

University of Georgia

Broccoli and cabbage response to various clethodim formulations.

Trial ID: Veg6-03
Location: ponder farm

Study Dir.: Stanley Culpepper
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: TyTy **Trial Status:** completed
State/Prov.: Ga **Trial Reliability:** excellent
Postal Code: 31794 **Initiation Date:** Feb-13-03
Country: U.S.A.

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	.		

Crop 1: BRSOA KALE **Variety:** Dwarf Siberian
Planting Date: Feb-13-03 **Planting Method:** seeded
Rate: 1 2" **Depth:** 0.25 in
Row Spacing: 36 inch **Spacing Within Row:** 2 inch **Seed Bed:** flat
Soil Temperature: 63 F **Soil Moisture:** drip **Emergence Date:** Feb-20-03

Crop 2: BRSOA COLLARD **Variety:** Champion
Planting Date: Feb-13-03 **Planting Method:** seeded
Rate: 1 2" **Depth:** 0.25 in
Row Spacing: 36 inch **Spacing Within Row:** 2 inch **Seed Bed:** flat
Soil Temperature: 63 F **Soil Moisture:** drip **Emergence Date:** Feb-20-03

SITE AND DESIGN

Plot Width, Unit: 6 FT **Plot Length, Unit:** 25 FT **Reps:** 4
Site Type: research station
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 94 **% OM:** 1.1 **Texture:** sand
% Silt: 2 **pH:** 5.8 **Soil Name:** Tifton sandy loam
% Clay: 4

Overall Moisture Conditions: drip

APPLICATION DESCRIPTION

	A	B	C
Application Date:	Feb-13-03	Mar-29-03	Apr-12-03
Time of Day:	10:00am	9:00am	9:00am
Application Method:	Broadcast	Broadcast	Broadcast
Application Timing:	planted	6 inch	+14d
Applic. Placement:	none	overtop	overtop
Air Temp., Unit:	65 F	78 F	68 F
% Relative Humidity:	64	59	49
Wind Velocity, Unit:	4 mph	2 mph	2 mph
Dew Presence (Y/N):	N	N	Y
Soil Temp., Unit:	63 F	74 F	68 F
Soil Moisture:	moist	moist	wet
% Cloud Cover:	80	20	0

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CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	BRSOA PRE	BRSOA 6 inch	BRSOA +14 d
Stage Scale:	.	.	V8
Height, Unit:	0. .	6.5 inch	9 inch
Crop 2 Code, Stage:	BRSOA PRE	BRSOA 6 inch	BRSOA +14 d
Stage Scale:	.	.	V7
Height, Unit:	0. .	5 inch	8 inch

WEED STAGE AT EACH APPLICATION

	A	B	C
Stage Scale:	.	.	.
Density, Unit:	.	.	.

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	none	backpack	backpack
Operating Pressure:		22	22
Nozzle Type:		flat fan	flat fan
Nozzle Size:		11002	11002
Nozzle Spacing, Unit:		18 inch	18 inch
Nozzles/Row:		2	2
Boom Length, Unit:		4.5 feet	4.5 feet
Boom Height, Unit:		15 inch	15 inch
Ground Speed, Unit:		3 mph	3 mph
Carrier:		water	water
Spray Volume, Unit:		14.8 GPA	14.8 GPA
Propellant:		CO2	CO2
Tank Mix (Y/N):		Y	Y

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Crop Code		collard injury percent	kale injury percent	collard injury percent	kale injury percent	collard injury percent	kale injury percent	collard injury percent	kale injury percent		
Rating Data Type		Apr-03-03	Apr-03-03	Apr-11-03	Apr-11-03	Apr-15-03	Apr-15-03	Apr-21-03	Apr-21-03		
Rating Unit		49 DA-A	49 DA-A	57 DA-A	57 DA-A	67 DA-A	67 DA-A	67 DA-A	67 DA-A		
Rating Date											
Trt-Eval Interval											
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7	8
1	Non-treated			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Select (high flash)	8 oz/a		1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
	COC	1 % v/v									
	Select (high flash)	8 oz/a									
	COC	1 % v/v									
3	V-10177	8 oz/a		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	COC	1 % v/v									
	V-10177	8 oz/a									
	COC	1 % v/v									
4	Poast	1 pt/a		3.3	8.3	0.5	1.0	0.0	0.0	0.0	0.0
	COC	1 % v/v									
	Poast	1 pt/a									
	COC	1 % v/v									
5	Select (high flash)	16 oz/a		0.0	0.8	0.8	1.8	0.0	0.0	0.0	0.0
	COC	1 % v/v									
	Select (high flash)	16 oz/a									
	COC	1 % v/v									
6	V-10177	16 oz/a		0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0
	COC	1 % v/v									
	V-10177	16 oz/a									
	COC	1 % v/v									
	LSD (P=.05)			1.96	3.23	1.53	2.79	0.00	0.00	0.00	0.00
	Standard Deviation			1.30	2.14	1.02	1.85	0.00	0.00	0.00	0.00
	CV			183.32	114.21	304.96	317.13	0.0	0.0	0.0	0.0
	Bartlett's X2			1.973	2.88	0.562	2.158	0.0	0.0	0.0	0.0
	P(Bartlett's X2)			0.16	0.411	0.755	0.34

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

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Crop Code		collard	kale
Rating Data Type		injury	injury
Rating Unit		percent	percent
Rating Date		Apr-28-03	Apr-28-03
Trt-Eval Interval		67 DA-A	67 DA-A
Trt No.	Treatment Name	Rate Unit	Rate Unit
		9	10
1	Non-treated	0.0	0.0
2	Select (high flash)	8 oz/a	0.0
	COC	1 % v/v	0.0
	Select (high flash)	8 oz/a	
	COC	1 % v/v	
3	V-10177	8 oz/a	0.0
	COC	1 % v/v	0.0
	V-10177	8 oz/a	
	COC	1 % v/v	
4	Poast	1 pt/a	0.0
	COC	1 % v/v	0.0
	Poast	1 pt/a	
	COC	1 % v/v	
5	Select (high flash)	16 oz/a	0.0
	COC	1 % v/v	0.0
	Select (high flash)	16 oz/a	
	COC	1 % v/v	
6	V-10177	16 oz/a	0.0
	COC	1 % v/v	0.0
	V-10177	16 oz/a	
	COC	1 % v/v	
LSD (P=.05)		0.00	0.00
Standard Deviation		0.00	0.00
CV		0.0	0.0
Bartlett's X2		0.0	0.0
P(Bartlett's X2)		.	.

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

Trial Comments

GENERAL COMMENTS: Trials was cultivated and hand weeded as necessary.

OBJECTIVE: Compare V-10177, Select, and Poast for crop phyto.

RESULTS:

- 1) Less than 5% visual injury was noted at any time from any treatments.
- 2) Conditions were not favorable for injury due to cooler air conditions this spring.
- 3) Trial should be repeated as a late spring or early fall trial when air conditions exceed 90 degrees F at time of application.