3	99.0	100.0	99.0	99.0		99.0	
	Reflex	1	pt/a								
	Cotton PD4: AH										
11	Cotton only PD 1:			96.8	99.0	100.0	99.0	99.0		99.0	
12	Cotton only PD 2:				99.0	100.0	99.0	99.0			
13	Cotton only PD 3: Ideal					100.0	99.0	99.0			
LSD (P=.05)				18.20	9.18	14.22	6.22	0.00	.	1.60	
Friedman's X2				14.78	7.15	11.05	4.75	0.00	.	1.29	
Standard Deviation				12.25	6.18	9.57	4.19	0.00	.	1.08	
CV				17.73	8.09	12.83	5.88	0.0	.	1.34	
Bartlett's X2				18.721	25.543	0.686	2.368	0.0	.	0.741	
P(Bartlett's X2)				0.001*	0.001*	0.408	0.306	.	.	0.389	
Replicate F				1.161	0.705	0.168	0.718	0.000		0.468	
Replicate Prob(F)				0.3519	0.5612	0.9167	0.5542	1.0000		0.7086	
Treatment F				48.425	157.427	74.629	427.893	0.000		5474.662	
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	1.0000		0.0001	

University of Georgia

Weed Code	RAPRA	RAPRA	RAPRA	RAPRA	RAPRA	DIGSA
Crop Code						
Part Rated	PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%
Rating Date	4/14/2011	4/27/2011	5/12/2011	6/1/2011	9/8/2011	4/14/2011
Crop Stage						
Crop Stage Scale						
Assessed By						
ARM Action Codes						
# Subsamples, Dec.						

Trt	Treatment	Rate	Unit	17	18	19	20	21	22	23
-----	-----------	------	------	----	----	----	----	----	----	----

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	DIGSA	DIGSA	DIGSA	DIGSA	AMAPA	AMAPA
Crop Code						
Part Rated	PLANT	PLANT	PLANT	PLANT	PLAEME P	PLAEME P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	COUNT	COUNT
Rating Unit	%	%	%	%	#/plot	#/plot
Rating Date	4/27/2011	5/12/2011	6/1/2011	9/8/2011	4/20/2011	5/3/2011
Crop Stage						
Crop Stage Scale						
Assessed By					JESS	JESS
ARM Action Codes						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate		Rate											
		Rate	Unit	24	25	26	27	28	29	30	31				
1	Watermelon PD 1: 3/20 Cotton intercrop None			0.0	c	0.0	b	0.0	b	0.0	b	236.5	a	175.3	ab
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	95.8	b	99.0	a	99.0	a	99.0	a	2.0	b	117.5	b
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	98.0	a	99.0	a	99.0	a	99.0	a	0.0	b	9.3	c
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	98.0	a	99.0	a	99.0	a	99.0	a	1.5	b	2.8	c
5	Watermelon PD 2: 4/10 Cotton intercrop None			0.0	c	0.0	b	0.0	b	0.0	b	206.3	a	176.3	ab
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	95.5	b	99.0	a	99.0	a	99.0	a	4.0	b	115.5	b
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	96.8	ab	99.0	a	99.0	a	99.0	a	0.3	b	9.3	c
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	96.5	b	99.0	a	99.0	a	99.0	a	0.0	b	4.5	c
9	Watermelon PD 1: 3/20 Sonalan Reflex	2 1	pt/a pt/a	96.3		99.0		99.0		99.0		1.5		2.5	
10	Watermelon PD2: 4/10 Sonalan Reflex	2 1	pt/a pt/a	97.3		99.0		99.0		99.0		1.5		28.5	
11	Cotton only PD 1:			98.0		99.0		99.0		99.0		8.0		162.3	
12	Cotton only PD 2:			98.0		99.0		99.0		99.0		2.5		188.8	
13	Cotton only PD 3: Ideal					99.0		99.0		99.0		16.3		188.8	
LSD (P=.05)				1.32		0.00		0.00		0.00		. .	92.85		69.71
Friedman's X2				1.94		0.00		0.00		0.00		. .	68.82		91.23
Standard Deviation				0.89		0.00		0.00		0.00		. .	62.50		46.92
CV				1.1		0.0		0.0		0.0		. .	169.18		51.65
Bartlett's X2				7.706		0.0		0.0		0.0		. .	126.8		75.463
P(Bartlett's X2)				0.564		.		.		.		. .	0.001*		0.001*
Replicate F				3.894		0.000		0.000		0.000			1.276		12.635
Replicate Prob(F)				0.0263		1.0000		1.0000		1.0000			0.3125		0.0001
Treatment F				7270.862		0.000		0.000		0.000			6.920		12.145
Treatment Prob(F)				0.0001		1.0000		1.0000		1.0000			0.0002		0.0001

University of Georgia

Weed Code	DIGSA	DIGSA	DIGSA	DIGSA	AMAPA	AMAPA
Crop Code						
Part Rated	PLANT	PLANT	PLANT	PLANT	PLAEME P	PLAEME P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	COUNT	COUNT
Rating Unit	%	%	%	%	#/plot	#/plot
Rating Date	4/27/2011	5/12/2011	6/1/2011	9/8/2011	4/20/2011	5/3/2011
Crop Stage						
Crop Stage Scale						
Assessed By					JESS	JESS
ARM Action Codes						
# Subsamples, Dec.						

Trt	Treatment	Rate	Unit	24	25	26	27	28	29	30	31
No.	Name	Rate	Unit								

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	AMAPA	AMAPA	RAPRA	RAPRA	RAPRA	RAPRA
Crop Code						
Part Rated	PLAEME P	PLANT	PLAEME P	PLAEME P	PLAEME P	PLAEME P
Rating Data Type	COUNT	COUNT	COUNT	COUNT	COUNT	COUNT
Rating Unit	#/plot	#/plot	#/plot	#/plot	#/plot	#/plot
Rating Date	5/17/2011	6/1/2011	4/1/2011	4/7/2011	4/20/2011	5/3/2011
Crop Stage						
Crop Stage Scale						
Assessed By			JESS	JESS	JESS	JESS
ARM Action Codes						
# Subsamples, Dec.						

Trt	Treatment	Rate	Unit	32	33	34	35	36	37	38	
No.	Name	Rate	Unit	32	33	34	35	36	37	38	
1	Watermelon PD 1: 3/20 Cotton intercrop None			100.0	b 121.8	b	74.0	a 121.0	a 66.0	a 41.8	b
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	34.0	cd 68.5	bc	42.8	b 68.0	b 63.3	a 84.3	a
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	23.0	cd 6.0	d	0.3	c 2.0	c 0.3	b 0.3	cd
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	3.0	d 6.0	d	0.3	c 1.5	c 0.0	b 0.0	d
5	Watermelon PD 2: 4/10 Cotton intercrop None			142.0	a 198.3	a			57.3	a 29.3	bcd
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	58.3	c 69.8	bc			35.3	ab 40.0	bc
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	17.3	d 17.5	cd			0.3	b 0.0	d
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	14.8	d 8.3	d			0.0	b 0.0	d
9	Watermelon PD 1: 3/20 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	2.8	6.0		0.0	3.3	0.0	0.0	
10	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	20.5	16.8				0.0	0.3	
11	Cotton only PD 1:			27.8	0.0				8.3	4.3	
12	Cotton only PD 2:			5.5	0.0				0.0	4.3	
13	Cotton only PD 3: Ideal			6.5	0.0				3.0	2.8	
LSD (P=.05)				38.89	54.66	.	16.96	24.56	42.19	39.86	
Friedman's X2				32.90	38.73	.	23.39	32.99	33.14	30.60	
Standard Deviation				26.17	36.79	.	11.41	16.53	28.40	26.83	
CV				74.74	92.2	.	48.67	42.23	158.1	168.51	
Bartlett's X2				45.04	50.215	.	38.555	34.956	57.675	75.048	
P(Bartlett's X2)				0.001*	0.001*	.	0.001*	0.001*	0.001*	0.001*	
Replicate F				0.308	0.487		4.305	5.200	1.932	1.543	
Replicate Prob(F)				0.8190	0.6957		0.0187	0.0092	0.1606	0.2378	
Treatment F				10.263	10.773		34.956	42.499	3.621	3.725	
Treatment Prob(F)				0.0001	0.0001		0.0001	0.0001	0.0070	0.0060	

University of Georgia

Weed Code	AMAPA	AMAPA	RAPRA	RAPRA	RAPRA	RAPRA
Crop Code						
Part Rated	PLAEME P	PLANT	PLAEME P	PLAEME P	PLAEME P	PLAEME P
Rating Data Type	COUNT	COUNT	COUNT	COUNT	COUNT	COUNT
Rating Unit	#/plot	#/plot	#/plot	#/plot	#/plot	#/plot
Rating Date	5/17/2011	6/1/2011	4/1/2011	4/7/2011	4/20/2011	5/3/2011
Crop Stage						
Crop Stage Scale						
Assessed By			JESS	JESS	JESS	JESS
ARM Action Codes						
# Subsamples, Dec.						

Trt	Treatment	Rate						
No.	Name	Rate Unit	32	33	34 35	36	37	38

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	RAPRA	RAPRA	GRASS	GRASS	GRASS	GRASS
Crop Code						
Part Rated	PLAEME P	PLANT	PLAEME P	PLAEME P	PLAEME P	PLAEME P
Rating Data Type	COUNT	COUNT	COUNT	COUNT	COUNT	COUNT
Rating Unit	#/plot	#/plot	#/plot	#/plot	#/plot	#/plot
Rating Date	5/17/2011	6/1/2011	4/1/2011	4/7/2011	4/20/2011	5/3/2011
Crop Stage			DIGSA	DIGSA	DIGSA	DIGSA
Crop Stage Scale			PANTE	PANTE	PANTE	PANTE
Assessed By			JESS	JESS	JESS	JESS
ARM Action Codes						
# Subsamples, Dec.						

Trt No.	Treatment Name	Rate	Unit	39	40	41	42	43	44	45	46	47			
1	Watermelon PD 1: 3/20 Cotton intercrop None			22.8	ab	33.0	a	31.0	a	141.3	a	201.5	a	56.8	ab
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	34.3	a	40.0	a	0.0	b	3.0	b	5.8	b	38.8	bc
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	4.0	bc	0.0	b	0.0	b	0.8	b	0.8	b	9.8	c
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	0.0	c	0.0	b	0.0	b	0.3	b	0.0	b	6.5	c
5	Watermelon PD 2: 4/10 Cotton intercrop None			15.8	abc	38.0	a			153.0	a	93.3	a		
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	15.3	abc	39.3	a			3.5	b	28.5	bc		
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	0.0	c	0.0	b			0.5	b	14.8	bc		
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	0.0	c	0.0	b			0.0	b	25.0	bc		
9	Watermelon PD 1: 3/20 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	0.0		0.0		0.0	3.0	0.0		0.3			
10	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	0.3		0.0				0.0		13.0			
11	Cotton only PD 1:			0.0		0.0				10.5		16.3			
12	Cotton only PD 2:			0.0		0.0				0.5		14.0			
13	Cotton only PD 3: Ideal			0.0		0.0				4.0		21.5			
LSD (P=.05)				20.30		24.44	.	15.72		76.24		101.16		44.59	.
Friedman's X2				15.24		18.40	.	20.62		100.45		73.77		35.28	.
Standard Deviation				13.67		16.45	.	10.58		51.32		68.10		30.01	.
CV				192.58		142.36	.	170.63		173.08		232.96		115.35	.
Bartlett's X2				28.603		8.613	.	0.0		77.815		107.626		43.282	.
P(Bartlett's X2)				0.001*		0.035*	.	.		0.001*		0.001*		0.001*	.
Replicate F				1.533		1.357		1.600		1.473		1.388		3.984	
Replicate Prob(F)				0.2401		0.2877		0.2244		0.2555		0.2787		0.0244	
Treatment F				2.736		4.847		6.869		5.914		3.815		2.775	
Treatment Prob(F)				0.0263		0.0014		0.0015		0.0032		0.0053		0.0247	

University of Georgia

Weed Code	RAPRA	RAPRA	GRASS	GRASS	GRASS	GRASS
Crop Code						
Part Rated	PLAEME P	PLANT	PLAEME P	PLAEME P	PLAEME P	PLAEME P
Rating Data Type	COUNT	COUNT	COUNT	COUNT	COUNT	COUNT
Rating Unit	#/plot	#/plot	#/plot	#/plot	#/plot	#/plot
Rating Date	5/17/2011	6/1/2011	4/1/2011	4/7/2011	4/20/2011	5/3/2011
Crop Stage			DIGSA	DIGSA	DIGSA	DIGSA
Crop Stage Scale			PANTE	PANTE	PANTE	PANTE
Assessed By			JESS	JESS	JESS	JESS
ARM Action Codes						
# Subsamples, Dec.						

Trt	Treatment	Rate							
No.	Name	Rate Unit	39	40	41 42	43	44	45	46 47

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	AVG10PLA	AVG10PLA	CITLA	CITLA	CITLA	CITLA
Crop Code	CITLA	CITLA	HAR1-3	HAR1-3	HAR1-3	HAR1-3
Part Rated	VINE	VINE	FRUTOT	FRUTOT	FRUTOT	FRUTOT
Rating Data Type	LENGTH	LENGTH	YIELD	NUMBER	YIELD	YIELD
Rating Unit	CM	CM	LB/PLOT	#/PLOT	LB/A	#/A
Rating Date	4/13/2013	4/27/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Crop Stage	AVERAGE	AVERAGE				

Crop Stage Scale

Assessed By

ARM Action Codes

Subsamples, Dec.

T9

T10

T11

TY12

TY13

Trt	Treatment	Rate	Unit	58	70	79	80	81	82	83	84
1	Watermelon PD 1: 3/20 Cotton intercrop None			22.03	a 67.08	a 5.95	c 1.0	c	1136.8	c 191.1	c
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	20.75	a 64.65	a 100.03	b 10.5	b	19110.0	b 2006.1	b
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	21.88	a 67.93	a 261.08	a 22.3	a	49879.1	a 4250.9	a
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	22.60	a 69.98	a 268.28	a 21.0	a	51254.6	a 4012.1	a
5	Watermelon PD 2: 4/10 Cotton intercrop None			15.53	b 42.58	b 23.85	c 2.5	c	4556.6	c 477.6	c
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	14.83	b 44.25	b 96.90	b 9.8	b	18513.0	b 1862.8	b
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	16.03	b 48.45	b 258.13	a 20.8	a	49315.5	a 3964.3	a
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	14.15	b 46.73	b 256.00	a 21.8	a	48909.5	a 4155.4	a
9	Watermelon PD 1:3/20 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	22.43	72.38	255.53	19.5		48818.7	3725.5	
10	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	14.38	46.30	247.95	18.3		47371.5	3486.7	
11	Cotton only PD 1:					0.00	0.0		0.0	0.0	
12	Cotton only PD 2:					0.00	0.0		0.0	0.0	
13	Cotton only PD 3: Ideal					0.00	0.0		0.0	0.0	
LSD (P=.05)				2.712	10.272	49.830	4.71	.	9520.19	900.36	.
Friedman's X2				3.296	12.001	43.976	3.71	.	8401.82	708.89	.
Standard Deviation				1.826	6.914	33.541	3.17	.	6408.18	606.05	.
CV				9.89	12.12	24.58	28.01	.	24.58	28.01	.
Bartlett's X2				12.614	11.846	19.78	21.922	.	19.78	21.922	.
P(Bartlett's X2)				0.181	0.222	0.019*	0.009*	.	0.019*	0.009*	.
Replicate F				6.332	1.360	0.371	0.201		0.371	0.201	
Replicate Prob(F)				0.0040	0.2866	0.7746	0.8946		0.7747	0.8946	
Treatment F				16.732	12.532	52.465	36.362		52.465	36.362	
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001		0.0001	0.0001	

University of Georgia

Weed Code	AVG10PLA	AVG10PLA	CITLA	CITLA	CITLA	CITLA
Crop Code	CITLA	CITLA	HAR1-3	HAR1-3	HAR1-3	HAR1-3
Part Rated	VINE	VINE	FRUTOT	FRUTOT	FRUTOT	FRUTOT
Rating Data Type	LENGTH	LENGTH	YIELD	NUMBER	YIELD	YIELD
Rating Unit	CM	CM	LB/PLOT	#/PLOT	LB/A	#/A
Rating Date	4/13/2013	4/27/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Crop Stage	AVERAGE	AVERAGE				

Crop Stage Scale						
Assessed By						
ARM Action Codes		T9	T10	T11	TY12	TY13
# Subsamples, Dec.					1	1

Trt	Treatment	Rate							
No.	Name	Rate Unit	58	70	79	80	81 82	83	84

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	CITLA	CITLA	CITLA	AVG20PLA	AVG20PLA	AVG20PLA
Crop Code				GOSHI	GOSHI	GOSHI
Part Rated						
Rating Data Type	Value	Input Cost	Value-Cost	HEIGHT	Height	Height
Rating Unit	\$/A	\$/A	\$/A	CM	CM	CM
Rating Date	6/22/2011	12/10/2011		4/29/2011	5/9/2011	6/1/2011
Crop Stage	15ct/lb					
Crop Stage Scale						
Assessed By						
ARM Action Codes	T14		T17	T1	T2	T3
# Subsamples, Dec.	1					

Trt No.	Treatment Name	Rate	Unit	85	86	87	88	110	133	156	
1	Watermelon PD 1: 3/20 Cotton intercrop None			170.5	c 2900.0	a	-2729.4856	c 11.213	a 10.088	b 18.000	c
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	2866.5	b 2900.0	a	-33.4948	b 10.675	ab 13.000	a 37.150	b
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	7481.9	a 2900.0	a	4581.8593	a 9.700	b 12.975	a 49.263	a
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	7688.2	a 2900.0	a	4788.1958	a 5.088	c 1.400	d 0.000	
5	Watermelon PD 2: 4/10 Cotton intercrop None			683.5	c 2900.0	a	-2216.5097	c 5.638	c 7.513	c 15.975	c
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	2776.9	b 2900.0	a	-123.0508	b 5.863	c 9.288	bc 30.538	b
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	7397.3	a 2900.0	a	4497.3183	a 5.800	c 8.175	bc 32.600	b
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	7336.4	a 2900.0	a	4436.4209	a 5.350	c 2.900	d 0.000	
9	Watermelon PD 1: 3/20 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	7322.8	2900.0		4422.8076				
10	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	7105.7	2900.0		4205.7241				
11	Cotton only PD 1:			0.0	0.0		0.0000	9.525	12.175	38.050	
12	Cotton only PD 2:			0.0	0.0		0.0000	5.750	8.013	29.288	
13	Cotton only PD 3: Ideal			0.0	0.0		0.0000			13.888	
LSD (P=.05)				1428.03	0.00	.	1428.02797	1.2975	2.1633	7.8454	
Friedman's X2				1260.27	0.00	.	1260.27344	1.1442	1.9341	6.3149	
Standard Deviation				961.23	0.00	.	961.22635	0.8734	1.4562	5.2809	
CV				24.58	0.0	.	57.24	11.71	17.03	21.94	
Bartlett's X2				19.78	0.0	.	19.78	20.106	10.015	16.748	
P(Bartlett's X2)				0.019*	.	.	0.019*	0.017*	0.349	0.033*	
Replicate F				0.371	0.000		0.371	1.328	0.388	0.678	
Replicate Prob(F)				0.7747	1.0000		0.7747	0.2964	0.7630	0.5769	
Treatment F				52.465	0.000		34.922	32.239	29.341	35.970	
Treatment Prob(F)				0.0001	1.0000		0.0001	0.0001	0.0001	0.0001	

University of Georgia

Weed Code	CITLA	CITLA	CITLA	AVG20PLA	AVG20PLA	AVG20PLA
Crop Code				GOSHI	GOSHI	GOSHI
Part Rated						
Rating Data Type	Value	Input Cost	Value-Cost	HEIGHT	Height	Height
Rating Unit	\$/A	\$/A	\$/A	CM	CM	CM
Rating Date	6/22/2011	12/10/2011		4/29/2011	5/9/2011	6/1/2011
Crop Stage	15ct/lb					
Crop Stage Scale						
Assessed By						
ARM Action Codes	T14		T17	T1	T2	T3
# Subsamples, Dec.	1					

Trt	Treatment	Rate	Unit	85	86	87	88	110	133	156
No.	Name									

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	AVG20PLA	AVG20PLA						
Crop Code	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	
Part Rated								
Rating Data Type	HEIGHT	Height	HARVEST	Seed yld	Lint Yld	Value	input cost	
Rating Unit	CM	CM	LB/PLOT	LB/A	LB/A	\$/A	\$/A	
Rating Date	6/16/2001	7/21/2011	10/4/2011	10/4/2011	10/4/2011	10/4/2011		
Crop Stage						92cnt/lb		
Crop Stage Scale								
Assessed By								
ARM Action Codes	T4	T5		TY8	T16	T15		
# Subsamples, Dec.				1	1	1		

Trt No.	Treatment Name	Rate	Unit	179	202	220	221	222	223	224		
1	Watermelon PD 1: 3/20 Cotton intercrop None			21.238	de 58.475	d 0.000	d 0.0	d 0.0	d 0.0	d 530.0	a	
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	42.950	bc 91.563	bc 0.000	d 0.0	d 0.0	d 0.0	d 530.0	a	
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	70.688	a 96.800	b 23.985	b 4582.4	b 1924.6	b 1770.6	b 530.0	a	
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	0.000	0.000	e 0.000	d 0.0	d 0.0	d 0.0	d 530.0	a	
5	Watermelon PD 2: 4/10 Cotton intercrop None			16.500	e 55.525	d 0.000	d 0.0	d 0.0	d 0.0	d 530.0	a	
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	40.500	bc 82.550	c 0.000	d 0.0	d 0.0	d 0.0	d 530.0	a	
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	50.213	b 93.988	b 20.295	c 3877.4	c 1628.5	c 1498.2	c 530.0	a	
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	0.000	0.000	e 0.000	d 0.0	d 0.0	d 0.0	d 530.0	a	
9	Watermelon PD 1: 3/20 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a		17.213	0.000	0.0	0.0	0.0	530.0		
10	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a		16.100	0.000	0.0	0.0	0.0	530.0		
11	Cotton only PD 1:			52.275	84.300	27.885	5327.5	2237.6	2058.5	530.0		
12	Cotton only PD 2:			48.363	93.238	26.525	5067.7	2128.4	1958.1	530.0		
13	Cotton only PD 3: Ideal			33.400	111.413	26.880	5135.5	2156.9	1984.4	530.0		
LSD (P=.05)				14.0296	9.6471	0.9160	175.00	73.50	67.62	0.00		
Friedman's X2				12.1951	8.6190	1.3796	263.57	110.70	101.84	0.00		
Standard Deviation				9.4435	6.4936	0.6165	117.79	49.47	45.51	0.00		
CV				27.62	10.54	6.38	6.38	6.38	6.38	0.0		
Bartlett's X2				33.413	30.972	5.072	5.072	5.071	5.072	0.0		
P(Bartlett's X2)				0.001*	0.001*	0.28	0.28	0.28	0.28	.		
Replicate F				1.642	0.615	1.557	1.558	1.557	1.558	0.000		
Replicate Prob(F)				0.2149	0.6140	0.2343	0.2341	0.2344	0.2342	1.0000		
Treatment F				22.662	152.557	1734.466	1734.465	1734.461	1734.460	0.000		
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	1.0000		

University of Georgia

Weed Code	AVG20PLA	AVG20PLA					
Crop Code	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI
Part Rated							
Rating Data Type	HEIGHT	Height	HARVEST	Seed yld	Lint Yld	Value	input cost
Rating Unit	CM	CM	LB/PLOT	LB/A	LB/A	\$/A	\$/A
Rating Date	6/16/2001	7/21/2011	10/4/2011	10/4/2011	10/4/2011	10/4/2011	
Crop Stage						92cnt/lb	
Crop Stage Scale							
Assessed By							
ARM Action Codes	T4	T5		TY8	T16	T15	
# Subsamples, Dec.				1	1	1	

Trt No.	Treatment Name	Rate	Unit	179	202	220	221	222	223	224
---------	----------------	------	------	-----	-----	-----	-----	-----	-----	-----

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Weed Code	GOSHI	BOTHCROP
Crop Code		
Part Rated		
Rating Data Type	Value-Cost	Value-COST
Rating Unit	\$/A	\$/A
Rating Date		
Crop Stage		
Crop Stage Scale		
Assessed By		
ARM Action Codes	T18	T19
# Subsamples, Dec.		

Trt	Treatment	Rate	Unit	225	226	227
1	Watermelon PD 1: 3/20 Cotton intercrop None			-530.0001	d	-3259.4857 f
2	Watermelon PD 1: 3/20 Cotton intercrop Sonalan	2	pt/a	-530.0001	d	-563.4948 e
3	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	1240.6379	b	5822.4972 a
4	Watermelon PD 1: 3/20 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	-530.0001	d	4258.1957 bc
5	Watermelon PD 2: 4/10 Cotton intercrop None			-530.0001	d	-2746.5096 f
6	Watermelon PD 2: 4/10 Cotton intercrop Sonalan	2	pt/a	-530.0001	d	-653.0508 e
7	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex	2 1	pt/a pt/a	968.2323	c	5465.5508 ab
8	Watermelon PD 2: 4/10 Cotton intercrop Sonalan Reflex Sinbar	2 1 4	pt/a pt/a oz/a	-530.0001	d	3906.4208 c
9	Watermelon PD 1: 3/20 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	-530.0001		3892.8078
10	Watermelon PD2: 4/10 Sonalan Reflex Cotton PD4: AH	2 1	pt/a pt/a	-530.0001		3675.7240
11	Cotton only PD 1:			1528.5469		1528.5469
12	Cotton only PD 2:			1428.1478		1428.1478
13	Cotton only PD 3: Ideal			1454.3550		1454.3550
<hr/>						
LSD (P=.05)				67.61841	.	1425.74196
Friedman's X2				101.84386	.	1271.20020
Standard Deviation				45.51494	.	959.68753
CV				24.86	.	51.53
Bartlett's X2				5.072	.	48.701
P(Bartlett's X2)				0.28	.	0.001*
Replicate F				1.558		0.305
Replicate Prob(F)				0.2341		0.8211
Treatment F				1734.461		38.418
Treatment Prob(F)				0.0001		0.0001

University of Georgia

Weed Code		
Crop Code	GOSHI	BOTHCROP
Part Rated		
Rating Data Type	Value-Cost	Value-COST
Rating Unit	\$/A	\$/A
Rating Date		
Crop Stage		
Crop Stage Scale		
Assessed By		
ARM Action Codes	T18	T19
# Subsamples, Dec.		

Trt	Treatment	Rate	Unit	225	226	227
No.	Name	Rate	Unit	225	226	227

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

Mean separations are based on the complete error term.

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

University of Georgia

Intercropping watermelon and cotton with multiple herbicide systems & plantings.

Trial ID: Veg6-11
Location: Ponder farm

Study Dir.: Peter Eure, Brian Tankersley
Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Peter Eure **Title:** EXTENSION WEED SCIENCE
Affiliation: UNIVERSITY OF GEORGIA
Postal Code: 31793
Investigator: Stanley Culpepper **Title:** EXTENSION WEED SCIENCE
Affiliation: UNIVERSITY OF GEORGIA
Postal Code: 31793

TRIAL LOCATION

City: TY TY **Trial Status:** COMPLETED
State/Prov.: GEORGIA **Trial Reliability:** GOOD
Postal Code: 31795 **Initiation Date:** 3/22/2011
Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1.	AMAPA Palmer amaranth	Amaranthus palmeri
2.	RAPRA Wild radish	Raphanus raphanistrum
3.	DIGSA Large crabgrass	Digitaria sanguinalis

Crop 1: CITLA WATERMELON **Variety:** MELODY (SEEDLESS)
Planting Date: 3/24/2011 **Planting Method:** TRANSPLANTED - MACHINE
Rate: 1 3 FT **Depth:** 2 IN
Row Spacing: 6 FT **Spacing Within Row:** 3 FT **Seed Bed:** SMOOTH
Soil Temperature: 67 F **Soil Moisture:** SLIGHTLY WET

Crop 2: CITLA WATERMELON **Variety:** SANGRIA (POLLINATOR)
Planting Date: 3/24/2011 **Planting Method:** TRANSPLANTED - MACHINE
Rate: 1 16 FT **Depth:** 2 IN
Row Spacing: 6 FT **Spacing Within Row:** 12 FT **Seed Bed:** SMOOTH
Soil Temperature: 67 F **Soil Moisture:** SLIGHTLY WET

Crop 3: GOSHI COTTON, SHORT STAPLE **Variety:** PHY WRF 499
Planting Date: 4/11/2011 **Planting Method:** HILL DROP
Rate: 2 S/9" **Depth:** 1 IN
Row Spacing: 36 IN **Spacing Within Row:** 9 IN **Seed Bed:** SMOOTH
Soil Temperature: 84 F **Soil Moisture:** SLIGHTLY DRY **Emergence Date:** 4/15/2011

Crop 4: CITLA WATERMELON **Variety:** MELODY (SEEDLESS)
Planting Date: 4/7/2011 **Planting Method:** TRANSPLANTED - MACHINE
Rate: 1 3 FT **Depth:** 2 IN
Row Spacing: 6 FT **Spacing Within Row:** 3 FT **Seed Bed:** SMOOTH
Soil Temperature: 60 F **Soil Moisture:** SLIGHTLY WET

Crop 5: CITLA WATERMELON **Variety:** SANGRIA (POLLINATOR)
Planting Date: 4/7/2011 **Planting Method:** TRANSPLANTED - MACHINE
Rate: 1 16 FT **Depth:** 2 IN
Row Spacing: 6 FT **Spacing Within Row:** 12 FT **Seed Bed:** SMOOTH
Soil Temperature: 60 F **Soil Moisture:** SLIGHTLY WET

Crop 6: GOSHI COTTON, SHORT STAPLE **Variety:** PHY 499 WRF
Planting Date: 4/21/2011 **Planting Method:** HILL DROP
Rate: 2 Seed/8" **Depth:** 0.5 in
Row Spacing: 36 in **Seed Bed:** SMOOTH
Soil Temperature: 68 F **Soil Moisture:** SLIGHTLY WET **Emergence Date:** 5/10/2011

Crop 7: GOSHI COTTON, SHORT STAPLE **Variety:** PHY 499 WRF
Planting Date: 5/5/2011 **Planting Method:** HILL DROP
Rate: 2 Seed/8" **Depth:** 0.5 in
Row Spacing: 36 in **Seed Bed:** SMOOTH
Soil Temperature: 71 F **Soil Moisture:** SLIGHTLY WET **Emergence Date:** 5/10/2011

Crop 8: GOSHI COTTON, SHORT STAPLE **Variety:** PHY 499 WRF
Planting Date: 7/5/2011 **Planting Method:** HILL DROP
Rate: 2 Seed/8" **Depth:** 0.5 in
Row Spacing: 36 in **Seed Bed:** SMOOTH
Soil Temperature: 92 F **Soil Moisture:** SLIGHTLY WET **Emergence Date:** 7/9/2011

University of Georgia

SITE AND DESIGN

Plot Width, Unit: 6 FT Plot Length, Unit: 50 FT Reps: 4
 Site Type: PONDER FARM
 Tillage Type: PLASTICULTURE Study Design: SPLIT-PLOT

MAINTENANCE

Field Prep./Maintenance: 2/16/2011--Telone II @ 12 GPA over the entire trial
 4/03/2011-- Gramoxone Inteon @ 1.5 pt/A + COC @ 1.5 pt/A over the entire trial
 5/01/2011-Ignite 280 @ 18 oz/A over cotton only plots
 5/02/2011-Dual Magnum @ 1 pt/A over cotton only plots for PD1 and PD2
 5/05/2011-SelectMax @ 14 oz/A overspray of entire trial for PANTE control
 5/22/2011-Round Up @ 22 oz/A plus Warrant @ 2.5 pt/A applied over cotton only plots
 5/22/2011-Ignite 280 @ 18 oz/A over cotton only plots (20 minutes after RoundUp/Warrant application)

SOIL DESCRIPTION

% Sand: 90 % OM: 0.8
 % Silt: 6 pH: 6.5 Soil Name: TIFTON SANDY LOAM
 % Clay: 4 CEC: 400

Overall Moisture Conditions: DRIP IRRIGATION

Closest Weather Station: www.griffin.uga.edu/aemn/ Distance: 250 Unit: yd

APPLICATION DESCRIPTION

	A	B
Application Date:	3/22/2011	4/3/2011
Time of Day:	8 AM	8 AM
Application Method:	BROADCAST	BROADCAST
Application Timing:	PREPLA	PREPLA B
Applic. Placement:	BROSOI	BROFOL
Air Temp., Unit:	64 F	64 F
% Relative Humidity:	72	40
Wind Velocity, Unit:	0 MPH	0 MPH
Dew Presence (Y/N):	Y	Y
Water Hardness:	N/A	N/A
Soil Temp., Unit:	64 F	66 F
Soil Moisture:	DRY	ADEQUATE
% Cloud Cover:	0	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	CITLA	CITLA .
Stage Scale:	preplant	preplant
Crop 2 Code, Stage:	CITLA .	CITLA .
Stage Scale:	preplant	preplant
Crop 3 Code, Stage:	GOSHI	GOSHI
Stage Scale:	preplant	preplant
Crop 4 Code, Stage:	CITLA .	CITLA .
Stage Scale:	preplant	preplant
Crop 5 Code, Stage:	CITLA .	CITLA .
Stage Scale:	preplant	preplant
Crop 6 Code, Stage:	GOSHI .	GOSHI .
Stage Scale:	preplant	preplant
Crop 7 Code, Stage:	GOSHI .	GOSHI .
Stage Scale:	preplant	preplant
Crop 8 Code, Stage:	GOSHI .	GOSHI
Stage Scale:	preplant	preplant

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AMAPA .	AMAPA .
Stage Scale:	preplant	<1"
Density, Unit:	. .	. .
Weed 2 Code, Stage:	RAPRA .	RAPRA .
Stage Scale:	preplant	<1"
Density, Unit:	. .	. .
Weed 3 Code, Stage:	DIGSA .	DIGSA .
Stage Scale:		<1"
Density, Unit:	. .	. .

University of Georgia

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	30 PSI	30 PSI
Nozzle Type:	DG	DG
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	18 IN	18 IN
Nozzles/Row:	2	2
Boom Length, Unit:	4.5 FT	4.5 FT
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Propellant:	CO2	CO2
Tank Mix (Y/N):	N	N