

University of Georgia

Reps: 3 Plots: 12 by 25 feet
 Spray vol: 14.8 gal/ac Mix size: 1.5 liters (min 1.1575)

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
31.669	ml	Cotoran 4 L	
31.669	ml	Direx 4 L	

- * 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 1.5 liters (mix size basis).
- * Product amount calculations increased 25 % for overage adjustment.
- * 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 1.5 liters.

Trial Comments

OBJECTIVE: Evaluate weed response to Staple in Flex weed management programs.

VISUAL INJURY:

1. Glyphosate plus Staple caused typical necrotic spotting with less than 10% injury throughout the season.

WEED RESPONSE:

Bristly starbur:

1. All programs provided excellent control but programs with Staple or other residual weed control products did improve late-season control.

Florida beggarweed, Smallflower morningglory, Texas panicum, Common cocklebur; and Florida pusley:

1. All programs provided excellent and similar late-season control.

SEED YIELD:

1. For the most part, yields were similar among herbicide systems although there was a little variability.

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Staple in Flex Weed Control Programs

Trial ID: C35-05

Study Dir.: Culpepper

Location: Attapulgus (big)

Investigator: Stanley Culpepper

Weed Code			ACNHI	ACHNI	ACHNI	DEDTO	DEDTO	DEDTO			
Crop Code		GOSHI	GOSHI	control	control	control	control	control			
Rating Data Type		injury	injury	percent	percent	percent	percent	percent			
Rating Unit		percent	percent	percent	percent	percent	percent	percent			
Rating Date		Jun-03-05	Jun-21-05	Jul-06-05	Jul-18-05	Sep-05-05	Jul-06-05	Jul-18-05			
Trt-Eval Interval		23 DA-A	41 DA-A	56 DA-A	68 DA-A	117 DA-A	56 DA-A	68 DA-A			
ARM Action Codes											
# Subsamples, Dec.											
Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7	8
1	Staple	0.0425	lb ai/a	9	0	91	100	98	90	100	100
	WeatherMax	0.75	lb ai/a								
	WeatherMax	0.75	lb ai/a								
	Layby Pro	1	lb ai/a								
	MSMA	1.5	lb ai/a								
	NIS	0.25	% v/v								
2	WeatherMax	0.75	lb ai/a	0	0	82	100	97	82	100	100
	Staple	0.0425	lb ai/a								
	WeatherMax	0.75	lb ai/a								
	Layby Pro	1	lb ai/a								
	MSMA	1.5	lb ai/a								
	NIS	0.25	% v/v								
3	WeatherMax	0.75	lb ai/a	1	0	85	100	98	85	100	100
	WeatherMax	0.75	lb ai/a								
	Staple	0.0425	lb ai/a								
	WeatherMax	0.75	lb ai/a								
4	WeatherMax	0.75	lb ai/a	7	0	94	100	97	94	100	100
	Staple	0.0213	lb ai/a								
	WeatherMax	0.75	lb ai/a								
	Staple	0.0213	lb ai/a								
	Layby Pro	1	lb ai/a								
	MSMA	1.5	lb ai/a								
	NIS	0.25	% v/v								
5	WeatherMax	0.75	lb ai/a	3	0	84	100	93	84	100	100
	WeatherMax	0.75	lb ai/a								
	WeatherMax	0.75	lb ai/a								
6	Cotoran	1	lb ai/a	0	0	90	100	99	86	100	100
	WeatherMax	0.75	lb ai/a								
	Staple	0.0319	lb ai/a								
	Layby Pro	1	lb ai/a								
	MSMA	1.5	lb ai/a								
	NIS	0.25	% v/v								
7	Non-treated			0	0	0	0	0	0	0	0
8	Staple	0.0425	lb ai/a	7	0	90	100	100	90	100	100
	WeatherMax	0.75	lb ai/a								
	WeatherMax	0.75	lb ai/a								
	Direx	1	lb ai/a								
	MSMA	1.5	lb ai/a								
	NIS	0.25	% v/v								
LSD (P=.05)				4.6	0.0	7.2	0.0	2.2	8.1	0.0	0.0
Standard Deviation				2.6	0.0	4.1	0.0	1.3	4.7	0.0	0.0
CV				80.27	0.0	5.37	0.0	1.5	6.09	0.0	0.0

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

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Weed Code	IAQTA	IAQTA	IAQTA	PANTE	PANTE	PANTE	XANST	XANST
Crop Code								
Rating Data Type	control	control	control	control	injury	control	control	control
Rating Unit	percent	percent	percent	percent	percent	percent	percent	percent
Rating Date	Jul-06-05	Jul-18-05	Aug-05-05	Jul-06-05	Jul-18-05	Sep-05-05	Jul-18-05	Sep-05-05
Trt-Eval Interval	56 DA-A	68 DA-A	86 DA-A	56 DA-A	68 DA-A	117 DA-A	68 DA-A	117 DA-A
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment								
No. Name Rate Unit	9	10	11	12	13	14	15	16
1 Staple 0.0425 lb ai/a	90	100	100	92	100	100	100	100
WeatherMax 0.75 lb ai/a								
WeatherMax 0.75 lb ai/a								
Layby Pro 1 lb ai/a								
MSMA 1.5 lb ai/a								
NIS 0.25 % v/v								
2 WeatherMax 0.75 lb ai/a	82	100	100	87	100	100	100	100
Staple 0.0425 lb ai/a								
WeatherMax 0.75 lb ai/a								
Layby Pro 1 lb ai/a								
MSMA 1.5 lb ai/a								
NIS 0.25 % v/v								
3 WeatherMax 0.75 lb ai/a	85	100	100	90	100	99	100	100
WeatherMax 0.75 lb ai/a								
Staple 0.0425 lb ai/a								
WeatherMax 0.75 lb ai/a								
4 WeatherMax 0.75 lb ai/a	94	100	100	95	100	100	100	100
Staple 0.0213 lb ai/a								
WeatherMax 0.75 lb ai/a								
Staple 0.0213 lb ai/a								
Layby Pro 1 lb ai/a								
MSMA 1.5 lb ai/a								
NIS 0.25 % v/v								
5 WeatherMax 0.75 lb ai/a	84	100	100	90	100	99	100	100
WeatherMax 0.75 lb ai/a								
WeatherMax 0.75 lb ai/a								
6 Cotoran 1 lb ai/a	88	100	100	78	100	100	100	100
WeatherMax 0.75 lb ai/a								
Staple 0.0319 lb ai/a								
Layby Pro 1 lb ai/a								
MSMA 1.5 lb ai/a								
NIS 0.25 % v/v								
7 Non-treated	0	0	0	0	0	0	0	0
8 Staple 0.0425 lb ai/a	90	100	100	90	100	100	100	100
WeatherMax 0.75 lb ai/a								
WeatherMax 0.75 lb ai/a								
Direx 1 lb ai/a								
MSMA 1.5 lb ai/a								
NIS 0.25 % v/v								
LSD (P=.05)	7.2	0.0	0.0	11.4	0.0	1.4	0.0	0.0
Standard Deviation	4.1	0.0	0.0	6.5	0.0	0.8	0.0	0.0
CV	5.33	0.0	0.0	8.35	0.0	0.92	0.0	0.0

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

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Weed Code	CASOB	CASOB	RCHSC	RCHSC	GOSHI	GOSHI			
Crop Code									
Rating Data Type	control	control	control	control	seed yld	seed yld			
Rating Unit	percent	percent	percent	percent	lb/plot	lb/A			
Rating Date	Jul-18-05	Sep-05-05	Jul-18-05	Sep-05-05	Oct-12-05	Oct-12-05			
Trt-Eval Interval	68 DA-A	117 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	17	18	19	20	21	22
1	Staple	0.0425	lb ai/a	100	99	100	99	13	3635.8
	WeatherMax	0.75	lb ai/a						
	WeatherMax	0.75	lb ai/a						
	Layby Pro	1	lb ai/a						
	MSMA	1.5	lb ai/a						
	NIS	0.25	% v/v						
2	WeatherMax	0.75	lb ai/a	100	100	100	100	12	3550.6
	Staple	0.0425	lb ai/a						
	WeatherMax	0.75	lb ai/a						
	Layby Pro	1	lb ai/a						
	MSMA	1.5	lb ai/a						
	NIS	0.25	% v/v						
3	WeatherMax	0.75	lb ai/a	100	100	100	100	11	3136.3
	WeatherMax	0.75	lb ai/a						
	Staple	0.0425	lb ai/a						
	WeatherMax	0.75	lb ai/a						
4	WeatherMax	0.75	lb ai/a	100	100	100	100	11	3070.5
	Staple	0.0213	lb ai/a						
	WeatherMax	0.75	lb ai/a						
	Staple	0.0213	lb ai/a						
	Layby Pro	1	lb ai/a						
	MSMA	1.5	lb ai/a						
	NIS	0.25	% v/v						
5	WeatherMax	0.75	lb ai/a	100	99	100	99	11	3264.1
	WeatherMax	0.75	lb ai/a						
	WeatherMax	0.75	lb ai/a						
6	Cotoran	1	lb ai/a	100	100	100	100	11	3306.7
	WeatherMax	0.75	lb ai/a						
	Staple	0.0319	lb ai/a						
	Layby Pro	1	lb ai/a						
	MSMA	1.5	lb ai/a						
	NIS	0.25	% v/v						
7	Non-treated			0	0	0	0	0	99.7
8	Staple	0.0425	lb ai/a	100	100	100	100	13	3825.5
	WeatherMax	0.75	lb ai/a						
	WeatherMax	0.75	lb ai/a						
	Direx	1	lb ai/a						
	MSMA	1.5	lb ai/a						
	NIS	0.25	% v/v						
LSD (P=.05)		0.0		1.6	0.0	1.6	2.1	621.85	
Standard Deviation		0.0		0.9	0.0	0.9	1.2	355.06	
CV		0.0		1.06	0.0	1.06	11.89	11.89	

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

Column 22: TY1 = 290.4*[C21]

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	Previous Crops	Previous Pesticides	Year
1.			

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

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: _____

Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	May-11-05	May-25-05	Jun-15-05	Jul-06-05
Time of Day:	11 am	1 pm	7 pm	4 pm
Application Method:	broadcast	broadcast	broadcast	broadcast
Application Timing:	PRE	2-4 lf	5-8 lf	Layby
Applic. Placement:	on soil	overtop	overtop	directed
Air Temp., Unit:	82 F	76 F	90 F	84 F
% Relative Humidity:	34	54	65	64
Wind Velocity, Unit:	3.5 mph	1 mph	2 mph	2 mph
Dew Presence (Y/N):	n	n	n	n
Water Hardness:				
Soil Temp., Unit:	84 F	80 F	92 F	88 F
Soil Moisture:	fair/irri	wet	wet	wet
% Cloud Cover:	0	0	0	100

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GOSHI PRE	GOSHI 2-4 lf	GOSHI 5-8 lf	GOSHI layby
Stage Scale:	not up	2 leaf	7 leaf	14 leaf
Height, Unit:	0 inch	2 inch	8 inch	24 inch

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WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	ACHNI PRE	ACHNI 2-4 leaf	ACHNI 5-8 leaf	ACHNI Layby
Stage Scale:	not up	< 2.5 in	< 4 inch	< 4 inch
Density, Unit:	0 ydsq	5 ydsq	. .	. .
Weed 2 Code, Stage:	DEDTO PRE	DEDTO 2-4 leaf	DEDTO 5-8 leaf	DEDTO Layby
Stage Scale:	not up	< 2.5 in	< 4 inch	< 4 inch
Density, Unit:	0 ydsq	5 ydsq	. .	. .
Weed 3 Code, Stage:	IAQTA PRE	IAQTA 2-4 leaf	IAQTA 5-8 leaf	IAQTA Layby
Stage Scale:	not up	< 2.5 in	< 4 inch	< 4 inch
Density, Unit:	0 ydsq	2 ydsq	. .	. .
Weed 4 Code, Stage:	PANTE PRE	PANTE 2-4 leaf	PANTE 5-8 leaf	PANTE Layby
Stage Scale:	not up	< 2.5 in	< 4 inch	< 4 inch
Density, Unit:	0 ydsq	12 ydsq	. .	. .
Weed 5 Code, Stage:	XANST PRE	XANST 2-4 leaf	XANST 5-8 leaf	XANST Layby
Stage Scale:	not up	< 2.5 in	< 4 inch	< 4 inch
Density, Unit:	0 ydsq	0.25 ydsq	. .	. .
Weed 6 Code, Stage:	CASOB PRE	CASOB 2-4 leaf	CASOB 5-8 leaf	CASOB Layby
Stage Scale:	not up	< 2.5 in	< 4 inch	< 4 inch
Density, Unit:	0 ydsq	1 ydsq	. .	. .
Weed 7 Code, Stage:	RCHSC PRE	RCHSC 2-4 leaf	RCHSC 5-8 leaf	RCHSC Layby
Stage Scale:	not up	< 2.5 in	< 4 inch	< 4 inch
Density, Unit:	0 ydsq	5 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 feet
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