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Cucumber, cantaloupe, and squash response to Sandea applied overtop of plastic before transplanting.

Trial ID: Veg42-03 Study Dir.: Culpepper
Location: Ponder farm Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: 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:** Jul-15-04
Country: U.S.A.

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

Crop 1: CUUPE SQUASH, SUMMER **Variety:** Enterprise
Planting Date: Aug-06-03 **Planting Method:** transplant
Rate: 1 12 inch **Depth:** 1.5 in
Row Spacing: 6 feet **Spacing Within Row:** 12 inch **Seed Bed:** plastic
Soil Temperature: 92 F **Soil Moisture:** drip

Crop 2: CITLA WATERMELON **Variety:** Margarita
Planting Date: Aug-06-03 **Planting Method:** transplant
Rate: 1 12 inch **Depth:** 1.5 in
Row Spacing: 6 feet **Spacing Within Row:** 12 inch **Seed Bed:** plastic
Soil Temperature: 92 F **Soil Moisture:** drip

Crop 3: CUMSA CUCUMBER **Variety:** slicer, but dont which
Planting Date: Aug-06-03 **Planting Method:** transplant
Rate: 1 12 inch **Depth:** 1.5 in
Row Spacing: 6 feet **Spacing Within Row:** 12 inch **Seed Bed:** plastic
Soil Temperature: 92 F **Soil Moisture:** drip

SITE AND DESIGN

Plot Width, Unit: 6 FT **Plot Length, Unit:** 35 FT **Reps:** 3
Site Type: research station
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 94 **% OM:** 1.1 **Texture:** sand
% Silt: 2 **pH:** 6.3 **Soil Name:** Tifton sandy loam
% Clay: 4

APPLICATION DESCRIPTION

	A	B
Application Date:	Aug-04-03	Aug-06-03
Time of Day:	3:00pm	11:00am
Application Method:	broadcast	broadcast
Application Timing:	bef.wash	aft.wash
Applic. Placement:	on plasti	on plasti
Air Temp., Unit:	85 F	88 F
% Relative Humidity:	69	79
Wind Velocity, Unit:	2 mph	2 mph
Dew Presence (Y/N):	n	n
Soil Moisture:	wet	wet
% Cloud Cover:	100	100

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CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	CUUPE .	CUUPE .
Stage Scale:	.	.
Height, Unit:	0. .	0. .
Crop 2 Code, Stage:	CITLA .	CITLA .
Stage Scale:	.	.
Height, Unit:	0. .	0. .
Crop 3 Code, Stage:	CUMSA .	CUMSA .
Stage Scale:	.	.
Height, Unit:	0. .	0. .

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	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:	4	4
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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Cucumber, cantaloupe, and squash response to Sandea applied overtop of plastic before transplanting.

Trial ID: Veg42-03 Study Dir.: Culpepper
Location: Ponder farm Investigator: Stanley Culpepper

Weed Code									
Crop Code			squash	squash	squash	cantalou	cantalou	cantalou	cucumber
Rating Data Type			injury	injury	injury	injury	injury	injury	injury
Rating Unit			percent	percent	percent	percent	percent	percent	percent
Rating Date			Aug-08-03	Aug-25-03	Sep-05-03	Aug-08-03	Aug-25-03	Sep-05-03	Aug-08-03
Trt-Eval Interval			4 DA-A	21 DA-A	32 DA-A	4 DA-A	21 DA-A	32 DA-A	4 DA-A
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7
1	Sandea (Wash off)	0.75	oz/a	0.0	26.7	22.7	0.0	6.7	3.3	0.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.0	60.0	46.7	0.0	20.0	16.7	0.0
	NIS	0.25	% v/v							
3	No herbicide			0.0	0.0	0.0	0.0	0.0	0.0	0.0
LSD (P=.05)				0.00	7.56	14.41	0.00	15.11	18.51	0.00
Standard Deviation				0.00	3.33	6.36	0.00	6.67	8.16	0.00
CV				0.0	11.54	27.52	0.0	75.0	122.47	0.0
Bartlett's X2				0.0	0.0	0.777	0.0	0.531	1.372	0.0
P(Bartlett's X2)				.	.	0.378	.	0.466	0.241	.

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

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Trt No.	Treatment Name	Rate	Rate Unit	8	9	10	11	12	13	14
	Weed Code									
	Crop Code			cucumber	cucumber	watermel	watermel	watermel	squash	squash
	Rating Data Type			injury	injury	injury	injury	injury	ht	ht
	Rating Unit			percent	percent	percent	percent	percent	cm	cm
	Rating Date			Aug-25-03	Sep-05-03	Aug-08-03	Aug-25-03	Sep-05-03	Sep-04-03	Sep-04-03
	Trt-Eval Interval			21 DA-A	32 DA-A	4 DA-A	21 DA-A	32 DA-A	31 DA-A	31 DA-A
	ARM Action Codes									
	# Subsamples, Dec.									
1	Sandea (Wash off)	0.75	oz/a	10.0	8.3	0.0	15.0	0.0	23.0	24.7
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	18.3	23.3	0.0	33.3	13.3	9.3	11.0
	NIS	0.25	% v/v							
3	No herbicide			0.0	0.0	0.0	0.0	0.0	22.7	32.7
	LSD (P=.05)			13.62	25.20	0.00	11.95	3.78	17.94	13.62
	Standard Deviation			6.01	11.12	0.00	5.27	1.67	7.92	6.01
	CV			63.63	105.33	0.0	32.71	37.5	43.18	26.38
	Bartlett's X2			0.0	0.702	0.0	0.029	0.0	0.012	3.549
	P(Bartlett's X2)			.	0.402	.	0.865	.	0.994	0.17

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

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Weed Code										
Crop Code				squash	squash	squash	AVG5plan squash	cucumber	cucumber	cucumber
Rating Data Type				ht	ht	ht	ht	ht	ht	ht
Rating Unit				cm	cm	cm	cm	cm	cm	cm
Rating Date				Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03
Trt-Eval Interval				31 DA-A	31 DA-A	31 DA-A		31 DA-A	31 DA-A	31 DA-A
ARM Action Codes							T1			
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	15	16	17	18	19	20	21
1	Sandea (Wash off)	0.75	oz/a	31.7	17.3	18.0	22.9	61.3	52.3	31.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	17.0	17.0	10.3	12.9	49.0	29.0	30.7
	NIS	0.25	% v/v							
3	No herbicide			34.7	32.0	36.0	31.6	39.3	37.7	12.0
LSD (P=.05)				15.99	15.67	28.20	8.82	70.55	61.86	39.05
Standard Deviation				7.06	6.91	12.44	3.89	31.13	27.29	17.23
CV				25.4	31.26	58.01	17.3	62.39	68.8	70.16
Bartlett's X2				2.88	0.622	1.803	1.484	0.894	1.411	7.627
P(Bartlett's X2)				0.237	0.733	0.406	0.476	0.64	0.494	0.022*

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

Column 18: T1 = @AVG([C13].[C17])

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Weed Code										
Crop Code				cucumber	cucumber	AVG5plan cucumber	cantalou	cantalou	cantalou	cantalou
Rating Data Type				ht	ht	ht	diameter	diameter	diameter	diameter
Rating Unit				cm	cm	cm	cm	cm	cm	cm
Rating Date				Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03
Trt-Eval Interval				31 DA-A	31 DA-A		31 DA-A	31 DA-A	31 DA-A	31 DA-A
ARM Action Codes						T2				
# Subsamples, Dec.						1				
Trt No.	Treatment Name	Rate	Rate Unit	22	23	24	25	26	27	28
1	Sandea (Wash off)	0.75	oz/a	10.0	14.3	33.8	88.0	110.3	83.3	59.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	11.7	14.3	26.9	63.7	65.7	70.7	45.7
	NIS	0.25	% v/v							
3	No herbicide			31.0	19.0	27.8	89.7	99.3	93.7	83.7
LSD (P=.05)				51.82	61.59	39.13	59.38	29.82	35.79	113.19
Standard Deviation				22.86	27.17	17.27	26.20	13.16	15.79	49.94
CV				130.22	171.03	58.5	32.57	14.34	19.12	79.55
Bartlett's X2				1.002	0.194	0.752	0.711	7.703	1.894	4.494
P(Bartlett's X2)				0.606	0.907	0.687	0.701	0.021*	0.388	0.106

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 24: T2 = @AVG([C19].[C23])

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Weed Code										
Crop Code				cantalou	AVG5plan cantalou	watermel	watermel	watermel	watermel	watermel
Rating Data Type				diameter	diameter	diameter	diameter	diameter	diameter	diameter
Rating Unit				cm	cm	cm	cm	cm	cm	cm
Rating Date				Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03
Trt-Eval Interval				31 DA-A		31 DA-A	31 DA-A	31 DA-A	31 DA-A	31 DA-A
ARM Action Codes					T3					
# Subsamples, Dec.					1					
Trt No.	Treatment Name	Rate	Rate Unit	29	30	31	32	33	34	35
1	Sandea (Wash off)	0.75	oz/a	49.0	70.6	124.0	96.0	143.3	118.7	99.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	40.7	52.2	78.3	78.7	71.3	71.7	73.3
	NIS	0.25	% v/v							
3	No herbicide			68.3	77.1	118.7	102.0	107.7	124.0	109.0
LSD (P=.05)				115.80	32.62	39.20	36.31	67.66	34.22	7.83
Standard Deviation				51.09	14.39	17.30	16.02	29.85	15.10	3.46
CV				97.01	21.6	16.16	17.37	27.78	14.41	3.69
Bartlett's X2				0.423	0.902	5.276	0.241	5.265	7.404	0.864
P(Bartlett's X2)				0.809	0.637	0.072	0.887	0.072	0.025*	0.649

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 30: T3 = @AVG([C24].[C29])

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Weed Code				AVG5plan						AVG5plan
Crop Code				watermel	squash	squash	squash	squash	squash	squash
Rating Data Type				diameter	ht	ht	ht	ht	ht	ht
Rating Unit				cm	cm	cm	cm	cm	cm	cm
Rating Date				Sep-04-03	Aug-20-03	Aug-20-03	Aug-20-03	Aug-20-03	Aug-20-03	Aug-20-03
Trt-Eval Interval					16 DA-A	16 DA-A	16 DA-A	16 DA-A	16 DA-A	
ARM Action Codes				T4						T6
# Subsamples, Dec.				1						1
Trt No.	Treatment Name	Rate	Rate Unit	36	37	38	39	40	41	42
1	Sandea (Wash off)	0.75	oz/a	116.2	7.3	7.7	7.3	5.0	4.7	6.4
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	74.7	6.7	7.0	7.7	7.3	5.7	6.9
	NIS	0.25	% v/v							
3	No herbicide			112.3	9.0	8.7	8.3	9.3	9.3	8.9
LSD (P=.05)				11.19	4.34	4.31	4.50	8.71	7.33	4.38
Standard Deviation				4.94	1.91	1.90	1.99	3.84	3.23	1.93
CV				4.89	24.98	24.43	25.54	53.23	49.3	26.09
Bartlett's X2				0.387	2.516	3.485	5.218	0.74	4.477	3.468
P(Bartlett's X2)				0.824	0.284	0.175	0.074	0.691	0.107	0.177

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 36: T4 = @AVG([C31].[C35])
Column 42: T6 = @AVG([C37].[C41])

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Trt No.	Treatment Name	Rate	Rate Unit	43	44	45	46	47	48	49
	Weed Code								AVG5plan	
	Crop Code			squash	squash	squash	squash	squash	squash	cucumber
	Rating Data Type			ht	ht	ht	ht	ht	ht	ht
	Rating Unit			cm	cm	cm	cm	cm	cm	cm
	Rating Date			Sep-24-03	Sep-24-03	Sep-24-03	Sep-24-03	Sep-24-03	Sep-24-03	Aug-20-03
	Trt-Eval Interval			51 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A		16 DA-A
	ARM Action Codes								T5	
	# Subsamples, Dec.								1	
1	Sandea (Wash off)	0.75	oz/a	42.3	39.0	43.0	30.0	13.3	33.5	6.7
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	38.7	44.3	47.7	39.7	16.7	37.4	9.3
	NIS	0.25	% v/v							
3	No herbicide			41.0	43.0	45.7	42.7	44.7	43.4	9.7
	LSD (P=.05)			12.65	20.20	19.07	27.79	28.83	9.21	9.65
	Standard Deviation			5.58	8.91	8.41	12.26	12.72	4.06	4.26
	CV			13.73	21.17	18.51	32.74	51.1	10.66	49.74
	Bartlett's X2			2.234	3.213	3.926	2.207	3.803	0.53	4.13
	P(Bartlett's X2)			0.327	0.201	0.14	0.332	0.149	0.767	0.127

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 48: T5 = @AVG([C43].[C47])

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Weed Code										
Crop Code				cucumber	cucumber	cucumber	cucumber	AVG5plan cucumber	Harv1 squash	Harv1 squash
Rating Data Type				ht	ht	ht	ht	ht	fruit	fruit
Rating Unit				cm	cm	cm	cm	cm	#/plot	lb/plot
Rating Date				Aug-20-03	Aug-20-03	Aug-20-03	Aug-20-03	Aug-20-03	Aug-29-03	Aug-29-03
Trt-Eval Interval				16 DA-A	16 DA-A	16 DA-A	16 DA-A		25 DA-A	25 DA-A
ARM Action Codes								T7		
# Subsamples, Dec.								1		
Trt No.	Treatment Name	Rate	Rate Unit	50	51	52	53	54	55	56
1	Sandea (Wash off)	0.75	oz/a	6.7	6.7	4.0	8.3	6.5	0.7	0.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	5.7	9.3	5.7	9.3	7.9	0.0	0.0
	NIS	0.25	% v/v							
3	No herbicide			5.7	11.0	8.0	10.7	9.0	0.3	0.1
LSD (P=.05)				5.70	10.95	15.50	10.82	5.96	1.85	0.15
Standard Deviation				2.52	4.83	6.84	4.77	2.63	0.82	0.07
CV				41.94	53.67	116.14	50.53	33.8	244.95	300.0
Bartlett's X2				0.106	0.801	0.522	7.732	0.263	0.824	0.0
P(Bartlett's X2)				0.948	0.67	0.77	0.021*	0.877	0.364	.

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 54: T7 = @AVG([C49].[C53])

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Weed Code				Harv1	Harv1	Harv2	Harv2	Harv2	Harv2	Harv3
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				cull	cull	fruit	fruit	cull	cull	fruit
Rating Unit				#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot
Rating Date				Aug-29-03	Aug-29-03	Sep-01-03	Sep-01-03	Sep-01-03	Sep-01-03	Sep-03-03
Trt-Eval Interval				25 DA-A	25 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	30 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	57	58	59	60	61	62	63
1	Sandea (Wash off)	0.75	oz/a	0.0	0.0	1.0	0.3	0.0	0.0	1.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	NIS	0.25	% v/v							
3	No herbicide			0.0	0.0	2.7	0.7	0.0	0.0	3.7
LSD (P=.05)				0.00	0.00	2.88	1.02	0.00	0.00	2.00
Standard Deviation				0.00	0.00	1.27	0.45	0.00	0.00	0.88
CV				0.0	0.0	103.85	145.34	0.0	0.0	56.69
Bartlett's X2				0.0	0.0	1.39	2.45	0.0	0.0	0.322
P(Bartlett's X2)				.	.	0.238	0.118	.	.	0.57

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

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Weed Code				Harv3	Harv3	Harv3	Harv4	Harv4	Harv4	Harv4
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				fruit	cull	cull	fruit	fruit	cull	cull
Rating Unit				lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot
Rating Date				Sep-03-03	Sep-03-03	Sep-03-03	Sep-08-03	Sep-08-03	Sep-08-03	Sep-08-03
Trt-Eval Interval				30 DA-A	30 DA-A	30 DA-A	35 DA-A	35 DA-A	35 DA-A	35 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	64	65	66	67	68	69	70
1	Sandea (Wash off)	0.75	oz/a	0.2	0.0	0.0	1.0	0.3	0.3	0.1
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.0	0.0	0.0	0.0	0.0	0.3	0.1
	NIS	0.25	% v/v							
3	No herbicide			1.0	0.0	0.0	3.7	1.1	0.0	0.0
LSD (P=.05)				0.72	0.00	0.00	3.89	1.18	1.19	0.24
Standard Deviation				0.32	0.00	0.00	1.72	0.52	0.53	0.11
CV				79.06	0.0	0.0	110.31	117.15	237.17	237.17
Bartlett's X2				1.526	0.0	0.0	0.252	0.55	0.0	0.0
P(Bartlett's X2)				0.217	.	.	0.616	0.458	1.00	1.00

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

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Weed Code				Harv5	Harv5	Harv5	Harv5	Harv6	Harv6	Harv6
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				fruit	fruit	cull	cull	fruit	fruit	cull
Rating Unit				#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot
Rating Date				Sep-10-03	Sep-10-03	Sep-10-03	Sep-10-03	Sep-12-03	Sep-12-03	Sep-12-03
Trt-Eval Interval				37 DA-A	37 DA-A	37 DA-A	37 DA-A	39 DA-A	39 DA-A	39 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	71	72	73	74	75	76	77
1	Sandea (Wash off)	0.75	oz/a	3.3	0.7	0.0	0.0	2.7	0.6	0.3
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.3	0.1	0.0	0.1	2.3	0.5	0.7
	NIS	0.25	% v/v							
3	No herbicide			2.0	0.3	0.3	0.0	5.7	1.5	0.0
LSD (P=.05)				5.53	1.14	0.76	0.15	3.54	1.14	1.31
Standard Deviation				2.44	0.50	0.33	0.07	1.56	0.50	0.58
CV				129.08	140.94	300.0	300.0	43.97	58.08	173.21
Bartlett's X2				3.333	3.329	0.0	0.0	0.687	1.419	0.824
P(Bartlett's X2)				0.189	0.189	.	.	0.709	0.492	0.364

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

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Weed Code				Harv6	Harv7	Harv7	Harv7	Harv7	Harv8	Harv8
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				cull	fruit	fruit	cull	cull	fruit	fruit
Rating Unit				lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot
Rating Date				Sep-12-03	Sep-16-03	Sep-16-03	Sep-16-03	Sep-16-03	Sep-17-03	Sep-17-03
Trt-Eval Interval				39 DA-A	43 DA-A	43 DA-A	43 DA-A	43 DA-A	44 DA-A	44 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	78	79	80	81	82	83	84
1	Sandea (Wash off)	0.75	oz/a	0.1	6.0	2.7	0.0	0.0	4.0	0.6
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.1	2.0	0.6	0.7	0.3	1.3	0.2
	NIS	0.25	% v/v							
3	No herbicide			0.0	10.3	3.4	0.0	0.0	6.3	0.9
LSD (P=.05)				0.15	8.31	2.43	0.76	0.40	8.61	1.26
Standard Deviation				0.07	3.67	1.07	0.33	0.18	3.80	0.56
CV				150.0	60.0	47.8	150.0	198.43	97.73	96.54
Bartlett's X2				0.0	0.815	2.286	0.0	0.0	1.419	0.997
P(Bartlett's X2)				1.00	0.665	0.319	.	.	0.492	0.607

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

University of Georgia

Weed Code				Harv8	Harv8	Harv9	Harv9	Harv9	Harv9	Harv10
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				cull	cull	fruit	fruit	cull	cull	fruit
Rating Unit				#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot
Rating Date				Sep-17-03	Sep-17-03	Sep-19-03	Sep-19-03	Sep-19-03	Sep-19-03	Sep-22-03
Trt-Eval Interval				44 DA-A	44 DA-A	46 DA-A	46 DA-A	46 DA-A	46 DA-A	49 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	85	86	87	88	89	90	91
1	Sandea (Wash off)	0.75	oz/a	0.3	0.1	2.3	0.4	0.3	0.1	6.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.0	0.0	0.7	0.1	0.0	0.0	3.0
	NIS	0.25	% v/v							
3	No herbicide			0.0	0.0	1.0	0.2	0.0	0.0	8.3
LSD (P=.05)				0.76	0.15	2.93	0.58	0.76	0.15	7.21
Standard Deviation				0.33	0.07	1.29	0.25	0.33	0.07	3.18
CV				300.0	300.0	96.82	103.85	300.0	300.0	55.03
Bartlett's X2				0.0	0.0	2.683	2.506	0.0	0.0	0.894
P(Bartlett's X2)				.	.	0.261	0.286	.	.	0.64

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

University of Georgia

Weed Code				Harv10	Harv10	Harv10	Harv11	Harv11	Harv11	Harv11
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				fruit	cull	cull	fruit	fruit	cull	cull
Rating Unit				lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot
Rating Date				Sep-22-03	Sep-22-03	Sep-22-03	Sep-26-03	Sep-26-03	Sep-26-03	Sep-26-03
Trt-Eval Interval				49 DA-A	49 DA-A	49 DA-A	53 DA-A	53 DA-A	53 DA-A	53 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	92	93	94	95	96	97	98
1	Sandea (Wash off)	0.75	oz/a	2.1	0.0	0.0	3.3	0.6	0.3	0.1
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.7	1.0	0.1	1.7	0.4	0.0	0.0
	NIS	0.25	% v/v							
3	No herbicide			3.6	0.0	0.0	2.3	0.7	0.0	0.0
LSD (P=.05)				2.75	2.27	0.30	6.32	0.60	0.76	0.15
Standard Deviation				1.21	1.00	0.13	2.79	0.27	0.33	0.07
CV				56.9	300.0	300.0	114.09	48.0	300.0	300.0
Bartlett's X2				0.874	0.0	0.0	3.223	0.692	0.0	0.0
P(Bartlett's X2)				0.646	.	.	0.20	0.708	.	.

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

University of Georgia

Weed Code				Harv12	Harv12	Harv12	Harv12	Harv13	Harv13	Harv13
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				fruit	fruit	cull	cull	fruit	fruit	cull
Rating Unit				#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot
Rating Date				Sep-29-03	Sep-29-03	Sep-29-03	Sep-29-03	Oct-03-03	Oct-03-03	Oct-03-03
Trt-Eval Interval				56 DA-A	56 DA-A	56 DA-A	56 DA-A	60 DA-A	60 DA-A	60 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	99	100	101	102	103	104	105
1	Sandea (Wash off)	0.75	oz/a	2.3	0.8	0.0	0.0	3.0	1.5	1.7
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	3.3	1.0	0.0	0.0	4.0	2.9	2.3
	NIS	0.25	% v/v							
3	No herbicide			4.3	1.3	0.0	0.0	2.7	2.0	0.3
LSD (P=.05)				4.24	1.24	0.00	0.00	4.78	4.10	2.39
Standard Deviation				1.87	0.55	0.00	0.00	2.11	1.81	1.05
CV				56.12	53.38	0.0	0.0	65.43	83.82	72.98
Bartlett's X2				6.549	5.792	0.0	0.0	1.568	0.948	2.934
P(Bartlett's X2)				0.038*	0.055	.	.	0.457	0.623	0.231

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

University of Georgia

Weed Code				Harv13	1st5harv	1st5harv	Totalhar	Totalhar	Totalhar	Totalhar
Crop Code				squash	squash	squash	squash	squash	squash	squash
Rating Data Type				cull	fruit	fuit	fruit	fruit	cull	cull
Rating Unit				lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot
Rating Date				Oct-03-03	Jan-16-04	Jan-16-04	Jan-17-04	Jan-17-04	Jan-17-04	Jan-17-04
Trt-Eval Interval				60 DA-A						
ARM Action Codes					T8	T9	T10	T11	T12	T13
# Subsamples, Dec.					1	1	1	1	1	1
Trt No.	Treatment Name	Rate	Rate Unit	106	107	108	109	110	111	112
1	Sandea (Wash off)	0.75	oz/a	0.5	7.0	1.4	36.7	10.8	3.3	0.8
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.7	0.3	0.1	18.7	6.5	5.0	1.3
	NIS	0.25	% v/v							
3	No herbicide			0.1	12.3	3.1	53.3	16.7	0.7	0.1
LSD (P=.05)				0.84	5.90	1.77	21.32	5.34	4.98	1.66
Standard Deviation				0.37	2.60	0.78	9.40	2.36	2.20	0.73
CV				87.91	39.71	50.8	25.96	20.79	73.28	99.59
Bartlett's X2				4.462	6.033	5.805	2.312	1.311	6.677	8.489
P(Bartlett's X2)				0.107	0.049*	0.055	0.315	0.519	0.035*	0.014*

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 107: T8 = [C55]+[C59]+[C63]+[C67]+[C71]
Column 108: T9 = [C56]+[C60]+[C64]+[C68]+[C72]
Column 109: T10 = [C55]+[C59]+[C63]+[C67]+[C71]+[C75]+[C79]+[C83]+[C87]+[C91]+[C95]+[C99]+[C103]
Column 110: T11 = [C56]+[C60]+[C64]+[C68]+[C72]+[C76]+[C80]+[C84]+[C88]+[C92]+[C96]+[C100]+[C104]
Column 111: T12 = [C57]+[C61]+[C65]+[C69]+[C73]+[C77]+[C81]+[C85]+[C89]+[C93]+[C97]+[C101]+[C105]
Column 112: T13 = [C58]+[C62]+[C66]+[C70]+[C74]+[C78]+[C82]+[C86]+[C90]+[C94]+[C98]+[C102]+[C106]

University of Georgia

Weed Code				Harv1	Harv1	Harv1	Harv1	Harv2	Harv2	Harv2
Crop Code				cucumber	cucumber	cucumber	cucumber	cucumber	cucumber	cucumber
Rating Data Type				fruit	fruit	cull	cull	fruit	fruit	cull
Rating Unit				#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot
Rating Date				Sep-17-03	Sep-17-03	Sep-17-03	Sep-17-03	Sep-22-03	Sep-22-03	Sep-22-03
Trt-Eval Interval				44 DA-A	44 DA-A	44 DA-A	44 DA-A	49 DA-A	49 DA-A	49 DA-A
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Rate Unit	113	114	115	116	117	118	119
1	Sandea (Wash off)	0.75	oz/a	7.7	4.1	1.0	0.3	5.0	1.7	0.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	10.7	5.3	0.0	0.0	3.3	1.1	0.3
	NIS	0.25	% v/v							
3	No herbicide			12.0	5.3	1.3	0.4	4.0	2.4	0.3
LSD (P=.05)				15.50	7.56	2.72	0.84	3.66	2.49	1.19
Standard Deviation				6.84	3.33	1.20	0.37	1.62	1.10	0.53
CV				67.64	67.89	154.52	151.85	39.31	63.37	237.17
Bartlett's X2				0.897	0.197	0.151	0.061	3.233	1.912	0.0
P(Bartlett's X2)				0.639	0.906	0.698	0.805	0.072	0.167	1.00

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

University of Georgia

Weed Code				Harv2	Harv3	Harv3	Harv3	Harv3	TotHarv	TotHarv
Crop Code				cucumber	cucumber	cucumber	cucumber	cucumber	cucumber	cucumber
Rating Data Type				cull	fruit	fruit	cull	cull	fruit	fruit
Rating Unit				lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot
Rating Date				Sep-22-03	Oct-06-03	Oct-06-03	Oct-06-03	Oct-06-03	Jan-17-04	Jan-17-04
Trt-Eval Interval				49 DA-A	63 DA-A	63 DA-A	63 DA-A	63 DA-A		
ARM Action Codes									T14	T15
# Subsamples, Dec.									1	1
Trt No.	Treatment Name	Rate	Rate Unit	120	121	122	123	124	125	126
1	Sandea (Wash off)	0.75	oz/a	0.0	4.7	2.2	0.3	0.1	17.3	8.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.1	5.7	2.3	0.0	0.0	19.7	8.7
	NIS	0.25	% v/v							
3	No herbicide			0.0	2.0	1.3	1.3	0.4	18.0	9.1
LSD (P=.05)				0.33	1.51	1.14	2.72	0.80	16.91	8.89
Standard Deviation				0.15	0.67	0.50	1.20	0.35	7.46	3.92
CV				261.53	16.22	26.03	216.33	198.43	40.7	45.71
Bartlett's X2				2.783	1.486	4.967	2.783	1.886	0.316	0.006
P(Bartlett's X2)				0.095	0.476	0.083	0.095	0.17	0.854	0.997

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 125: T14 = [C113]+[C117]+[C121]
Column 126: T15 = [C114]+[C118]+[C122]

University of Georgia

Weed Code				TotHarv	TotHarv
Crop Code				cucumber	cucumber
Rating Data Type				cull	cull
Rating Unit				#/plot	lb/plot
Rating Date				Jan-17-04	Jan-17-04
Trt-Eval Interval					
ARM Action Codes				T16	T17
# Subsamples, Dec.				1	1
Trt No.	Treatment Name	Rate	Rate Unit	127	128
1	Sandea (Wash off)	0.75	oz/a	1.3	0.5
	NIS	0.25	% v/v		
2	Sandea (Not washed off)	0.75	oz/a	0.3	0.1
	NIS	0.25	% v/v		
3	No herbicide			3.0	0.8
LSD (P=.05)				3.16	0.80
Standard Deviation				1.39	0.35
CV				89.64	73.83
Bartlett's X2				3.163	1.911
P(Bartlett's X2)				0.206	0.385

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Column 127: T16 = [C115]+[C119]+[C123]
Column 128: T17 = [C116]+[C120]+[C124]

Trial Comments

OBJECTIVE: Determine cucumber, squash, and watermelon response to Sandea applied over plastic and either washed off or not washed off.

VISUAL INJURY (plant stunting):
1) Squash injury was severe when Sandea was applied over plastic. Injury was twice as much when not washed off as compared to washed off.
2) Watermelon stunting ranged from 15 to 33% when Sandea was not washed off at 19 DAP. Stunting was still noted 10 d later when Sandea was not washed off.
3)Cantaloupe injury was far less than squash. However, when not washed off injury ranged from 17 to 20% at 19 and 30 DAT.
4) Cucumber followed similar trends noted with cantaloupe. When not washed off injury ranged from 18 to 23% at 19 to 30 DAT.

Plant Heights (5 plants per plot):
1) At 26 DAP, squash heights were reduced when Sandea was not washed from plastic. A trend was also noted even when it was washed from plastic.
2) At 26 DAP, watermelon heights were reduced 34% when compared to the non-treated.
3) No effect on height was noted with cucumber.
4) Although not significant, there was a trend for smaller cantaloupe plants when Sandea was not washed from plastic at 26 DAP.

SQUASH HARVEST (13 times):
1) Data for each harvest is reported but not discussed.
2) Pooled over the 1st five harvest, Sandea not washed off reduced the number and weight of fruit harvested. Similar trends were noted with Sandea was washed off.
3) Pooled over all harvest dates, Sandea not washed off reduced the number and weight of fruit harvested. When Sandea was not washed off, less fruit weight was noted compared to the control.

CUCUMBER HARVEST (3 times):
1) Treatments had no effect.

GENERAL COMMENTS:
1. Applied Telone C35 at 22 GPA on July 15.
2. Laid plastic on July 28.
3. Sprayed wash off treatments on Aug 4. Washed off with 0.5 inch that day.
4. Sprayed non-wash off on August 6, transplanted, and then within 2 hours it rain 0.5 inch. Agressive rain storm.
5. I believe this is a absolute worst case situation.
6. Disease essentially took melons out so harvest would have been questionable.