

# University of Georgia

**Cucumber response to herbicides applied overtop of plastic before planting.**

Trial ID: Veg48-05  
 Location: Ponder (5161)

Study Dir.: Stanley Culpepper  
 Investigator: Stanley Culpepper

Reps: 3                      Plots: 6 by 20 feet  
 Spray vol: 14.8 gal/ac      Mix size: 1 liters (min .46301)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code	Amt to Measure	Product	Plot No. By Rep		
										1	2	3
1	0 day before transplant						A			101	205	304
	Valor	51	DF	3	oz/a	BD		1.518 g/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
2	0 day before transplant						A			102	201	306
	Goal	4	F	1	pt/a	BD		8.445 ml/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
3	0 day before transplant						A			103	202	301
	Sandea	75	DF	1	oz/a	BD		0.506 g/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
4	0 day before transplant						A			104	206	305
	Gramoxone	2.5	L	2	pt/a	BD		16.89 ml/mx				
	NIS		L	0.25	% v/v	BD		2.5 ml/mx				
5	0 day before transplant						A			105	204	303
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
6	0 day before transplant						A			106	203	302
	Non-treated											
7	5 day before transplant						B			107	213	318
	Valor	51	DF	3	oz/a	BD		1.518 g/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
8	5 day before transplant						B			108	214	316
	Goal	4	F	1	pt/a	BD		8.445 ml/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
9	5 day before transplant						B			109	218	314
	Sandea	75	DF	1	oz/a	BD		0.506 g/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
10	5 day before transplant						B			110	216	313
	Gramoxone	2.5	L	2	pt/a	BD		16.89 ml/mx				
	NIS		L	0.25	% v/v	BD		2.5 ml/mx				
11	5 day before transplant						B			111	217	315
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
12	5 day before transplant						B			112	215	317
	Non-treated											
13	10 day before transplant						C			113	207	308
	Valor	51	DF	3	oz/a	BD		1.518 g/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
14	10 day before transplant						C			114	212	312
	Goal	4	F	1	pt/a	BD		8.445 ml/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
15	10 day before transplant						C			115	211	307
	Sandea	75	DF	1	oz/a	BD		0.506 g/mx				
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
16	10 day before transplant						C			116	209	309
	Gramoxone	2.5	L	2	pt/a	BD		16.89 ml/mx				
	NIS		L	0.25	% v/v	BD		2.5 ml/mx				
17	10 day before transplant						C			117	210	311
	WeatherMax	5.5	L	22	oz/a	BD		11.61 ml/mx				
18	10 day before transplant						C			118	208	310
	Non-treated											

Sort Order: Treatment

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Reps: 3                      Plots: 6 by 20 feet  
 Spray vol: 14.8 gal/ac      Mix size: 1 liters (min .46301)

Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Rate Stg	Grow Code	Appl to Measure	Amt Product 1	Plot No. 2	By Rep 3
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Product quantities required for listed treatments and applications in one trial:											
<b>Amount*</b>	<b>Unit</b>	<b>Treatment Name</b>	<b>Lot Code</b>								
5.693	g	Valor 51 DF									
174.198	ml	WeatherMax 5.5 L									
31.669	ml	Goal 4 F									
1.898	g	Sandea 75 DF									
63.338	ml	Gramoxone 2.5 L									
9.374	ml	NIS 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:** Evaluate the impact that time has on herbicides applied over mulch prior to transplanting.

Visual squash response:

1. Valor killed squash when applied 0 DBP (d before transplanting); caused 27 to 50% injury applied 5 or 10 DBP.
2. Goal caused 30 to 40% injury applied 0 DBP; caused less than 10% when applied 5 or 10 DBP.
3. Sandea caused up to 57% stunting applied 0 DBP, caused up to 30% stunting applied 5 or 10 DBP.
4. Gramoxone and WeatherMax only injured squash more than 5% when applied 0 DBP

Squash heights and biomass (5 or 10 plants measured per plot):

1. Main effects were highly significant and will be discussed.
2. Pooled over herbicide treatments, squash were 22% shorter with less biomass when herbicides were applied 0 DBP when compared to other herbicide application timings.
3. Pooled over application timing, surviving plants were shorter and had less biomass when treated with Valor or Sandea treatments when compared to the non-treated control.

Squash yields (averaged over 10 harvest dates):

1. Main effects were highly significant and will be discussed.
2. Less fruit were harvested when herbicides were applied 0 DBP when compared to other application timings.
3. Valor treatments reduced the number and weight of fruit harvested by 64 and 61%, respectively.
4. Sandea treatments reduced the number and weight of fruit harvested by 43 and 35%, respectively.

**GENERAL COMMENTS:**

1. 10 DBP = Aug 1; 5 DBP = Aug 5; 0 DBP = Aug 10.
2. Rainfall: Aug 1 = 0.1 in; Aug 6 = 1.95 in; Aug 15 = 1.45 in.

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**Cucumber response to herbicides applied overtop of plastic before planting.**

Trial ID: Veg48-05

Study Dir.: Stanley Culpepper

Location: Ponder (5161)

Investigator: Stanley Culpepper

Weed Code		squash	squash	squash	squash	plant 1	plant 2	plant 3	
Crop Code		injury	injury	injury	injury	squash	squash	squash	
Rating Data Type		percent	percent	percent	percent	ht	ht	ht	
Rating Unit						cm	cm	cm	
Rating Date		Aug-15-05	Aug-19-05	Aug-30-05	Sep-24-05	Aug-22-05	Aug-22-05	Aug-22-05	
Trt-Eval Interval		14 DA-A	18 DA-A	29 DA-A	54 DA-A	21 DA-A	21 DA-A	21 DA-A	
ARM Action Codes									
# Subsamples, Dec.									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	Unit	
		1	2	3	4	5	6	7	
1	0 day before transplant Valor WeatherMax	3 oz/a 22 oz/a	100	100	100	100	0	0	0
2	0 day before transplant Goal WeatherMax	1 pt/a 22 oz/a	40	30	33	33	11	6	7
3	0 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a	13	22	53	57	5	10	6
4	0 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v	35	10	18	17	8	11	9
5	0 day before transplant WeatherMax	22 oz/a	3	7	12	7	9	10	10
6	0 day before transplant Non-treated		0	0	0	0	10	6	11
7	5 day before transplant Valor WeatherMax	3 oz/a 22 oz/a	37	55	59	50	8	1	2
8	5 day before transplant Goal WeatherMax	1 pt/a 22 oz/a	3	0	7	8	9	14	13
9	5 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a	0	3	30	22	8	9	10
10	5 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v	0	3	3	5	8	11	13
11	5 day before transplant WeatherMax	22 oz/a	0	0	2	0	11	11	11
12	5 day before transplant Non-treated		0	0	0	0	12	12	11
13	10 day before transplant Valor WeatherMax	3 oz/a 22 oz/a	27	52	55	37	3	0	4
14	10 day before transplant Goal WeatherMax	1 pt/a 22 oz/a	3	0	3	3	14	13	12
15	10 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a	5	10	30	15	9	6	7
16	10 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v	0	0	0	0	10	11	12

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Weed Code					plant 1	plant 2	plant 3	
Crop Code	squash	squash	squash	squash	squash	squash	squash	
Rating Data Type	injury	injury	injury	injury	ht	ht	ht	
Rating Unit	percent	percent	percent	percent	cm	cm	cm	
Rating Date	Aug-15-05	Aug-19-05	Aug-30-05	Sep-24-05	Aug-22-05	Aug-22-05	Aug-22-05	
Trt-Eval Interval	14 DA-A	18 DA-A	29 DA-A	54 DA-A	21 DA-A	21 DA-A	21 DA-A	
ARM Action Codes								
# Subsamples, Dec.								
Trt No.	1	2	3	4	5	6	7	
Treatment Name								
Rate								
Unit								
17	10 day before transplant WeatherMax 22 oz/a	0	0	0	0	10	11	9
18	10 day before transplant Non-treated	0	0	0	0	8	12	11
LSD (P=.05)	10.9	12.3	11.0	13.3	6.4	4.7	4.9	
Standard Deviation	6.5	7.4	6.6	8.0	3.8	2.8	2.9	
CV	44.02	45.58	29.15	40.61	45.01	32.81	33.53	

Means followed by same letter do not significantly differ (P=.05, LSD)

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Weed Code	plant 4 squash	plant 5 squash	plant 6 squash	plant 7 squash	plant 8 squash	plant 9 squash	plant 10 squash
Crop Code							
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Aug-22-05	Aug-22-05	Aug-22-05	Aug-22-05	Aug-22-05	Aug-22-05	Aug-22-05
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A
ARM Action Codes							
# Subsamples, Dec.							
Trt Treatment							
No. Name							
Rate							
Unit							
	8	9	10	11	12	13	14
1 0 day before transplant Valor WeatherMax	0	0	0	0	0	0	0
2 0 day before transplant Goal WeatherMax	7	8	10	4	7	6	7
3 0 day before transplant Sanda WeatherMax	5	9	8	3	7	8	5
4 0 day before transplant Gramoxone NIS	10	10	7	11	9	9	9
5 0 day before transplant WeatherMax	6	6	9	10	10	6	9
6 0 day before transplant Non-treated	11	12	11	10	10	11	4
7 5 day before transplant Valor WeatherMax	6	9	5	5	3	4	4
8 5 day before transplant Goal WeatherMax	10	11	10	11	11	12	7
9 5 day before transplant Sanda WeatherMax	10	10	12	10	10	6	6
10 5 day before transplant Gramoxone NIS	11	11	11	11	7	7	7
11 5 day before transplant WeatherMax	10	11	10	8	3	5	6
12 5 day before transplant Non-treated	11	10	11	11	10	9	7
13 10 day before transplant Valor WeatherMax	6	9	3	6	4	6	6
14 10 day before transplant Goal WeatherMax	11	12	10	10	11	12	13
15 10 day before transplant Sanda WeatherMax	9	10	9	3	7	9	10
16 10 day before transplant Gramoxone NIS	11	11	11	15	9	11	12
17 10 day before transplant WeatherMax	11	9	9	9	10	10	8

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Weed Code	plant 4	plant 5	plant 6	plant 7	plant 8	plant 9	plant 10
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-22-05	Aug-22-05	Aug-22-05	Aug-22-05	Aug-22-05	Aug-22-05	Aug-22-05
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A	21 DA-A
ARM Action Codes							
# Subsamples, Dec.							
Trt Treatment							
No. Name	8	9	10	11	12	13	14
Rate Unit							
18 10 day before transplant	10	11	9	10	9	11	12
Non-treated							
LSD (P=.05)	5.5	5.3	4.2	5.6	5.3	6.0	6.9
Standard Deviation	3.3	3.2	2.5	3.4	3.2	3.6	4.1
CV	38.13	34.31	29.37	40.9	41.63	45.78	56.89

Means followed by same letter do not significantly differ (P=.05, LSD)

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Weed Code	Avg10pla	plant 1	plant 2	plant 3	plant 4	plant 5	Avg5plan	
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-22-05	Sep-06-05	Sep-06-05	Sep-06-05	Sep-06-05	Sep-06-05	Sep-06-05	
Trt-Eval Interval	21 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A	
ARM Action Codes	T2						T1	
# Subsamples, Dec.								
Trt Treatment	Rate	15	16	17	18	19	20	21
No. Name	Rate Unit							
1 0 day before transplant		0	0	0	0	0	0	0
Valor	3 oz/a							
WeatherMax	22 oz/a							
2 0 day before transplant		7	23	13	19	13	19	9
Goal	1 pt/a							
WeatherMax	22 oz/a							
3 0 day before transplant		7	15	14	4	11	11	6
Sandea	1 oz/a							
WeatherMax	22 oz/a							
4 0 day before transplant		9	17	19	17	22	12	9
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
5 0 day before transplant		9	22	26	14	14	23	10
WeatherMax	22 oz/a							
6 0 day before transplant		10	31	23	28	21	25	13
Non-treated								
7 5 day before transplant		5	14	23	15	14	0	7
Valor	3 oz/a							
WeatherMax	22 oz/a							
8 5 day before transplant		11	23	25	26	24	24	12
Goal	1 pt/a							
WeatherMax	22 oz/a							
9 5 day before transplant		9	17	17	18	17	20	9
Sandea	1 oz/a							
WeatherMax	22 oz/a							
10 5 day before transplant		10	22	22	24	22	23	11
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
11 5 day before transplant		9	30	33	27	29	28	15
WeatherMax	22 oz/a							
12 5 day before transplant		10	28	28	30	29	30	15
Non-treated								
13 10 day before transplant		5	6	14	17	15	9	6
Valor	3 oz/a							
WeatherMax	22 oz/a							
14 10 day before transplant		12	25	27	27	31	17	13
Goal	1 pt/a							
WeatherMax	22 oz/a							
15 10 day before transplant		8	25	16	22	19	15	10
Sandea	1 oz/a							
WeatherMax	22 oz/a							
16 10 day before transplant		11	32	31	30	26	30	15
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
17 10 day before transplant		10	27	28	27	29	29	14
WeatherMax	22 oz/a							

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Weed Code	Avg10pla	plant 1	plant 2	plant 3	plant 4	plant 5	Avg5plan
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-22-05	Sep-06-05	Sep-06-05	Sep-06-05	Sep-06-05	Sep-06-05	Sep-06-05
Trt-Eval Interval	21 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A	36 DA-A
ARM Action Codes	T2						T1
# Subsamples, Dec.							
Trt Treatment	Rate						
No. Name	Rate Unit	15	16	17	18	19	20
18 10 day before transplant		10	23	26	28	29	26
Non-treated							13
LSD (P=.05)	2.6	10.8	11.9	14.7	14.8	17.1	5.0
Standard Deviation	1.6	6.5	7.1	8.8	8.9	10.3	3.0
CV	18.94	30.57	33.26	42.52	43.9	54.26	29.2

Means followed by same letter do not significantly differ (P=.05, LSD)

Column 15: T2 =  $([C5]+[C6]+[C7]+[C8]+[C9]+[C10]+[C11]+[C12]+[C13]+[C14])/10$

Column 21: T1 =  $([C16]+[C17]+[C18]+[C19]+[C20])/10$

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Weed Code		biomass squash plant #/10ft	biomass squash plants wt gram/10f	biomass squash wt per plt gram/pla	harv 1 squash fruit #/5plant	har 1 squash fruit kg/5plan	harv 1 squash cull #/5plant	harv 1 squash cull kg/5plan		
Crop Code		Aug-31-05	Aug-31-05	Aug-31-05	Sep-05-05	Sep-05-05	Sep-05-05	Sep-05-05		
Rating Data Type		30 DA-A	30 DA-A	30 DA-A	35 DA-A	35 DA-A	35 DA-A	35 DA-A		
Rating Unit										
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	22	23	24	25	26	27	28
1	0 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		0	0	0	0	0	0	0
2	0 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		5	168	34	1	0	0	0
3	0 day before transplant Sandea WeatherMax	1 oz/a 22 oz/a		5	33	3	0	0	0	0
4	0 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		7	147	21	0	0	0	0
5	0 day before transplant WeatherMax	22 oz/a		6	152	24	0	0	0	0
6	0 day before transplant Non-treated			6	208	40	0	0	0	0
7	5 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		2	22	5	0	0	0	0
8	5 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		6	248	41	1	0	0	0
9	5 day before transplant Sandea WeatherMax	1 oz/a 22 oz/a		6	68	12	0	0	0	0
10	5 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		6	245	46	0	0	0	0
11	5 day before transplant WeatherMax	22 oz/a		5	270	53	0	0	0	0
12	5 day before transplant Non-treated			7	250	46	1	0	0	0
13	10 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		3	17	6	0	0	0	0
14	10 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		7	462	68	1	0	0	0
15	10 day before transplant Sandea WeatherMax	1 oz/a 22 oz/a		5	132	25	0	0	0	0
16	10 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		6	313	52	0	0	0	0
17	10 day before transplant WeatherMax	22 oz/a		6	245	42	1	0	0	0

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Weed Code	biomass	biomass	biomass	harv 1	har 1	harv 1	harv 1
Crop Code	squash	squash	squash	squash	squash	squash	squash
Rating Data Type	plant	plants wt	wt per plt	fruit	fruit	cull	cull
Rating Unit	#/10ft	gram/10f	gram/pla	#/5plant	kg/5plan	#/5plant	kg/5plan
Rating Date	Aug-31-05	Aug-31-05	Aug-31-05	Sep-05-05	Sep-05-05	Sep-05-05	Sep-05-05
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 Treatment	Rate						
No. Name	Rate Unit	22	23	24	25	26	27
18 10 day before transplant		6	218	33	1	0	0
Non-treated							
LSD (P=.05)		2.7	190.7	29.4	1.3	0.1	0.0
Standard Deviation		1.6	114.4	17.6	0.8	0.1	0.0
CV		30.62	64.37	57.53	225.57	228.83	0.0

Means followed by same letter do not significantly differ (P=.05, LSD)

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Weed Code	harv 2 squash fruit	harv 2 squash fruit	harv 2 squash cull	harv 2 squash cull	harv 3 squash fruit	harv 3 squash fruit	harv 3 squash cull	
Crop Code								
Rating Data Type	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	
Rating Unit								
Rating Date	Sep-07-05	Sep-07-05	Sep-07-05	Sep-07-05	Sep-09-05	Sep-09-05	Sep-09-05	
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 Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
No. Name	Rate Unit	29	30	31	32	33	34	35
1 0 day before transplant Valor WeatherMax	3 oz/a 22 oz/a	0	0	0	0	0	0	0
2 0 day before transplant Goal WeatherMax	1 pt/a 22 oz/a	1	0	0	0	1	0	0
3 0 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a	0	0	0	0	1	0	0
4 0 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v	0	0	0	0	1	0	0
5 0 day before transplant WeatherMax	22 oz/a	1	0	0	0	2	0	0
6 0 day before transplant Non-treated		1	0	0	0	2	0	0
7 5 day before transplant Valor WeatherMax	3 oz/a 22 oz/a	0	0	0	0	0	0	0
8 5 day before transplant Goal WeatherMax	1 pt/a 22 oz/a	1	0	0	0	3	0	0
9 5 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a	1	0	0	0	0	0	0
10 5 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v	1	0	0	0	1	0	0
11 5 day before transplant WeatherMax	22 oz/a	0	0	0	0	3	0	0
12 5 day before transplant Non-treated		2	0	0	0	3	0	0
13 10 day before transplant Valor WeatherMax	3 oz/a 22 oz/a	0	0	0	0	0	0	0
14 10 day before transplant Goal WeatherMax	1 pt/a 22 oz/a	2	0	0	0	3	0	0
15 10 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a	0	0	0	0	0	0	0
16 10 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v	2	0	0	0	4	0	0
17 10 day before transplant WeatherMax	22 oz/a	1	0	0	0	4	0	0

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Weed Code	harv 2	harv 2	harv 2	harv 2	harv 3	harv 3	harv 3
Crop Code	squash	squash	squash	squash	squash	squash	squash
Rating Data Type	fruit	fruit	cull	cull	fruit	fruit	cull
Rating Unit	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant
Rating Date	Sep-07-05	Sep-07-05	Sep-07-05	Sep-07-05	Sep-09-05	Sep-09-05	Sep-09-05
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 Treatment	Rate						
No. Name	Rate Unit	29	30	31	32	33	34
18 10 day before transplant		1	0	0	0	4	0
Non-treated							
LSD (P=.05)		1.8	0.2	0.0	0.0	2.9	0.2
Standard Deviation		1.1	0.1	0.0	0.0	1.7	0.1
CV		139.14	160.13	0.0	0.0	95.88	102.87

Means followed by same letter do not significantly differ (P=.05, LSD)

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# University of Georgia

Weed Code	harv 3 squash cull	harv 4 squash fruit	harv 4 squash fruit	harv 4 squash cull	harv 4 squash cull	harv 5 squash fruit	harv 5 squash fruit	
Crop Code								
Rating Data Type								
Rating Unit	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	
Rating Date	Sep-09-05	Sep-12-05	Sep-12-05	Sep-12-05	Sep-12-05	Sep-14-05	Sep-14-05	
Trt-Eval Interval	39 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	44 DA-A	44 DA-A	
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment	Rate	36	37	38	39	40	41	42
No. Name	Rate Unit							
1 0 day before transplant		0	0	0	0	0	0	0
Valor	3 oz/a							
WeatherMax	22 oz/a							
2 0 day before transplant		0	3	0	0	0	2	0
Goal	1 pt/a							
WeatherMax	22 oz/a							
3 0 day before transplant		0	0	0	0	0	0	0
Sandea	1 oz/a							
WeatherMax	22 oz/a							
4 0 day before transplant		0	2	0	0	0	2	0
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
5 0 day before transplant		0	4	0	0	0	2	0
WeatherMax	22 oz/a							
6 0 day before transplant		0	3	0	0	0	1	0
Non-treated								
7 5 day before transplant		0	1	0	0	0	0	0
Valor	3 oz/a							
WeatherMax	22 oz/a							
8 5 day before transplant		0	4	0	0	0	2	0
Goal	1 pt/a							
WeatherMax	22 oz/a							
9 5 day before transplant		0	2	0	0	0	1	0
Sandea	1 oz/a							
WeatherMax	22 oz/a							
10 5 day before transplant		0	5	1	0	0	2	0
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
11 5 day before transplant		0	5	0	0	0	1	0
WeatherMax	22 oz/a							
12 5 day before transplant		0	3	0	0	0	2	0
Non-treated								
13 10 day before transplant		0	2	0	0	0	1	0
Valor	3 oz/a							
WeatherMax	22 oz/a							
14 10 day before transplant		0	2	0	0	0	3	0
Goal	1 pt/a							
WeatherMax	22 oz/a							
15 10 day before transplant		0	3	0	0	0	1	1
Sandea	1 oz/a							
WeatherMax	22 oz/a							
16 10 day before transplant		0	3	0	0	0	3	1
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
17 10 day before transplant		0	4	0	0	0	3	0
WeatherMax	22 oz/a							

## University of Georgia

Weed Code	harv 3	harv 4	harv 4	harv 4	harv 4	harv 5	harv 5
Crop Code	squash	squash	squash	squash	squash	squash	squash
Rating Data Type	cull	fruit	fruit	cull	cull	fruit	fruit
Rating Unit	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan
Rating Date	Sep-09-05	Sep-12-05	Sep-12-05	Sep-12-05	Sep-12-05	Sep-14-05	Sep-14-05
Trt-Eval Interval	39 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	44 DA-A	44 DA-A
ARM Action Codes							
# Subsamples, Dec.							
Trt Treatment							
No. Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
	Unit						
18 10 day before transplant	36	37	38	39	40	41	42
Non-treated	0	4	0	0	0	2	0
LSD (P=.05)	0.0	2.7	0.3	0.4	0.1	2.8	0.6
Standard Deviation	0.0	1.6	0.2	0.2	0.0	1.7	0.3
CV	0.0	58.46	62.86	424.26	447.27	110.26	124.45

Means followed by same letter do not significantly differ (P=.05, LSD)

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# University of Georgia

Weed Code	harv 5 squash cull	harv 5 squash cull	harv 6 squash fruit	harv 6 squash fruit	harv 6 squash cull	harv 6 squash cull	harv 7 squash fruit		
Crop Code									
Rating Data Type									
Rating Unit	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant		
Rating Date	Sep-14-05	Sep-14-05	Sep-16-05	Sep-16-05	Sep-16-05	Sep-16-05	Sep-19-05		
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 Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
No. Name	Rate	Unit	43	44	45	46	47	48	49
1 0 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		0	0	0	0	0	0	0
2 0 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		0	0	3	0	0	0	8
3 0 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a		0	0	0	0	0	0	3
4 0 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		0	0	5	0	0	0	6
5 0 day before transplant WeatherMax	22 oz/a		0	0	5	0	0	0	7
6 0 day before transplant Non-treated			0	0	5	0	0	0	8
7 5 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		0	0	3	0	0	0	6
8 5 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		0	0	5	0	0	0	8
9 5 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a		0	0	2	1	0	0	5
10 5 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		0	0	4	0	0	0	8
11 5 day before transplant WeatherMax	22 oz/a		0	0	4	0	0	0	4
12 5 day before transplant Non-treated			0	0	4	0	0	0	9
13 10 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		0	0	2	0	0	0	6
14 10 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		0	0	6	1	0	0	9
15 10 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a		0	0	3	0	0	0	5
16 10 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		0	0	4	0	0	0	10
17 10 day before transplant WeatherMax	22 oz/a		0	0	6	1	0	0	6

## University of Georgia

Weed Code	harv 5	harv 5	harv 6	harv 6	harv 6	harv 6	harv 7
Crop Code	squash	squash	squash	squash	squash	squash	squash
Rating Data Type	cull	cull	fruit	fruit	cull	cull	fruit
Rating Unit	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant
Rating Date	Sep-14-05	Sep-14-05	Sep-16-05	Sep-16-05	Sep-16-05	Sep-16-05	Sep-19-05
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 Treatment							
No. Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
18 10 day before transplant	43	44	45	46	47	48	49
Non-treated	0	0	6	1	0	0	9
LSD (P=.05)	0.0	0.0	3.6	0.7	0.4	0.1	5.8
Standard Deviation	0.0	0.0	2.2	0.4	0.2	0.0	3.5
CV	0.0	0.0	58.9	95.02	424.26	426.24	52.4

Means followed by same letter do not significantly differ (P=.05, LSD)

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# University of Georgia

Weed Code	harv 7 squash fruit	harv 7 squash cull	harv 7 squash cull	harv 8 squash fruit	harv 8 squash fruit	harv 8 squash cull	harv 8 squash cull	
Crop Code	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	
Rating Data Type	Sep-19-05	Sep-19-05	Sep-19-05	Sep-21-05	Sep-21-05	Sep-21-05	Sep-21-05	
Rating Unit	49 DA-A	49 DA-A	49 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A	
Rating Date								
Trt-Eval Interval								
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment	Rate	50	51	52	53	54	55	56
No. Name	Rate Unit							
1 0 day before transplant		0	0	0	0	0	0	0
Valor	3 oz/a							
WeatherMax	22 oz/a							
2 0 day before transplant		1	0	0	4	0	0	0
Goal	1 pt/a							
WeatherMax	22 oz/a							
3 0 day before transplant		0	0	0	2	0	0	0
Sandea	1 oz/a							
WeatherMax	22 oz/a							
4 0 day before transplant		1	0	0	4	0	0	0
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
5 0 day before transplant		1	0	0	7	0	0	0
WeatherMax	22 oz/a							
6 0 day before transplant		1	0	0	5	0	0	0
Non-treated								
7 5 day before transplant		0	0	0	3	0	0	0
Valor	3 oz/a							
WeatherMax	22 oz/a							
8 5 day before transplant		1	0	0	5	0	0	0
Goal	1 pt/a							
WeatherMax	22 oz/a							
9 5 day before transplant		1	0	0	6	0	0	0
Sandea	1 oz/a							
WeatherMax	22 oz/a							
10 5 day before transplant		1	0	0	6	0	0	0
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
11 5 day before transplant		1	0	0	5	0	0	0
WeatherMax	22 oz/a							
12 5 day before transplant		1	0	0	4	0	0	0
Non-treated								
13 10 day before transplant		1	0	0	3	0	0	0
Valor	3 oz/a							
WeatherMax	22 oz/a							
14 10 day before transplant		1	0	0	4	0	0	0
Goal	1 pt/a							
WeatherMax	22 oz/a							
15 10 day before transplant		1	0	0	5	0	0	0
Sandea	1 oz/a							
WeatherMax	22 oz/a							
16 10 day before transplant		1	0	0	5	0	0	0
Gramoxone	2 pt/a							
NIS	0.25 % v/v							
17 10 day before transplant		1	0	0	6	0	0	0
WeatherMax	22 oz/a							

## University of Georgia

Weed Code	harv 7	harv 7	harv 7	harv 8	harv 8	harv 8	harv 8
Crop Code	squash	squash	squash	squash	squash	squash	squash
Rating Data Type	fruit	cull	cull	fruit	fruit	cull	cull
Rating Unit	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan
Rating Date	Sep-19-05	Sep-19-05	Sep-19-05	Sep-21-05	Sep-21-05	Sep-21-05	Sep-21-05
Trt-Eval Interval	49 DA-A	49 DA-A	49 DA-A	51 DA-A	51 DA-A	51 DA-A	51 DA-A
ARM Action Codes							
# Subsamples, Dec.							
Trt Treatment	Rate						
No. Name	Rate Unit	50	51	52	53	54	55
18 10 day before transplant		1	0	0	3	0	0
Non-treated							
LSD (P=.05)		0.6	0.4	0.1	3.7	0.3	0.4
Standard Deviation		0.4	0.2	0.0	2.2	0.2	0.2
CV		47.76	436.56	445.92	52.31	56.55	398.53
							480.64

Means followed by same letter do not significantly differ (P=.05, LSD)

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# University of Georgia

Weed Code	harv 9 squash fruit	harv 9 squash fruit	harv 9 squash cull	harv 9 squash cull	harv 10 squash fruit	harv 10 squash fruit	harv 10 squash cull			
Crop Code										
Rating Data Type										
Rating Unit	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant			
Rating Date	Sep-23-05	Sep-23-05	Sep-23-05	Sep-23-05	Sep-27-05	Sep-27-05	Sep-27-05			
Trt-Eval Interval	53 DA-A	53 DA-A	53 DA-A	53 DA-A	57 DA-A	57 DA-A	57 DA-A			
ARM Action Codes										
# Subsamples, Dec.										
Trt No.	Treatment Name	Rate	Unit	57	58	59	60	61	62	63
1	0 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		0	0	0	0	0	0	0
2	0 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		4	0	0	0	6	2	0
3	0 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a		3	0	0	0	4	1	0
4	0 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		3	0	0	0	6	2	0
5	0 day before transplant WeatherMax	22 oz/a		6	1	0	0	6	2	0
6	0 day before transplant Non-treated			3	0	0	0	6	2	0
7	5 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		3	0	0	0	4	1	0
8	5 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		5	1	0	0	8	2	0
9	5 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a		3	0	0	0	5	2	0
10	5 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		6	0	0	0	5	2	0
11	5 day before transplant WeatherMax	22 oz/a		4	0	0	0	3	1	0
12	5 day before transplant Non-treated			3	1	0	0	6	2	0
13	10 day before transplant Valor WeatherMax	3 oz/a 22 oz/a		1	0	0	0	6	2	0
14	10 day before transplant Goal WeatherMax	1 pt/a 22 oz/a		8	1	0	0	6	2	0
15	10 day before transplant Sanda WeatherMax	1 oz/a 22 oz/a		5	1	0	0	6	1	0
16	10 day before transplant Gramoxone NIS	2 pt/a 0.25 % v/v		4	0	0	0	6	2	0
17	10 day before transplant WeatherMax	22 oz/a		9	1	0	0	8	3	0

## University of Georgia

Weed Code	harv 9	harv 9	harv 9	harv 9	harv 10	harv 10	harv 10	
Crop Code	squash	squash	squash	squash	squash	squash	squash	
Rating Data Type	fruit	fruit	cull	cull	fruit	fruit	cull	
Rating Unit	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	kg/5plan	#/5plant	
Rating Date	Sep-23-05	Sep-23-05	Sep-23-05	Sep-23-05	Sep-27-05	Sep-27-05	Sep-27-05	
Trt-Eval Interval	53 DA-A	53 DA-A	53 DA-A	53 DA-A	57 DA-A	57 DA-A	57 DA-A	
ARM Action Codes								
# Subsamples, Dec.								
Trt Treatment	Rate							
No. Name	Rate Unit	57	58	59	60	61	62	63
18 10 day before transplant		4	1	0	0	7	2	0
Non-treated								
LSD (P=.05)		3.3	0.5	0.0	0.0	3.8	1.4	0.0
Standard Deviation		2.0	0.3	0.0	0.0	2.3	0.9	0.0
CV		47.76	61.57	0.0	0.0	42.3	48.77	0.0

Means followed by same letter do not significantly differ (P=.05, LSD)

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# University of Georgia

Weed Code			harv 10	Total10h	Total10h	
Crop Code			squash	squash	squash	
Rating Data Type			cull	fruit	fruit	
Rating Unit			kg/5plan	#/5plant	kg/5plan	
Rating Date			Sep-27-05	Sep-27-05	Sep-27-05	
Trt-Eval Interval			57 DA-A	57 DA-A	57 DA-A	
ARM Action Codes				T3	T4	
# Subsamples, Dec.					1	
Trt No.	Treatment Name	Rate	Unit	64	65	66
1	0 day before transplant			0	0	0.0
	Valor	3 oz/a				
	WeatherMax	22 oz/a				
2	0 day before transplant			0	32	5.2
	Goal	1 pt/a				
	WeatherMax	22 oz/a				
3	0 day before transplant			0	13	1.8
	Sandea	1 oz/a				
	WeatherMax	22 oz/a				
4	0 day before transplant			0	29	3.8
	Gramoxone	2 pt/a				
	NIS	0.25 % v/v				
5	0 day before transplant			0	40	5.6
	WeatherMax	22 oz/a				
6	0 day before transplant			0	35	5.0
	Non-treated					
7	5 day before transplant			0	21	2.7
	Valor	3 oz/a				
	WeatherMax	22 oz/a				
8	5 day before transplant			0	41	5.9
	Goal	1 pt/a				
	WeatherMax	22 oz/a				
9	5 day before transplant			0	26	4.5
	Sandea	1 oz/a				
	WeatherMax	22 oz/a				
10	5 day before transplant			0	39	4.9
	Gramoxone	2 pt/a				
	NIS	0.25 % v/v				
11	5 day before transplant			0	30	3.8
	WeatherMax	22 oz/a				
12	5 day before transplant			0	38	5.7
	Non-treated					
13	10 day before transplant			0	20	3.6
	Valor	3 oz/a				
	WeatherMax	22 oz/a				
14	10 day before transplant			0	44	6.1
	Goal	1 pt/a				
	WeatherMax	22 oz/a				
15	10 day before transplant			0	28	4.1
	Sandea	1 oz/a				
	WeatherMax	22 oz/a				
16	10 day before transplant			0	41	5.5
	Gramoxone	2 pt/a				
	NIS	0.25 % v/v				
17	10 day before transplant			0	48	6.7
	WeatherMax	22 oz/a				

## University of Georgia

Weed Code	harv 10	Total10h	Total10h
Crop Code	squash	squash	squash
Rating Data Type	cull	fruit	fruit
Rating Unit	kg/5plan	#/5plant	kg/5plan
Rating Date	Sep-27-05	Sep-27-05	Sep-27-05
Trt-Eval Interval	57 DA-A	57 DA-A	57 DA-A
ARM Action Codes		T3	T4
# Subsamples, Dec.			1
Trt Treatment	Rate		
No. Name	Rate Unit	64	65
18 10 day before transplant		0	40
Non-treated			5.5
LSD (P=.05)	0.0	19.2	3.16
Standard Deviation	0.0	11.5	1.90
CV	0.0	36.69	42.57

Means followed by same letter do not significantly differ (P=.05, LSD)

Column 65: T3 = [C25]+[C29]+[C33]+[C37]+[C41]+[C45]+[C49]+[C53]+[C57]+[C61]

Column 66: T4 = [C26]+[C30]+[C34]+[C38]+[C42]+[C46]+[C50]+[C54]+[C58]+[C62]

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# University of Georgia

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

**SOIL DESCRIPTION**

% Sand: 94      % OM: 1.1      Texture: loamy sand  
 % Silt: 2        pH: 6.4        Soil Name: \_\_\_\_\_  
 % Clay: 4        CEC: \_\_\_\_\_ Fert. Level: \_\_\_\_\_

**ADDITIONAL MEASURED ELEMENTS**

Element	Quantity	Unit

**MOISTURE CONDITIONS**

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: drip

Closest Weather Station: \_\_\_\_\_ Distance: \_\_\_\_\_ Unit: \_\_\_\_

**APPLICATION DESCRIPTION**

	A	B	C
Application Date:	Aug-01-05	Aug-05-05	Aug-10-05
Time of Day:	11 am	10 am	10 am
Application Method:	broadcast	broadcast	broadcast
Application Timing:	10 DBP	5 DBP	0 DBP
Applic. Placement:	over plas	over plas	over pla
Air Temp., Unit:	86 F	78 F	84 F
% Relative Humidity:	60	72	56
Wind Velocity, Unit:	0 mph	0 mph	0 mph
Dew Presence (Y/N):	n	n	n
Water Hardness:			
Soil Temp., Unit:	88 F	88 F	89 F
Soil Moisture:	drip	drip	drip
% Cloud Cover:	0	0	0

**CROP STAGE AT EACH APPLICATION**

	A	B	C
Crop 1 Code, Stage:	CUUPE preplant	CUUPE preplant	CUUPE preplant
Stage Scale:	pre-trans	pre-trans	pre-trans
Height, Unit:	0 in	0 in	0 in

**WEED STAGE AT EACH APPLICATION**

	A	B	C
Weed 1 Code, Stage:	none preplant	none preplant	none preplant
Stage Scale:	weed free	weed free	weed free
Density, Unit:	0 ydsq	0 ydsq	0 ydsq



# University of Georgia

## APPLICATION EQUIPMENT

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

Trt No	Treatment Application Comment