

University of Georgia

Transplant cabbage and collard tolerance to Goal 4 F applied topically.

Trial ID: Veg2-06

Study Dir.: Stanley Culpepper

Location: Ponder 5138

Investigator: Stanley Culpepper

Weed Code											
Crop Code	BRSOL	BRSOL	BRSOL	BRSOL	BRSOA	BRSOA	BRSOA	BRSOA	BRSOA		
Rating Data Type	injury	injury	injury	injury	injury	injury	injury	injury	injury		
Rating Unit	percent	percent	percent	percent	percent	percent	percent	percent	percent		
Rating Date	Oct-03-05	Oct-10-05	Oct-16-05	Oct-21-05	Oct-03-05	Oct-10-05	Oct-16-05	Oct-21-05	Oct-21-05		
Trt-Eval Interval	21 DA-A	28 DA-A	34 DA-A	39 DA-A	21 DA-A	28 DA-A	34 DA-A	39 DA-A	39 DA-A		
ARM Action Codes											
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7	8
1	No herbicide			0 c	0 b	0 b	0 c	0 e	0 c	0 b	2 b
2	Goal Tender	0.0625	LB A/A	3 bc	0 b	1 b	0 c	4 d	0 c	3 b	2 b
3	Goal Tender	0.125	LB A/A	8 a	3 b	0 b	1 c	14 b	5 b	1 b	5 b
4	Goal Tender	0.25	LB A/A	7 ab	8 a	1 b	0 c	18 a	14 a	4 b	6 b
5	Goal Tender	0.0625	LB A/A	0 c	0 b	12 a	12 b	0 e	0 c	19 a	19 a
6	Goal Tender	0.125	LB A/A	0 c	0 b	14 a	11 b	0 e	0 c	17 a	17 a
7	Goal Tender	0.25	LB A/A	0 c	0 b	19 a	19 a	0 e	0 c	23 a	23 a
8	Goal Tender	0.0625	LB A/A	4 abc	1 b	13 a	11 b	7 c	1 c	19 a	16 a
	Goal Tender	0.0625	LB A/A								
	LSD (P=.05)			4.1	3.0	6.4	4.7	2.5	3.5	6.9	6.7
	Standard Deviation			2.8	2.1	4.4	3.2	1.7	2.4	4.7	4.6
	CV			99.53	132.4	58.65	47.82	32.1	93.82	43.88	41.58
	Bartlett's X2			1.632	1.408	9.782	4.53	7.723	7.961	7.739	11.042
	P(Bartlett's X2)			0.652	0.495	0.082	0.339	0.052	0.019*	0.258	0.137

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

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Weed Code	plant 1	plant 2	plant 3	plant 4	plant 5	plant 6	plant 7	plant 8			
Crop Code	BRSOL	BRSOL	BRSOL	BRSOL	BRSOL	BRSOL	BRSOL	BRSOL			
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05			
Trt-Eval Interval	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A			
ARM Action Codes											
Trt No.	Treatment Name	Rate	Unit	9	10	11	12	13	14	15	16
1	No herbicide			20 ab	17 a	15 b	18 ab	15 c	17 a	17 a	15 b
2	Goal Tender	0.0625	LB A/A	14 b	15 a	18 ab	13 b	18 abc	18 a	16 a	16 ab
3	Goal Tender	0.125	LB A/A	17 ab	16 a	16 ab	18 ab	20 ab	17 a	16 a	17 ab
4	Goal Tender	0.25	LB A/A	19 ab	16 a	16 ab	18 ab	15 c	18 a	17 a	16 ab
5	Goal Tender	0.0625	LB A/A	21 a	17 a	21 a	19 a	17 bc	16 a	16 a	18 ab
6	Goal Tender	0.125	LB A/A	20 ab	18 a	20 ab	19 a	21 a	20 a	17 a	21 a
7	Goal Tender	0.25	LB A/A	15 ab	18 a	17 ab	17 ab	18 abc	16 a	17 a	17 ab
8	Goal Tender	0.0625	LB A/A	19 ab	16 a	15 b	18 ab	14 c	16 a	16 a	15 b
	Goal Tender	0.0625	LB A/A								
LSD (P=.05)				5.3	6.0	5.4	5.0	3.6	5.8	5.6	4.7
Standard Deviation				3.6	4.1	3.7	3.4	2.5	4.0	3.8	3.2
CV				19.97	24.74	21.39	19.47	14.29	23.16	23.49	19.0
Bartlett's X2				13.933	14.274	6.473	18.458	10.76	7.09	4.798	9.551
P(Bartlett's X2)				0.052	0.047*	0.486	0.01*	0.149	0.42	0.685	0.215

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Weed Code	plant 9	plant 10	AVG10pla	plant 1	plant 2	plant 3	plant 4	plant 5
Crop Code	BRSOL	BRSOL	BRSOL	BRSOA	BRSOA	BRSOA	BRSOA	BRSOA
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm
Rating Date	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05
Trt-Eval Interval	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A
ARM Action Codes			T2					
Trt Treatment	Rate							
No. Name	Rate	Unit						
	17	18	19	20	21	22	23	24
1 No herbicide	20 a	17 a	17 bc	15 bc	16 c	17 bc	16 bc	19 abc
2 Goal Tender 0.0625 LB A/A	16 a	17 a	16 c	15 bc	17 bc	16 c	16 bc	17 c
3 Goal Tender 0.125 LB A/A	17 a	17 a	17 bc	18 abc	18 abc	19 bc	19 b	16 c
4 Goal Tender 0.25 LB A/A	16 a	17 a	17 bc	14 c	17 bc	15 c	14 c	15 c
5 Goal Tender 0.0625 LB A/A	19 a	21 a	19 ab	20 ab	21 ab	22 ab	20 ab	23 ab
6 Goal Tender 0.125 LB A/A	18 a	18 a	19 a	23 a	22 a	24 a	24 a	23 a
7 Goal Tender 0.25 LB A/A	18 a	18 a	17 bc	17 bc	18 abc	17 bc	17 bc	17 bc
8 Goal Tender 0.0625 LB A/A	16 a	17 a	16 c	18 abc	19 abc	19 bc	20 ab	20 abc
Goal Tender 0.0625 LB A/A								
LSD (P=.05)	3.6	4.4	2.0	5.2	4.3	4.4	4.0	5.1
Standard Deviation	2.4	3.0	1.4	3.5	2.9	3.0	2.7	3.5
CV	14.19	16.97	8.0	20.46	15.78	16.09	14.96	18.63
Bartlett's X2	5.514	3.727	7.852	6.834	3.327	7.409	3.511	2.304
P(Bartlett's X2)	0.597	0.811	0.346	0.446	0.853	0.388	0.834	0.941

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Column 19: T2 = ((C9)+(C10)+(C11)+(C12)+(C13)+(C14)+(C15)+(C16)+(C17)+(C18))/10

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Weed Code	plant 6	plant 7	plant 8	plant 9	plant 10	AVG.10pl	biomass	biomass			
Crop Code	BRSOA	BRSOA	BRSOA	BRSOA	BRSOA	BRSOA	BRSOA	BRSOA			
Rating Data Type	ht	ht	ht	ht	ht	ht	total wt/5'	graded wt/5'			
Rating Unit	cm	cm	cm	cm	cm	cm	lb	lb			
Rating Date	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-04-05	Oct-31-05	Oct-31-05			
Trt-Eval Interval	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A	49 DA-A	49 DA-A			
ARM Action Codes						T1					
Trt No.	Treatment Name	Rate	Unit	25	26	27	28	29	30	31	32
1	No herbicide			18 b	18 abc	16 b	16 bcd	18 a	17 cd	3 abc	1 ab
2	Goal Tender	0.0625	LB A/A	16 b	16 bc	18 ab	18 abc	17 a	16 cd	3 abc	1 bc
3	Goal Tender	0.125	LB A/A	18 b	16 bc	17 b	17 a-d	16 a	17 cd	3 abc	1 ab
4	Goal Tender	0.25	LB A/A	17 b	14 c	17 b	14 d	17 a	15 d	2 c	1 cd
5	Goal Tender	0.0625	LB A/A	19 ab	20 ab	18 ab	20 ab	19 a	20 ab	3 ab	1 a
6	Goal Tender	0.125	LB A/A	24 a	23 a	21 a	20 a	22 a	22 a	3 a	1 ab
7	Goal Tender	0.25	LB A/A	20 ab	17 bc	19 ab	16 cd	18 a	17 cd	2 bc	1 d
8	Goal Tender	0.0625	LB A/A	18 b	19 abc	17 b	17 a-d	17 a	18 bc	3 abc	1 bcd
	Goal Tender	0.0625	LB A/A								
LSD (P=.05)				5.1	4.9	3.9	3.5	5.4	2.7	0.8	0.2
Standard Deviation				3.5	3.3	2.6	2.4	3.7	1.8	0.5	0.2
CV				18.68	18.67	14.81	13.71	20.37	10.14	19.52	14.93
Bartlett's X2				5.804	12.523	5.795	3.103	5.228	4.495	5.774	16.417
P(Bartlett's X2)				0.563	0.085	0.564	0.875	0.632	0.721	0.566	0.022*

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Column 30: T1 = ([C20]+[C21]+[C22]+[C23]+[C24]+[C25]+[C26]+[C27]+[C28]+[C29])/10

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Weed Code		Harv 1	Harv 1
Crop Code		BRSOL	BRSOL
Rating Data Type		fruit/7ft	wt/7ft
Rating Unit		#	lb
Rating Date		Dec-19-05	Dec-19-05
Trt-Eval Interval		98 DA-A	98 DA-A
ARM Action Codes			
Trt No.	Treatment Name	Rate	Unit
		33	34
1	No herbicide	7 ab	9 a
2	Goal Tender 0.0625 LB A/A	7 a	8 a
3	Goal Tender 0.125 LB A/A	7 a	9 a
4	Goal Tender 0.25 LB A/A	7 a	9 a
5	Goal Tender 0.0625 LB A/A	7 b	9 a
6	Goal Tender 0.125 LB A/A	7 a	10 a
7	Goal Tender 0.25 LB A/A	7 a	11 a
8	Goal Tender 0.0625 LB A/A	7 a	9 a
	Goal Tender 0.0625 LB A/A		
LSD (P=.05)		0.4	3.0
Standard Deviation		0.3	2.0
CV		3.75	21.67
Bartlett's X2		0.061	3.74
P(Bartlett's X2)		0.806	0.809

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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: 94	% OM: 1.1	Texture: sand	
% Silt: 2	pH: 6.2	Soil Name: Tifton sandy loam	
% Clay: 4	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
Application Date:	Sep-27-05	Oct-10-05
Time of Day:	7:45 am	6 pm
Application Method:	Broadcast	Broadcast
Application Timing:	POST	POST
Applic. Placement:	overtop	overtop
Air Temp., Unit:	73 f	84 F
% Relative Humidity:	81	56
Wind Velocity, Unit:	2 mph	3 mph
Dew Presence (Y/N):	y	y
Water Hardness:	0	0
Soil Temp., Unit:	74 f	82 F
Soil Moisture:	moist	moist
% Cloud Cover:	100	80

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	BR SOL 2WAT	BR SOL 4WAT
Stage Scale:	8-12 leaf	12-14 lf
Height, Unit:	6 inch	10 inch
Crop 2 Code, Stage:	BR SOA 2WAT	BR SOA 4WAT
Stage Scale:	4-8 leaf	8-12 lf
Height, Unit:	6 inch	9 inch

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WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:		
Stage Scale:		
Density, Unit:		

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	backpack	backpack
Operating Pressure:	23	23
Nozzle Type:	flat fan	flat fan
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	18 inch	18 inch
Nozzles/Row:	4	4
Band Width, Unit:		
Boom Length, Unit:	4.5 feet	4.5 feet
Boom Height, Unit:	15 inch	15 inch
Ground Speed, Unit:	3 mph	3 mph
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:	water	water
Spray Volume, Unit:	14.8 GPA	14.8 GPA
Spray pH:		
Propellant:	CO2	CO2
Tank Mix (Y/N):	Y	Y

Trt No	Treatment Application Comment