

University of Georgia

Cucumber and crabgrass response to clethodim products.

Trial ID: Veg70-06
 Location: TVP

Study Dir.: Stanley Culpepper
 Investigator: Stanley Culpepper

Reps: 4 Plots: 6 by 25 feet
 Spray vol: 14.8 gal/ac Mix size: 1 liters (min .77168)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Grow Stg	Appl Code	Amt to Measure	Product	Plot No. By Rep			
										1	2	3	4
1	Untreated									101	204	305	401
2	V-10137	1		EC	9 OZ/A		POST A	4.751 ml/mx		102	201	302	406
	NIS			L	0.25 % V/V		POST A	2.5 ml/mx					
3	V-10181	1		EC	9 OZ/A		POST A	4.751 ml/mx		103	202	301	405
	NIS			L	0.25 % V/V		POST A	2.5 ml/mx					
4	V-10180	1.6		EC	6 OZ/A		POST A	3.167 ml/mx		104	206	304	403
	NIS			L	0.25 % V/V		POST A	2.5 ml/mx					
5	V-10139	1.6		EC	6 OZ/A		POST A	3.167 ml/mx		105	203	306	404
	NIS			L	0.25 % V/V		POST A	2.5 ml/mx					
6	Select	2		L	9 OZ/A		POST A	4.751 ml/mx		106	205	303	402
	COC			L	1 % V/V		POST A	9.999 ml/mx					

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
5.939	ml	V-10137	1	EC	
12.499	ml	NIS		L	
5.939	ml	V-10181	1	EC	
3.959	ml	V-10180	1.6	EC	
3.959	ml	V-10139	1.6	EC	
5.939	ml	Select	2	L	
12.499	ml	COC		L	

- * '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.
- * 'Per volume' calculations use spray volume= 14.8 gal/ac, mix size= 1 liters.

Trial Comments

OBJECTIVE: Determine impact of clethodim formulations on grass and cucumber.

VISUAL CUCUMBER INJURY:

1. Conditions were extremely hot; however, Select with crop oil caused at most 7% injury.
2. With the crop oil treatment having little injury, surfactants mixed with other clethodim formulations were not able to "safen" any application.

CRABGRASS RESPONSE:

1. All treatments provided excellent control by 9 DAT, likely because of excellent conditions and small grass size.

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Weed Code	CUMSA	CUMSA	DIGSA
Crop Code	injury	injury	control
Rating Data Type	%	%	%
Rating Unit	Aug-29-06	Sep-04-06	Sep-04-06
Rating Date	SC	SC	SC
Assessed By	3 DA-A	9 DA-A	9 DA-A
Trt-Eval Interval	Trt	Treatment	Rate
	No.	Name	Rate Unit
	1	2	3
1 Untreated	0 b	0 b	0 b
2 V-10137 NIS	6 a	7 a	99 a
9 OZ/A 0.25 % V/V			
3 V-10181 NIS	4 a	7 a	99 a
9 OZ/A 0.25 % V/V			
4 V-10180 NIS	6 a	7 a	99 a
6 OZ/A 0.25 % V/V			
5 V-10139 NIS	4 a	7 a	99 a
6 OZ/A 0.25 % V/V			
6 Select COC	4 a	7 a	98 a
9 OZ/A 1 % V/V			
LSD (P=.05)	3.2	0.9	1.7
Standard Deviation	2.1	0.6	1.1
CV	54.3	11.17	1.34
Bartlett's X2	3.308	0.139	0.139
P(Bartlett's X2)	0.347	0.998	0.998

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

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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: Tifton	Trial Status:	Completed
State/Prov.: GA	Trial Reliability:	excellent
Postal Code: 31794	Initiation Date:	Aug-26-06
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.	DIGSA	large crabgrass	

Crop 1: CUMSA CUCUMBER	Variety: Thunder
Planting Date: Aug-26-06	Planting Method: transplant
Rate: 1 ft	Depth: 1 in
Row Spacing: 6 ft	Perennial Age: _____
Soil Temperature: 94 f	Soil Moisture: drip
	Emergence Date: _____
	Seed Bed: raised bed, mulch

SITE AND DESIGN

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT Reps: 4
Site Type: Tifton Vegetable Park
Tillage Type: conventional Study Design: RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments: _____

	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

Field Prep./Maintenance: _____

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

SOIL DESCRIPTION

% Sand: 90 % OM: 1.1 Texture: Sand
 % Silt: 8 pH: 6.3 Soil Name: Tifton sandy loam
 % Clay: 2 CEC: _____ Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

No.	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: moist

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A
Application Date:	Aug-26-06
Time of Day:	2:00pm
Application Method:	broadcast
Application Timing:	POST
Applic. Placement:	overtop
Air Temp., Unit:	89 F
% Relative Humidity:	46
Wind Velocity, Unit:	3 mph
Dew Presence (Y/N):	n
Water Hardness:	
Soil Temp., Unit:	94 F
Soil Moisture:	
% Cloud Cover:	60

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	CUMSA POST
Stage Scale:	runners
Height, Unit:	10 inch

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	DIGSA POST
Stage Scale:	up to 5in
Density, Unit:	5 ydsq

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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