

University of Georgia

RR cotton response to Staple LX or Staple SP systems.

Trial ID: C18-06

Study Dir.: Stanley Culpepper

Location: Sunbelt Expo

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 Unit	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
										1	2	3	4
1	Staple SP NIS	85		SP	0.0425	LB A/A	POST	A	0.8096 g/mx	101	218	326	412
				L	0.25	% V/V	POST	A	4.999 ml/mx				
2	Staple SP WeatherMax	85		SP	0.0425	LB A/A	POST	A	0.8096 g/mx	102	214	317	408
		4.5		L	22	OZ/A	POST	A	23.23 ml/mx				
3	Staple SP Generic	85		SP	0.0425	LB A/A	POST	A	0.8096 g/mx	103	220	323	421
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
4	Staple SP Generic	85		SP	0.0425	LB A/A	POST	A	0.8096 g/mx	104	213	309	415
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
5	Staple SP MSMA	85		SP	0.0425	LB A/A	POST	A	0.8096 g/mx	105	203	311	425
		6		L	1	PT/A	POST	A	16.89 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
6	Staple LX NIS	3.2		L	0.0425	LB A/A	POST	A	1.795 ml/mx	106	208	325	416
				L	0.25	% V/V	POST	A	4.999 ml/mx				
7	Staple LX WeatherMax	3.2		L	0.0425	LB A/A	POST	A	1.795 ml/mx	107	217	305	411
		4.5		L	22	OZ/A	POST	A	23.23 ml/mx				
8	Staple LX Generic	3.2		L	0.0425	LB A/A	POST	A	1.795 ml/mx	108	223	320	409
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
9	Staple LX Generic	3.2		L	0.0425	LB A/A	POST	A	1.795 ml/mx	109	204	314	401
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
10	Staple LX MSMA	3.2		L	0.0425	LB A/A	POST	A	1.795 ml/mx	110	212	324	406
		6		L	1	PT/A	POST	A	16.89 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
11	Staple SP NIS	85		SP	0.064	LB A/A	POST	A	1.219 g/mx	111	224	319	424
				L	0.25	% V/V	POST	A	4.999 ml/mx				
12	Staple SP WeatherMax	85		SP	0.064	LB A/A	POST	A	1.219 g/mx	112	225	303	414
		4.5		L	22	OZ/A	POST	A	23.23 ml/mx				
13	Staple SP Generic	85		SP	0.064	LB A/A	POST	A	1.219 g/mx	113	201	307	402
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
14	Staple SP Generic	85		SP	0.064	LB A/A	POST	A	1.219 g/mx	114	206	312	407
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
15	Staple SP MSMA	85		SP	0.064	LB A/A	POST	A	1.219 g/mx	115	216	321	420
		6		L	1	PT/A	POST	A	16.89 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
16	Staple LX NIS	3.2		L	0.064	LB A/A	POST	A	2.702 ml/mx	116	210	306	413
				L	0.25	% V/V	POST	A	4.999 ml/mx				
17	Staple LX WeatherMax	3.2		L	0.064	LB A/A	POST	A	2.702 ml/mx	117	219	318	404
		4.5		L	22	OZ/A	POST	A	23.23 ml/mx				
18	Staple LX Generic	3.2		L	0.064	LB A/A	POST	A	2.702 ml/mx	118	222	304	403
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
19	Staple LX Generic	3.2		L	0.064	LB A/A	POST	A	2.702 ml/mx	119	211	310	417
		3		L	32	OZ/A	POST	A	33.78 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
20	Staple LX MSMA	3.2		L	0.064	LB A/A	POST	A	2.702 ml/mx	120	226	302	426
		6		L	1	PT/A	POST	A	16.89 ml/mx				
				L	0.25	% V/V	POST	A	4.999 ml/mx				
21	No Staple NIS			L	0.25	% V/V	POST	A	4.999 ml/mx	121	215	322	419

University of Georgia

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 Unit	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
										1	2	3	4
22	No Staple WeatherMax	4.5	L		22 OZ/A		POST	A	23.23 ml/mx	122	205	301	410
23	No Staple Generic	3	L		32 OZ/A		POST	A	33.78 ml/mx	123	221	308	422
24	No Staple Generic NIS	3	L		32 OZ/A		POST	A	33.78 ml/mx	124	207	315	405
					0.25 % V/V		POST	A	4.999 ml/mx				
25	No Staple MSMA NIS	6	L		1 PT/A		POST	A	16.89 ml/mx	125	209	316	423
					0.25 % V/V		POST	A	4.999 ml/mx				
26	Roundup WeatherMax	4.5	L		22 OZ/A		POST	A	23.23 ml/mx	126	202	313	418

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
12.680	g	Staple SP	85	SP	
93.740	ml	NIS		L	
145.165	ml	WeatherMax	4.5	L	
422.298	ml	Generic	3	L	
105.563	ml	MSMA	6	L	
28.106	ml	Staple LX	3.2	L	
29.033	ml	Roundup WeatherMax	4.5	L	

- * '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: Compare Staple LX to Staple SP when mixed with NIS, WeatherMax, a generic glyphosate, or MSMA.

VISUAL COTTON RESPONSE:

1. No differences between the SP or LX formulation were noted in this trial when mixed with any tank mix partner.

WEED RESPONSE:

Pitted morningglory:

1. No differences were noted when comparing Staple formulations.

Large crabgrass:

1. At 12 DAT, Staple LX at 0.425 lb plus MSMA was more effective than the same treatment with Staple SP.
2. At 12 DAT, Staple SP at 0.064 lb plus MSMA was more effective than the same treatment with Staple LX.

CONCLUSIONS:

1. No real differences in Staple formulations was noted in this trial.

GENERAL COMMENTS:

1. WeatherMax plus Direx was directed over the entire trial area on July 1.

University of Georgia

RR cotton response to Staple LX or Staple SP systems.

Trial ID: C18-06
Location: Sunbelt Expo

Study Dir.: Stanley Culpepper
Investigator: Stanley Culpepper

Weed Code			GOSHI	GOSHI	IPOLA	IPOLA	IPOLA	IPOLA	DIGSA	
Crop Code			injury	injury	GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	
Rating Data Type			%	%	control	control	control	control	control	
Rating Unit					%	%	%	%	%	
Rating Date			Jun-03-06	Jun-10-06	Jun-10-06	Jun-16-06	Jul-10-06	Aug-02-06	Jun-10-06	
Assessed By			SC	SC	SC	AD	AD	AD	SC	
Trt-Eval Interval			5 DA-A	12 DA-A	12 DA-A	18 DA-A	42 DA-A	65 DA-A	12 DA-A	
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
1	Staple SP NIS	0.0425	LB A/A 0.25 % V/V	5 fgh	21 a	56 bcd	63 ab	99 a	93 ab	14 de
2	Staple SP WeatherMax	0.0425	LB A/A 22 OZ/A	9 efg	8 b	76 a	78 ab	92 def	93 ab	99 a
3	Staple SP Generic	0.0425	LB A/A 32 OZ/A	19 a-d	3 b	72 ab	68 ab	97 a-d	97 ab	99 a
4	Staple SP Generic NIS	0.0425	LB A/A 32 OZ/A 0.25 % V/V	13 cde	3 b	69 ab	79 ab	90 f	97 ab	99 a
5	Staple SP MSMA NIS	0.0425	LB A/A 1 PT/A 0.25 % V/V	20 a-d	25 a	71 ab	70 ab	98 abc	96 ab	18 cd
6	Staple LX NIS	0.0425	LB A/A 0.25 % V/V	8 e-h	24 a	50 cd	64 ab	99 a	97 ab	14 de
7	Staple LX WeatherMax	0.0425	LB A/A 22 OZ/A	12 def	4 b	74 ab	78 ab	92 def	95 ab	99 a
8	Staple LX Generic	0.0425	LB A/A 32 OZ/A	17 a-d	3 b	75 a	75 ab	92 def	95 ab	99 a
9	Staple LX Generic NIS	0.0425	LB A/A 32 OZ/A 0.25 % V/V	19 a-d	3 b	73 ab	61 ab	91 f	95 ab	99 a
10	Staple LX MSMA NIS	0.0425	LB A/A 1 PT/A 0.25 % V/V	21 abc	25 a	63 a-d	75 ab	98 abc	89 abc	26 b
11	Staple SP NIS	0.064	LB A/A 0.25 % V/V	18 a-d	29 a	66 abc	63 ab	99 a	90 abc	10 e
12	Staple SP WeatherMax	0.064	LB A/A 22 OZ/A	18 a-d	7 b	72 ab	82 ab	94 a-f	95 ab	99 a
13	Staple SP Generic	0.064	LB A/A 32 OZ/A	22 ab	6 b	75 a	76 ab	93 c-f	97 ab	99 a
14	Staple SP Generic NIS	0.064	LB A/A 32 OZ/A 0.25 % V/V	18 a-d	8 b	78 a	78 ab	95 a-f	87 bc	99 a
15	Staple SP MSMA NIS	0.064	LB A/A 1 PT/A 0.25 % V/V	20 a-d	23 a	71 ab	74 ab	99 a	97 ab	30 b
16	Staple LX NIS	0.064	LB A/A 0.25 % V/V	15 b-e	25 a	69 ab	61 ab	99 ab	95 ab	9 e
17	Staple LX WeatherMax	0.064	LB A/A 22 OZ/A	17 a-d	9 b	77 a	70 ab	92 def	94 ab	99 a
18	Staple LX Generic	0.064	LB A/A 32 OZ/A	24 a	7 b	72 ab	75 ab	95 a-f	98 ab	99 a
19	Staple LX Generic NIS	0.064	LB A/A 32 OZ/A 0.25 % V/V	17 a-d	7 b	77 a	83 ab	94 a-f	95 ab	99 a

University of Georgia

Weed Code										
Crop Code	GOSHI	GOSHI	IPOLA	IPOLA	IPOLA	IPOLA	DIGSA			
Rating Data Type	injury	injury	control	control	control	control	control	control		
Rating Unit	%	%	%	%	%	%	%	%		
Rating Date	Jun-03-06	Jun-10-06	Jun-10-06	Jun-16-06	Jul-10-06	Aug-02-06	Jun-10-06			
Assessed By	SC	SC	SC	AD	AD	AD	SC			
Trt-Eval Interval	5 DA-A	12 DA-A	12 DA-A	18 DA-A	42 DA-A	65 DA-A	12 DA-A			
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
20	Staple LX MSMA NIS	0.064 1 0.25	LB A/A PT/A % V/V	24 a	25 a	68 ab	68 ab	99 a	98 a	24 bc
21	No Staple NIS	0.25	% V/V	1 h	4 b	0 e	0 c	0 h	0 d	0 f
22	No Staple WeatherMax	22	OZ/A	1 h	4 b	76 a	80 ab	91 ef	96 ab	99 a
23	No Staple Generic	32	OZ/A	1 h	7 b	74 ab	75 ab	94 a-f	97 ab	99 a
24	No Staple Generic NIS	32 0.25	OZ/A % V/V	4 gh	6 b	77 a	79 ab	94 b-f	95 ab	99 a
25	No Staple MSMA NIS	1 0.25	PT/A % V/V	21 abc	29 a	48 d	60 b	73 g	81 c	19 cd
26	Roundup WeatherMax	22	OZ/A	3 gh	5 b	73 ab	84 a	96 a-e	90 abc	99 a
LSD (P=.05)				6.8	7.0	15.1	18.9	4.5	9.1	6.1
Standard Deviation				4.8	4.9	10.7	13.3	3.2	6.4	4.3
CV				34.44	40.38	15.91	19.12	3.54	7.09	6.47
Bartlett's X2				25.845	45.62	46.775	24.273	32.486	79.487	8.995
P(Bartlett's X2)				0.416	0.007*	0.004*	0.446	0.038*	0.001*	0.253

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

University of Georgia

Weed Code				DIGSA	DIGSA
Crop Code				GOSHI	GOSHI
Rating Data Type				control	control
Rating Unit				%	%
Rating Date				Jun-16-06	Jul-10-06
Assessed By				AD	AD
Trt-Eval Interval				18 DA-A	42 DA-A
Trt No.	Treatment Name	Rate	Rate Unit	8	9
1	Staple SP NIS	0.0425 0.25	LB A/A % V/V	2 e	99 a
2	Staple SP WeatherMax	0.0425 22	LB A/A OZ/A	92 a	92 d
3	Staple SP Generic	0.0425 32	LB A/A OZ/A	85 a	93 a-d
4	Staple SP Generic NIS	0.0425 32 0.25	LB A/A OZ/A % V/V	85 a	90 d
5	Staple SP MSMA NIS	0.0425 1 0.25	LB A/A PT/A % V/V	18 bcd	99 ab
6	Staple LX NIS	0.0425 0.25	LB A/A % V/V	8 cde	98 abc
7	Staple LX WeatherMax	0.0425 22	LB A/A OZ/A	90 a	93 a-d
8	Staple LX Generic	0.0425 32	LB A/A OZ/A	88 a	92 cd
9	Staple LX Generic NIS	0.0425 32 0.25	LB A/A OZ/A % V/V	87 a	91 d
10	Staple LX MSMA NIS	0.0425 1 0.25	LB A/A PT/A % V/V	17 bcd	98 abc
11	Staple SP NIS	0.064 0.25	LB A/A % V/V	5 de	99 a
12	Staple SP WeatherMax	0.064 22	LB A/A OZ/A	88 a	94 a-d
13	Staple SP Generic	0.064 32	LB A/A OZ/A	89 a	93 bcd
14	Staple SP Generic NIS	0.064 32 0.25	LB A/A OZ/A % V/V	90 a	95 a-d
15	Staple SP MSMA NIS	0.064 1 0.25	LB A/A PT/A % V/V	17 bcd	99 a
16	Staple LX NIS	0.064 0.25	LB A/A % V/V	0 e	99 a
17	Staple LX WeatherMax	0.064 22	LB A/A OZ/A	91 a	92 cd
18	Staple LX Generic	0.064 32	LB A/A OZ/A	92 a	94 a-d
19	Staple LX Generic NIS	0.064 32 0.25	LB A/A OZ/A % V/V	94 a	95 a-d
20	Staple LX MSMA NIS	0.064 1 0.25	LB A/A PT/A % V/V	21 bc	99 a

University of Georgia

Weed Code		DIGSA	DIGSA
Crop Code		GOSHI	GOSHI
Rating Data Type		control	control
Rating Unit		%	%
Rating Date		Jun-16-06	Jul-10-06
Assessed By		AD	AD
Trt-Eval Interval		18 DA-A	42 DA-A
Trt No.	Treatment Name	Rate	Unit
21	No Staple NIS	0.25 % V/V	
22	No Staple WeatherMax	22 OZ/A	
23	No Staple Generic	32 OZ/A	
24	No Staple Generic NIS	32 OZ/A 0.25 % V/V	
25	No Staple MSMA NIS	1 PT/A 0.25 % V/V	
26	Roundup WeatherMax	22 OZ/A	
LSD (P=.05)		13.1	5.0
Standard Deviation		9.2	3.6
CV		15.65	3.89
Bartlett's X2		93.222	24.36
P(Bartlett's X2)		0.001*	0.144

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

University of Georgia

RR cotton response to Staple LX or Staple SP systems.

Trial ID: C18-06 Study Dir.: Stanley Culpepper
 Location: Sunbelt Expo Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley 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: Moultrie Trial Status: completed
 State/Prov.: GA Trial Reliability: excellent
 Postal Code: _____ Initiation Date: May-05-06
 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.	IPOLA	pitted morningglory	
2.	DIGSA	large crabgrass	

Crop 1: GOSHI COTTON, SHORT STAPLE Variety: DP 555 BRR
 Planting Date: May-05-06 Planting Method: seeded
 Rate: 3 ft Depth: 0.5 in Perennial Age: _____
 Row Spacing: 36 inch Spacing Within Row: 4 inch Seed Bed: _____
 Soil Temperature: ____ _ Soil Moisture: irrigated Emergence Date: May-10-06

SITE AND DESIGN

Plot Width, Unit: 12 FT Plot Length, Unit: 25 FT Reps: 4
 Site Type: Sunbelt Expo
 Tillage Type: Conventional Study Design: FACTORIAL

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

University of Georgia

MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 88	% OM: 6	Texture: .	
% Silt: 12	pH: 1.2	Soil Name: _____	
% Clay: 0	CEC: _____	Fert. Level: _____	

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

No.	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: .

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A
Application Date:	May-29-06
Time of Day:	9:00 am
Application Method:	broadcast
Application Timing:	POST
Applic. Placement:	overtop
Air Temp., Unit:	79 F
% Relative Humidity:	42
Wind Velocity, Unit:	2 mph
Dew Presence (Y/N):	y
Water Hardness:	
Soil Temp., Unit:	80 F
Soil Moisture:	perfect
% Cloud Cover:	20

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	GOSHI POST
Stage Scale:	4 leaf
Height, Unit:	5 inch

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	IPOLA POST
Stage Scale:	3-6 inch
Density, Unit:	8 ydsq
Weed 2 Code, Stage:	DIGSA POST
Stage Scale:	3-8 inch
Density, Unit:	30 ydsq

University of Georgia

APPLICATION EQUIPMENT

	A
Appl. Equipment:	backpack
Operating Pressure:	24
Nozzle Type:	flat fan
Nozzle Size:	11002
Nozzle Spacing, Unit:	18 inch
Nozzles/Row:	2
Band Width, Unit:	
Boom Length, Unit:	4.5 ft
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 GPA
Spray pH:	
Propellant:	CO2
Tank Mix (Y/N):	Y

Trt No	Treatment Application Comment