

University of Georgia

Transplanted tomato and squash response to Sandea applied overtop of plastic before transplanting.

Trial ID: Veg45-03
Location: Ponder farm

Study Dir.: Culpepper
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: 31795 **Initiation Date:** Jul-15-03
Country: U.S.A.

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

Crop 1: LYPES TOMATO **Variety:** Amelia
Planting Date: Aug-06-03 **Planting Method:** transplant
Rate: 1 18 inch **Depth:** 1.5 in
Row Spacing: 6 feet **Spacing Within Row:** 18 inch **Seed Bed:** plastic
Soil Temperature: 90 F **Soil Moisture:** drip

Crop 2: 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

SITE AND DESIGN

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

SOIL DESCRIPTION

% Sand: 94 **% OM:** 1.3 **Texture:** sand
% Silt: 2 **pH:** 6.4 **Soil Name:** Tifton sandy loam
% Clay: 4

APPLICATION DESCRIPTION

	A	B
Application Date:	Aug-04-03	Aug-06-03
Time of Day:	3:00pm	10:00am
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 Temp., Unit:	89 F	92 F
Soil Moisture:	wet	wet
% Cloud Cover:	100	100

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CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	LYPES .	LYPES .
Stage Scale:	.	.
Height, Unit:	0. .	0. .
Crop 2 Code, Stage:	CUUPE .	CUUPE .
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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Transplanted tomato and squash response to Sandea applied overtop of plastic before transplanting.

Trial ID: Veg45-03

Study Dir.: Culpepper

Location: Ponder farm

Investigator: Stanley Culpepper

Weed Code			tomato	tomato	tomato	squash	squash	squash	squash
Crop Code			injury	injury	injury	injury	injury	injury	ht
Rating Data Type			percent	percent	percent	percent	percent	percent	cm
Rating Unit									
Rating Date			Aug-08-03	Aug-25-03	Sep-05-03	Aug-08-03	Aug-25-03	Sep-05-03	Aug-20-03
Trt-Eval Interval			4 DA-A	21 DA-A	32 DA-A	4 DA-A	21 DA-A	32 DA-A	16 DA-A
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	1	2	3	4	5	6	7
		Unit							
1	Sandea (Wash off) NIS	0.75 oz/a 0.25 % v/v	0.0	6.7	0.0	0.0	60.0	48.3	7.0
2	Sandea (Not washed off) NIS	0.75 oz/a 0.25 % v/v	0.0	20.0	15.0	0.0	86.7	80.0	5.7
3	No herbicide		0.0	0.0	0.0	0.0	0.0	0.0	7.3
	LSD (P=.05)		0.00	11.95	6.54	0.00	7.56	11.95	3.34
	Standard Deviation		0.00	5.27	2.89	0.00	3.33	5.27	1.47
	CV		0.0	59.29	57.74	0.0	6.82	12.32	22.08
	Bartlett's X2		0.0	0.531	0.0	0.0	0.0	0.914	0.372
	P(Bartlett's X2)		.	0.466	.	.	.	0.339	0.83

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

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Weed Code			squash	squash	squash	squash	squash	squash	squash
Crop Code			ht	ht	ht	ht	ht	ht	ht
Rating Data Type			cm	cm	cm	cm	cm	cm	cm
Rating Unit			cm	cm	cm	cm	cm	cm	cm
Rating Date			Aug-20-03	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	16 DA-A	16 DA-A
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	8	9	10	11	12	13	14
		Rate Unit							
1	Sandea (Wash off)	0.75 oz/a	6.7	7.0	6.3	5.7	7.0	6.7	6.7
	NIS	0.25 % v/v							
2	Sandea (Not washed off)	0.75 oz/a	6.7	6.3	6.0	6.7	6.7	6.3	6.7
	NIS	0.25 % v/v							
3	No herbicide		7.7	7.3	8.7	8.0	10.0	8.3	7.7
LSD (P=.05)			5.07	2.39	3.46	2.20	3.66	3.29	2.62
Standard Deviation			2.24	1.05	1.53	0.97	1.62	1.45	1.15
CV			31.94	15.3	21.82	14.34	20.48	20.43	16.5
Bartlett's X2			3.519	0.0	3.528	0.797	3.66	4.534	2.964
P(Bartlett's X2)			0.172	1.00	0.06	0.671	0.056	0.104	0.227

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

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Weed Code			AVG10pla							
Crop Code	squash	squash	squash	squash	squash	squash	squash			
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Aug-20-03	Aug-20-03	Aug-20-03	Sep-04-03	Sep-04-03	Sep-04-03	Sep-04-03			
Trt-Eval Interval	16 DA-A	16 DA-A		31 DA-A	31 DA-A	31 DA-A	31 DA-A			
ARM Action Codes			T1							
# Subsamples, Dec.			1							
Trt No.	Treatment Name	Rate	Unit	15	16	17	18	19	20	21
1	Sandea (Wash off)	0.75	oz/a	7.0	6.7	6.7	14.7	17.0	19.3	17.7
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	5.3	3.7	6.0	13.0	11.3	8.7	8.3
	NIS	0.25	% v/v							
3	No herbicide			8.3	11.3	8.5	23.7	30.0	33.3	33.0
LSD (P=.05)				3.78	8.71	2.36	9.69	13.14	8.00	9.16
Standard Deviation				1.67	3.84	1.04	4.28	5.80	3.53	4.04
CV				24.19	53.23	14.78	24.99	29.82	17.25	20.55
Bartlett's X2				1.848	1.486	4.603	0.948	1.566	2.367	4.428
P(Bartlett's X2)				0.397	0.476	0.10	0.622	0.457	0.306	0.109

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

Column 17: T1 = @AVG([7].[16])

University of Georgia

Weed Code			squash	squash	squash	squash	squash	squash	AVG10pla
Crop Code			ht	ht	ht	ht	ht	ht	squash
Rating Data Type			cm	cm	cm	cm	cm	cm	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									T2
# Subsamples, Dec.									1
Trt No.	Treatment Name	Rate	22	23	24	25	26	27	28
		Unit							
1	Sandea (Wash off)	0.75 oz/a	19.3	23.7	11.3	12.7	14.0	17.0	6.6
	NIS	0.25 % v/v							
2	Sandea (Not washed off)	0.75 oz/a	11.7	8.3	8.7	9.3	10.0	11.3	6.0
	NIS	0.25 % v/v							
3	No herbicide		34.7	33.3	28.0	28.0	27.3	15.7	8.6
LSD (P=.05)			9.95	13.71	15.32	10.59	10.74	19.05	2.46
Standard Deviation			4.39	6.05	6.76	4.67	4.74	8.41	1.08
CV			20.06	27.78	42.24	28.04	27.69	57.32	15.3
Bartlett's X2			1.312	4.477	2.772	2.54	2.131	6.219	3.783
P(Bartlett's X2)			0.519	0.107	0.25	0.281	0.345	0.045*	0.151

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

Column 28: T2 = @AVG([8].[17])

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Weed Code			squash	squash	squash	squash	squash	squash	squash
Crop Code									
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	Sep-24-03
Trt-Eval Interval			51 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit							
1	Sandea (Wash off)	0.75 oz/a	47.3	45.7	50.0	38.0	48.3	42.0	34.0
	NIS	0.25 % v/v							
2	Sandea (Not washed off)	0.75 oz/a	40.7	37.0	25.3	23.3	27.7	30.0	38.0
	NIS	0.25 % v/v							
3	No herbicide		46.3	45.0	49.7	51.7	49.3	47.7	44.0
LSD (P=.05)			8.21	11.95	17.36	37.87	17.67	12.19	17.01
Standard Deviation			3.62	5.27	7.66	16.71	7.80	5.38	7.51
CV			8.09	12.38	18.38	44.36	18.66	13.49	19.41
Bartlett's X2			1.031	0.428	2.584	3.003	1.841	1.023	0.962
P(Bartlett's X2)			0.597	0.807	0.275	0.223	0.398	0.60	0.618

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

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Weed Code				AVG10pla				
Crop Code		squash	squash	squash	squash	tomato	tomato	tomato
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	Sep-24-03
Trt-Eval Interval		51 DA-A	51 DA-A	51 DA-A		51 DA-A	51 DA-A	51 DA-A
ARM Action Codes					T3			
# Subsamples, Dec.					1			
Trt Treatment	Rate							
No. Name	Rate Unit	36	37	38	39	40	41	42
1 Sandea (Wash off)	0.75 oz/a	42.0	41.0	45.3	43.4	61.3	67.3	66.3
NIS	0.25 % v/v							
2 Sandea (Not washed off)	0.75 oz/a	33.0	33.0	35.7	32.4	71.0	59.0	68.3
NIS	0.25 % v/v							
3 No herbicide		46.3	48.3	27.7	45.6	55.0	70.3	65.7
LSD (P=.05)		25.32	13.27	26.52	2.84	25.12	12.26	5.68
Standard Deviation		11.17	5.85	11.70	1.25	11.08	5.41	2.51
CV		27.62	14.36	32.31	3.1	17.74	8.25	3.75
Bartlett's X2		1.871	2.111	6.194	0.138	2.696	0.708	3.398
P(Bartlett's X2)		0.392	0.348	0.045*	0.933	0.26	0.702	0.183

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

Column 39: T3 = @AVG([29].[38])

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Weed Code			tomato	tomato	tomato	tomato	tomato	tomato	tomato
Crop Code			ht	ht	ht	ht	ht	ht	ht
Rating Data Type			cm	cm	cm	cm	cm	cm	cm
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	Sep-24-03
Trt-Eval Interval			51 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit							
43			43	44	45	46	47	48	49
1	Sandea (Wash off)	0.75 oz/a	66.7	66.0	71.0	70.3	68.3	66.3	67.0
	NIS	0.25 % v/v							
2	Sandea (Not washed off)	0.75 oz/a	61.0	64.7	62.3	65.0	65.7	64.0	61.3
	NIS	0.25 % v/v							
3	No herbicide		70.0	67.0	72.0	67.0	66.0	65.0	63.7
LSD (P=.05)			11.87	12.37	7.15	5.75	9.25	8.66	9.79
Standard Deviation			5.24	5.46	3.15	2.54	4.08	3.82	4.32
CV			7.95	8.28	4.61	3.76	6.12	5.87	6.75
Bartlett's X2			1.292	1.151	0.057	1.74	0.249	0.091	2.202
P(Bartlett's X2)			0.524	0.562	0.972	0.419	0.883	0.956	0.333

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

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Weed Code	AVG10pla	Harv1	Harv1	Harv1	Harv1	Harv2	Harv2	
Crop Code	tomato	squash	squash	squash	squash	squash	squash	
Rating Data Type	ht	fruit	fruit wt	cull	cull wt	fruit	fruit wt	
Rating Unit	cm	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	
Rating Date	Sep-24-03	Aug-29-03	Aug-29-03	Aug-29-03	Aug-29-03	Sep-01-03	Sep-01-03	
Trt-Eval Interval		25 DA-A	25 DA-A	25 DA-A	25 DA-A	28 DA-A	28 DA-A	
ARM Action Codes	T4							
# Subsamples, Dec.								
Trt Treatment	Rate							
No. Name	Rate Unit	50	51	52	53	54	55	56
1 Sandea (Wash off)	0.75 oz/a	67.1	0.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % v/v							
2 Sandea (Not washed off)	0.75 oz/a	64.2	0.0	0.0	0.0	0.0	0.0	0.0
NIS	0.25 % v/v							
3 No herbicide		66.2	1.0	0.1	0.0	0.0	3.7	0.7
LSD (P=.05)		6.00	2.27	0.15	0.00	0.00	2.00	0.40
Standard Deviation		2.65	1.00	0.07	0.00	0.00	0.88	0.18
CV		4.02	300.0	300.0	0.0	0.0	72.16	72.16
Bartlett's X2		0.86	0.0	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)		0.65

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

Column 50: T4 = @AVG([40].[49])

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Weed Code		Harv2	Harv2	Harv3	Harv3	Harv3	Harv3	Harv4	
Crop Code		squash	squash	squash	squash	squash	squash	squash	
Rating Data Type		cull	cull wt	fruit	fruit wt	cull	cull wt	fruit	
Rating Unit		#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	
Rating Date		Sep-01-03	Sep-01-03	Sep-03-03	Sep-03-03	Sep-03-03	Sep-03-03	Sep-08-03	
Trt-Eval Interval		28 DA-A	28 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A	35 DA-A	
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit							
			57	58	59	60	61	62	63
1	Sandea (Wash off)	0.75 oz/a	0.0	0.0	1.0	0.1	0.0	0.0	0.0
	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	4.0	0.7	0.0	0.0	1.7
LSD (P=.05)			0.00	0.00	2.62	0.37	0.00	0.00	2.00
Standard Deviation			0.00	0.00	1.15	0.16	0.00	0.00	0.88
CV			0.0	0.0	69.28	61.24	0.0	0.0	158.75
Bartlett's X2			0.0	0.0	0.038	0.0	0.0	0.0	0.0
P(Bartlett's X2)			.	.	0.845	1.00	.	.	.

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

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Weed Code		Harv4	Harv4	Harv4	Harv5	Harv5	Harv5	Harv5	
Crop Code		squash	squash	squash	squash	squash	squash	squash	
Rating Data Type		fruit wt	cull	cull wt	fruit	fruit wt	cull	cull wt	
Rating Unit		lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	
Rating Date		Sep-08-03	Sep-08-03	Sep-08-03	Sep-10-03	Sep-10-03	Sep-10-03	Sep-10-03	
Trt-Eval Interval		35 DA-A	35 DA-A	35 DA-A	37 DA-A	37 DA-A	37 DA-A	37 DA-A	
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit							
			64	65	66	67	68	69	70
1	Sandea (Wash off)	0.75 oz/a	0.0	1.0	0.1	1.3	0.1	0.0	0.0
	NIS	0.25 % v/v							
2	Sandea (Not washed off)	0.75 oz/a	0.0	0.0	0.0	1.7	0.1	0.0	0.0
	NIS	0.25 % v/v							
3	No herbicide		0.3	0.7	0.1	6.3	1.1	0.0	0.0
LSD (P=.05)			0.40	1.51	0.15	6.46	1.18	0.00	0.00
Standard Deviation			0.18	0.67	0.07	2.85	0.52	0.00	0.00
CV			158.75	120.0	150.0	91.54	123.32	0.0	0.0
Bartlett's X2			0.0	0.038	0.0	4.048	8.027	0.0	0.0
P(Bartlett's X2)			.	0.845	1.00	0.132	0.018*	.	.

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

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Weed Code	Harv6 squash fruit #/plot	Harv6 squash fruit wt lb/plot	Harv6 squash cull #/plot	Harv6 squash cull wt lb/plot	Harv7 squash fruit #/plot	Harv7 squash fruit wt lb/plot	Harv7 squash cull #/plot			
Crop Code	Sep-12-03	Sep-12-03	Sep-12-03	Sep-12-03	Sep-16-03	Sep-16-03	Sep-16-03			
Rating Data Type	39 DA-A	39 DA-A	39 DA-A	39 DA-A	43 DA-A	43 DA-A	43 DA-A			
Rating Unit										
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	71	72	73	74	75	76	77
1	Sandea (Wash off)	0.75	oz/a	4.0	1.1	0.3	0.1	8.7	3.0	0.3
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	0.0	0.0	0.0	0.0	2.7	0.7	0.0
	NIS	0.25	% v/v							
3	No herbicide			12.3	2.2	0.3	0.1	17.3	4.4	0.0
LSD (P=.05)				10.12	1.64	0.76	0.15	9.56	3.24	0.76
Standard Deviation				4.47	0.72	0.33	0.07	4.22	1.43	0.33
CV				82.03	66.51	150.0	150.0	44.12	52.74	300.0
Bartlett's X2				0.488	0.002	0.0	0.0	1.54	2.195	0.0
P(Bartlett's X2)				0.485	0.961	1.00	1.00	0.463	0.334	.

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

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Weed Code		Harv7	Harv8	Harv8	Harv8	Harv8	Harv9	Harv9	
Crop Code		squash	squash	squash	squash	squash	squash	squash	
Rating Data Type		cull wt	fruit	fruit wt	cull	cull wt	fruit	fruit wt	
Rating Unit		lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	
Rating Date		Sep-16-03	Sep-17-03	Sep-17-03	Sep-17-03	Sep-17-03	Sep-19-03	Sep-19-03	
Trt-Eval Interval		43 DA-A	44 DA-A	44 DA-A	44 DA-A	44 DA-A	46 DA-A	46 DA-A	
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	78	79	80	81	82	83	84
1	Sandea (Wash off)	0.75 oz/a	0.1	0.7	0.4	1.7	0.2	2.7	0.4
	NIS	0.25 % v/v							
2	Sandea (Not washed off)	0.75 oz/a	0.0	0.3	0.1	0.0	0.0	1.3	0.2
	NIS	0.25 % v/v							
3	No herbicide		0.0	4.0	0.6	0.0	0.0	1.7	0.2
LSD (P=.05)			0.30	3.07	0.54	3.78	0.45	4.21	0.61
Standard Deviation			0.13	1.35	0.24	1.67	0.20	1.86	0.27
CV			300.0	81.24	67.6	300.0	300.0	98.25	101.55
Bartlett's X2			0.0	3.722	2.324	0.0	0.0	0.68	0.797
P(Bartlett's X2)			.	0.156	0.127	.	.	0.712	0.671

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

University of Georgia

Weed Code		Harv9	Harv9	Harv10	Harv10	Harv10	Harv10	Harv11
Crop Code		squash	squash	squash	squash	squash	squash	squash
Rating Data Type		cull	cull wt	fruit	fruit wt	cull	cull wt	fruit
Rating Unit		#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot
Rating Date		Sep-19-03	Sep-19-03	Sep-22-03	Sep-22-03	Sep-22-03	Sep-22-03	Sep-24-03
Trt-Eval Interval		46 DA-A	46 DA-A	49 DA-A	49 DA-A	49 DA-A	49 DA-A	51 DA-A
ARM Action Codes								
# Subsamples, Dec.								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit						
1	Sandea (Wash off)	0.75 oz/a	0.3	0.3	7.0	2.2	0.0	0.0
	NIS	0.25 % v/v						19.7
2	Sandea (Not washed off)	0.75 oz/a	0.0	0.0	9.7	2.2	0.0	0.0
	NIS	0.25 % v/v						9.0
3	No herbicide		0.0	0.0	5.3	1.1	1.0	0.1
								18.3
	LSD (P=.05)		0.76	0.76	12.28	2.35	2.27	0.15
	Standard Deviation		0.33	0.33	5.42	1.03	1.00	0.07
	CV		300.0	300.0	73.85	56.8	300.0	300.0
	Bartlett's X2		0.0	0.0	1.497	3.824	0.0	0.0
	P(Bartlett's X2)		.	.	0.473	0.148	.	0.035*

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

University of Georgia

Weed Code	Harv11 squash fruit wt lb/plot	Harv11 squash cull #/plot	Harv11 squash cull wt lb/plot	Harv12 squash fruit #/plot	Harv12 squash fruit wt lb/plot	Harv12 squash cull #/plot	Harv12 squash cull wt lb/plot			
Crop Code	Sep-24-03	Sep-24-03	Sep-24-03	Sep-26-03	Sep-26-03	Sep-26-03	Sep-26-03			
Rating Data Type	51 DA-A	51 DA-A	51 DA-A	53 DA-A	53 DA-A	53 DA-A	53 DA-A			
Rating Unit										
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	92	93	94	95	96	97	98
1	Sandea (Wash off)	0.75	oz/a	3.8	1.0	0.2	14.7	2.1	0.0	0.0
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	5.1	2.3	0.3	7.0	1.1	0.0	0.0
	NIS	0.25	% v/v							
3	No herbicide			3.9	0.3	0.1	8.7	1.3	0.0	0.0
LSD (P=.05)				9.10	5.75	0.63	9.78	0.86	0.00	0.00
Standard Deviation				4.01	2.54	0.28	4.31	0.38	0.00	0.00
CV				93.59	207.7	156.87	42.67	25.15	0.0	0.0
Bartlett's X2				7.332	6.314	3.171	3.163	3.792	0.0	0.0
P(Bartlett's X2)				0.026*	0.043*	0.205	0.206	0.15	.	.

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

University of Georgia

Weed Code	Harv13 squash fruit #/plot	Harv13 squash fruit wt lb/plot	Harv13 squash cull #/plot	Harv13 squash cull wt lb/plot	1st5harv squash fruit #/plot	1st5harv squash fruit lb/plot	totalhar squash fruit #/plot			
Crop Code	Sep-29-03	Sep-29-03	Sep-29-03	Sep-29-03	Jan-17-04	Jan-17-04	Jan-17-04			
Rating Data Type	56 DA-A	56 DA-A	56 DA-A	56 DA-A						
Rating Unit					T5	T6	T7			
Rating Date					1	1	1			
Trt-Eval Interval										
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	99	100	101	102	103	104	105
1	Sandea (Wash off)	0.75	oz/a	12.0	4.1	0.3	0.1	2.3	0.2	71.7
	NIS	0.25	% v/v							
2	Sandea (Not washed off)	0.75	oz/a	7.3	1.7	1.0	0.4	1.7	0.1	39.0
	NIS	0.25	% v/v							
3	No herbicide			11.0	3.0	1.3	0.3	16.7	2.9	95.3
LSD (P=.05)				4.78	1.31	3.66	0.98	5.90	1.23	17.65
Standard Deviation				2.11	0.58	1.62	0.43	2.60	0.54	7.79
CV				20.85	19.68	181.79	162.02	37.79	50.78	11.34
Bartlett's X2				1.94	2.358	3.171	0.797	0.024	4.262	0.45
P(Bartlett's X2)				0.164	0.308	0.205	0.671	0.988	0.119	0.799

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

Column 103: T5 = [51]+[55]+[59]+[63]+[67]

Column 104: T6 = [52]+[56]+[60]+[64]+[68]

Column 105: T7 = [51]+[55]+[59]+[63]+[67]+[71]+[75]+[79]+[83]+[87]+[91]+[95]+[99]

University of Georgia

Weed Code			totalhar	totalhar	totalhar	tomato	tomato	tomato	tomato
Crop Code			squash	squash	squash	tomato	tomato	tomato	tomato
Rating Data Type			fruit	cull	cull	jumbo	jumbo	large	large
Rating Unit			lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot
Rating Date			Jan-17-04	Jan-17-04	Jan-17-04	Nov-06-03	Nov-06-03	Nov-06-03	Nov-06-03
Trt-Eval Interval						94 DA-A	94 DA-A	94 DA-A	94 DA-A
ARM Action Codes			T8	T9	T10				
# Subsamples, Dec.			1	1	1				
Trt Treatment	Rate								
No. Name	Rate Unit		106	107	108	109	110	111	112
1 Sandea (Wash off)	0.75 oz/a		17.3	5.0	1.1	40.3	27.0	11.7	4.3
NIS	0.25 % v/v								
2 Sandea (Not washed off)	0.75 oz/a		11.1	3.3	0.7	26.0	18.9	24.7	9.3
NIS	0.25 % v/v								
3 No herbicide			19.7	3.7	0.5	39.3	26.9	16.7	6.2
LSD (P=.05)			7.28	2.93	0.88	18.29	15.50	9.97	5.22
Standard Deviation			3.21	1.29	0.39	8.07	6.84	4.40	2.30
CV			20.01	32.27	49.98	22.91	28.21	24.89	34.8
Bartlett's X2			2.22	0.892	1.624	1.227	1.868	4.481	5.147
P(Bartlett's X2)			0.33	0.64	0.444	0.542	0.393	0.106	0.076

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

Column 106: T8 = [52]+[56]+[60]+[64]+[68]+[72]+[76]+[80]+[84]+[88]+[92]+[96]+[100]

Column 107: T9 = [53]+[57]+[61]+[65]+[69]+[73]+[77]+[81]+[85]+[89]+[93]+[97]+[101]

Column 108: T10 = [54]+[58]+[62]+[66]+[70]+[74]+[78]+[82]+[86]+[90]+[94]+[98]+[102]

University of Georgia

Weed Code			tomato	tomato	tomato	tomato	tomato	tomato	tomato
Crop Code			medium	medium	small	small	ex small	ex small	cull
Rating Data Type			#/plot	lb/plot	#/plot	lb/plot	#/plot	lb/plot	#/plot
Rating Unit			Nov-06-03	Nov-06-03	Nov-06-03	Nov-06-03	Nov-06-03	Nov-06-03	Nov-06-03
Rating Date			94 DA-A	94 DA-A	94 DA-A	94 DA-A	94 DA-A	94 DA-A	94 DA-A
Trt-Eval Interval									
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit							
1	Sandea (Wash off)	0.75 oz/a	27.3	7.4	11.3	2.4	39.3	4.9	16.7
	NIS	0.25 % v/v							
2	Sandea (Not washed off)	0.75 oz/a	32.3	8.4	10.3	2.2	44.7	5.6	14.3
	NIS	0.25 % v/v							
3	No herbicide		20.3	5.3	5.3	1.0	30.3	3.3	15.0
LSD (P=.05)			14.06	3.88	6.41	1.38	18.52	2.92	5.23
Standard Deviation			6.20	1.71	2.83	0.61	8.17	1.29	2.31
CV			23.27	24.3	31.43	32.73	21.44	27.91	15.06
Bartlett's X2			0.327	0.786	2.365	1.597	0.428	1.29	1.973
P(Bartlett's X2)			0.849	0.675	0.306	0.45	0.808	0.525	0.373

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

University of Georgia

Weed Code			Total	Total
Crop Code		tomato	tomato	tomato
Rating Data Type		cull	fruit	fruit
Rating Unit		lb/plot	#/plot	lb/plot
Rating Date		Nov-06-03	Jan-17-04	Jan-17-04
Trt-Eval Interval		94 DA-A		
ARM Action Codes			T11	T12
# Subsamples, Dec.				
Trt No.	Treatment Name	Rate		
		Rate Unit	120	121
				122
1	Sandea (Wash off)	0.75 oz/a	8.3	130.0
	NIS	0.25 % v/v		46.1
2	Sandea (Not washed off)	0.75 oz/a	6.6	138.0
	NIS	0.25 % v/v		44.4
3	No herbicide		7.3	112.0
				42.7
	LSD (P=.05)		4.95	29.29
	Standard Deviation		2.18	12.92
	CV		29.41	10.2
	Bartlett's X2		5.598	2.424
	P(Bartlett's X2)		0.061	0.298
				0.136

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

Column 121: T11 = [109]+[111]+[113]+[115]+[117]

Column 122: T12 = [110]+[112]+[114]+[116]+[118]

Trial Comments

OBJECTIVE: Determine squash and tomato response to Sandea applied over plastic and then either being washed off or not washed off.

VISUAL INJURY:

- 1) Sandea when washed from plastic did not significantly injury tomato. When not washed off, tomato was stunted 15 to 20% at 19 to 30 DAT.
- 2) Squash stunting was severe regardless of Sandea being washed off or not washed off.

SQUASH HEIGHTS (10 plants per plot):

1. No stunting was noted at 14 d after transplanting.
2. No stunting was noted at 28 d after transplanting (little growth noted in last 14 days because of cold wet conditions).
3. When Sandea was not washed off, squash was stunted 30% at 48 d after transplanting.

TOMTOA HEIGHTS (10 plants per plot):

1. Herbicide treatments did not have an effect at 48 d after transplanting.

SQUASH YIELDS (13 harvest; harvest entire plot):

1. Sandea applied overtop of plastic, regardless of wash off, reduced the number and weight of fruit harvested when pooled over the 1st five harvest dates.
2. Sandea applied overtop of plastic, regardless of wash off, reduced the total number of fruit harvested. A trend for less fruit weight was also noted.

TOMATO YIELDS (once over, harvest 6 plants):

- 1) Treatments had no effect. There was a slight trend for less Jumbo (delay maturity) when Sandea was not washed from plastic.

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. Aggressive rain storm.
5. I believe this is a absolute worst case situation.