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Carrot response to Goal 2XL, Goal Tender, and Dual Magnum.

Trial ID: Veg1-06

Study Dir.: Andrew MacRae

Location: Ponder farm

Investigator: Stanley Culpepper

Reps: 4

Plots: 6 by 20 feet

Spray vol: 14.8 gal/ac

Mix size: 1 liters (min .61734)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Grow Stg	Appl Code	Amt Product to Measure	Plot No. By Rep			
									1	2	3	4
1	None								101	208	304	405
2	Goal 2 XL	2 L	0.125	LB A/A	PRE	A	4.223 ml/mx		102	209	303	406
3	Goal Tender	4 L	0.125	LB A/A	PRE	A	2.111 ml/mx		103	207	308	409
4	Goal 2 XL	2 L	0.25	LB A/A	PRE	A	8.445 ml/mx		104	206	310	404
5	Goal Tender	4 L	0.25	LB A/A	PRE	A	4.223 ml/mx		105	210	311	410
6	Goal 2 XL	2 L	0.125	LB A/A	POST	B	4.223 ml/mx		106	211	312	402
7	Goal Tender	4 L	0.125	LB A/A	POST	B	2.111 ml/mx		107	205	301	412
8	Goal 2 XL	2 L	0.25	LB A/A	POST	B	8.445 ml/mx		108	203	307	408
9	Goal Tender	4 L	0.25	LB A/A	POST	B	4.223 ml/mx		109	202	309	411
10	Dual Magnum	7.64 L	0.95	LB A/A	PRE	A	8.401 ml/mx		110	212	302	401
11	Dual Magnum	7.64 L	1.24	LB A/A	PRE	A	10.97 ml/mx		111	204	305	403
12	Dual Magnum	7.64 L	1.24	LB A/A	POST	B	10.97 ml/mx		112	201	306	407

Sort Order: Treatment

Product quantities required for listed treatments and applications in one trial:

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
31.669	ml	Goal 2 XL	2	L	
15.834	ml	Goal Tender	4	L	
37.914	ml	Dual Magnum	7.64	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.

Trial Comments

OBJECTIVE: Evaluate potential use of Goal Tender, Goal 2 XL, and Dual Magnum in seeded carrots.

Visual Carrot Response:

- Both carrot cultivars responded similarly to herbicide treatments.
- Little to no differences were noted when comparing Goal Tender and Goal 2 XL.
- At 12 DAT, Goal PRE at 0.125 lb caused up to 20% stunting but little injury was noted by 18 DAT.
- Much more injury was noted with 0.25 lb of Goal causing up to 28% at 18 DAT.
- Goal applied POST caused a quick initial burn but carrots recovered quickly (similar to what is seen in onion).
- At 12 DAT, Dual Magnum PRE stunted carrots up to 20% but carrots recovered very quickly. A lower use rate of Dual Magnum would likely be very effective in carrots (0.475 to 0.61 lb A/A should be studied).
- Dual Magnum POST caused significant and unacceptable injury and should not be used in carrots.

Plant Heights (15 plants per plot were measured 4 different times for the Navajo cultivar):

- Goal applied PRE at 0.25 lb and Dual Magnum POST generally reduced plant heights at 48 DAP; Goal 2 XL POST at 0.25 lb A/A tended to reduce plant heights at this time as well.
- At 61 DAP, Goal PRE at 0.25 lb reduced plant stands up to 34% while Dual Magnum POST reduced heights up to 23%.
- By 77 DAP, no treatment statistically impacted carrot heights but trends were still similar to those noted earlier in the season.

Plant Yield (Only Navajo carrot were harvested):

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1. Yields were variable as always, but carrot weight was less with Goal 0.25 lb PRE compared to all other treatments.

GENERAL COMMENTS:

1. Plots were maintained weed free.
2. Since cultivars responded similarly to herbicide, the Navajo cultivar was only measured for height and yield.

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Carrot response to Goal 2XL, Goal Tender, and Dual Magnum.

Trial ID: Veg1-06

Study Dir.: Andrew MacRae

Location: Ponder farm

Investigator: Stanley Culpepper

Weed Code	Navajo DAUCS	Sugar DAUCS	both cul DAUCS	both cul DAUCS	both cul DAUCS	both cul DAUCS	plant 1 DAUCS	plant 2 DAUCS		
Crop Code										
Rating Data Type	injury	injury	injury	injury	injury	injury	ht	ht		
Rating Unit	percent	percent	percent	percent	percent	percent	cm	cm		
Rating Date	Sep-27-05	Sep-27-05	Oct-03-05	Oct-10-05	Oct-16-05	Nov-01-05	Oct-11-05	Oct-11-05		
Crop Stage										
Assessed By	AM	AM	SC	SC	SC	SC				
Trt-Eval Interval	12 DA-A	12 DA-A	18 DA-A	25 DA-A	31 DA-A	46 DA-A	26 DA-A	26 DA-A		
ARM Action Codes										
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
		Unit								
			1	2	3	4	5	6	7	8
1	None		0 c	0 d	0 d	0 b	0 e	0 d	10 ab	11 abc
2	Goal 2 XL	0.125 LB A/A	20 b	15 bc	1 d	6 b	3 de	1 d	9 abc	8 cd
3	Goal Tender	0.125 LB A/A	13 b	10 c	2 cd	0 b	4 de	0 d	10 ab	11 ab
4	Goal 2 XL	0.25 LB A/A	35 a	28 a	23 a	28 a	14 ab	14 b	8 bc	8 cd
5	Goal Tender	0.25 LB A/A	33 a	20 b	22 a	28 a	14 ab	12 bc	5 c	5 d
6	Goal 2 XL	0.125 LB A/A	0 c	0 d	0 d	0 b	17 ab	4 d	12 ab	9 abc
7	Goal Tender	0.125 LB A/A	0 c	0 d	0 d	0 b	11 bc	5 cd	10 ab	12 a
8	Goal 2 XL	0.25 LB A/A	0 c	0 d	0 d	1 b	18 a	7 cd	9 abc	9 bc
9	Goal Tender	0.25 LB A/A	0 c	0 d	0 d	1 b	13 ab	5 cd	11 ab	10 abc
10	Dual Magnum	0.95 LB A/A	18 b	13 bc	7 bc	5 b	2 de	1 d	9 abc	8 bcd
11	Dual Magnum	1.24 LB A/A	20 b	18 bc	9 b	6 b	4 de	6 cd	9 abc	8 bcd
12	Dual Magnum	1.24 LB A/A	0 c	0 d	0 d	0 b	7 cd	29 a	12 a	10 abc
LSD (P=.05)			10.0	7.5	5.4	15.7	5.5	6.1	3.5	2.8
Standard Deviation			6.9	5.2	3.7	10.8	3.8	4.2	2.4	2.0
CV			60.49	60.64	71.7	170.6	42.76	61.24	25.73	21.94
Bartlett's X2			10.192	2.436	10.424	28.104	20.104	11.999	14.366	13.997
P(Bartlett's X2)			0.07	0.656	0.064	0.001*	0.028*	0.213	0.213	0.233

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

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Weed Code	plant 3	plant 4	plant 5	plant 6	plant 7	plant 8	plant 9	plant 10			
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS			
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05			
Crop Stage											
Assessed By											
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A			
ARM Action Codes											
Trt No.	Treatment Name	Rate	Rate Unit	9	10	11	12	13	14	15	16
1	None			11 a	9 ab	9 ab	9 ab	9 a	9 abc	9 ab	9 abc
2	Goal 2 XL	0.125	LB A/A	9 ab	11 a	11 a	10 ab	9 a	9 abc	8 ab	10 ab
3	Goal Tender	0.125	LB A/A	11 a	10 ab	9 ab	11 a	10 a	9 abc	12 a	10 ab
4	Goal 2 XL	0.25	LB A/A	6 b	6 c	7 b	6 b	5 b	5 c	4 c	4 d
5	Goal Tender	0.25	LB A/A	6 b	7 bc	7 b	7 ab	7 ab	5 c	6 bc	5 cd
6	Goal 2 XL	0.125	LB A/A	9 ab	10 ab	10 ab	11 a	11 a	11 ab	11 a	11 ab
7	Goal Tender	0.125	LB A/A	11 a	9 ab	11 a	10 ab	11 a	12 a	12 a	10 ab
8	Goal 2 XL	0.25	LB A/A	9 ab	10 ab	9 ab	9 ab	10 a	9 abc	12 a	10 ab
9	Goal Tender	0.25	LB A/A	9 ab	10 ab	11 a	10 ab	10 a	11 ab	11 a	11 a
10	Dual Magnum	0.95	LB A/A	8 ab	10 ab	10 a	10 ab	10 a	7 bc	8 ab	8 bc
11	Dual Magnum	1.24	LB A/A	8 ab	8 bc	9 ab	8 ab	7 ab	9 abc	9 ab	9 ab
12	Dual Magnum	1.24	LB A/A	11 a	9 ab	11 a	9 ab	8 ab	10 ab	11 a	11 ab
LSD (P=.05)				2.8	2.6	3.0	3.3	3.8	4.1	3.9	3.1
Standard Deviation				2.0	1.8	2.1	2.3	2.6	2.8	2.7	2.2
CV				22.25	19.96	22.42	25.39	30.18	32.17	29.41	23.96
Bartlett's X2				8.858	10.817	16.984	19.44	27.784	19.67	10.977	17.407
P(Bartlett's X2)				0.635	0.372	0.108	0.054	0.003*	0.05	0.445	0.096

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

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Weed Code	plant 11	plant 12	plant 13	plant 14	plant 15	AVG15pla	plant 1	plant 2
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm
Rating Date	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05	Oct-11-05	Nov-02-05	Nov-02-05
Crop Stage								
Assessed By								
Trt-Eval Interval	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A	26 DA-A	48 DA-A	48 DA-A
ARM Action Codes						T1		
Trt Treatment	Rate							
No. Name	Rate Unit	17	18	19	20	21	22	23
1 None		10 a	9 abc	7 ab	10 a	11 a	9 ab	18 a
2 Goal 2 XL	0.125 LB A/A	9 a	9 abc	11 a	10 a	11 a	9 ab	18 a
3 Goal Tender	0.125 LB A/A	11 a	11 a	9 ab	10 a	10 a	10 ab	19 a
4 Goal 2 XL	0.25 LB A/A	5 b	6 bc	7 ab	5 b	5 b	6 c	15 ab
5 Goal Tender	0.25 LB A/A	5 b	6 c	6 b	5 b	5 b	6 c	14 ab
6 Goal 2 XL	0.125 LB A/A	12 a	11 a	10 a	10 a	8 ab	10 ab	18 a
7 Goal Tender	0.125 LB A/A	12 a	10 abc	10 ab	10 a	11 a	11 a	16 ab
8 Goal 2 XL	0.25 LB A/A	10 a	10 abc	10 ab	10 a	9 ab	10 ab	12 ab
9 Goal Tender	0.25 LB A/A	11 a	11 a	9 ab	10 a	11 a	10 ab	16 ab
10 Dual Magnum	0.95 LB A/A	9 a	10 ab	9 ab	10 a	9 ab	9 ab	15 ab
11 Dual Magnum	1.24 LB A/A	9 a	10 abc	9 ab	9 a	8 ab	9 b	16 ab
12 Dual Magnum	1.24 LB A/A	11 a	11 a	11 a	12 a	12 a	10 ab	8 b
LSD (P=.05)		3.6	3.8	3.9	3.6	3.9	1.8	7.0
Standard Deviation		2.5	2.6	2.7	2.5	2.7	1.2	4.8
CV		26.67	28.26	30.57	27.25	30.26	13.6	31.79
Bartlett's X2		14.817	18.689	13.836	19.678	23.238	18.612	19.719
P(Bartlett's X2)		0.191	0.067	0.242	0.05*	0.016*	0.068	0.049*

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

Column 22: T1 = ([C7]+[C8]+[C9]+[C10]+[C11]+[C12]+[C13]+[C14]+[C15]+[C16]+[C17]+[C18]+[C19]+[C20]+[C21])/15

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Weed Code	plant 3	plant 4	plant 5	plant 6	plant 7	plant 8	plant 9	plant 10		
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS		
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht		
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm		
Rating Date	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05		
Crop Stage										
Assessed By										
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A		
ARM Action Codes										
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
		Unit	Unit	Unit	Unit	Unit	Unit	Unit		
		25	26	27	28	29	30	31		
		32								
1	None	20 a	17 ab	15 abc	14 a-d	17 ab	18 a	15 abc	17 a	
2	Goal 2 XL	0.125 LB A/A	16 abc	18 a	19 ab	17 abc	17 ab	17 ab	18 abc	19 a
3	Goal Tender	0.125 LB A/A	20 ab	19 a	21 a	20 a	20 a	21 a	23 a	20 a
4	Goal 2 XL	0.25 LB A/A	14 abc	12 bcd	13 bcd	10 cd	10 cd	10 cd	13 bc	12 ab
5	Goal Tender	0.25 LB A/A	13 bc	13 a-d	11 cd	13 bcd	13 bc	12 bc	11 c	10 b
6	Goal 2 XL	0.125 LB A/A	18 ab	17 ab	16 abc	15 a-d	16 abc	15 ab	18 abc	17 ab
7	Goal Tender	0.125 LB A/A	20 ab	19 a	19 ab	19 ab	20 a	20 a	20 ab	19 a
8	Goal 2 XL	0.25 LB A/A	13 bc	10 cd	15 abc	15 a-d	13 bc	15 ab	13 bc	15 ab
9	Goal Tender	0.25 LB A/A	17 ab	18 ab	16 abc	14 a-d	16 ab	16 ab	16 abc	16 ab
10	Dual Magnum	0.95 LB A/A	17 ab	14 abc	17 abc	18 ab	20 a	18 ab	17 abc	15 ab
11	Dual Magnum	1.24 LB A/A	16 abc	14 a-d	14 bcd	14 a-d	15 abc	18 a	17 abc	17 ab
12	Dual Magnum	1.24 LB A/A	10 c	8 d	8 d	9 d	7 d	6 d	11 c	12 ab
LSD (P=.05)		5.9	5.7	6.0	6.1	5.2	5.0	7.3	6.5	
Standard Deviation		4.1	3.9	4.1	4.3	3.6	3.5	5.0	4.5	
CV		25.03	26.59	27.34	28.78	23.73	22.67	31.56	28.76	
Bartlett's X2		20.014	7.936	16.668	8.546	4.987	10.793	32.179	21.653	
P(Bartlett's X2)		0.045*	0.719	0.118	0.664	0.932	0.461	0.001*	0.027*	

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

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Weed Code	plant 11	plant 12	plant 13	plant 14	plant 15	AVG15pla	plant 1	plant 2		
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS		
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht		
Rating Unit	cm	cm	cm	15	cm	cm	cm	cm		
Rating Date	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05	Nov-02-05	Nov-15-05	Nov-15-05		
Crop Stage										
Assessed By										
Trt-Eval Interval	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	48 DA-A	61 DA-A	61 DA-A		
ARM Action Codes						T2				
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
		Unit	Unit	Unit	Unit	Unit	Unit	Unit		
		33	34	35	36	37	38	39		
		40								
1	None		16 ab	19 a	16 ab	16 abc	17 ab	17 ab	27 a	28 a
2	Goal 2 XL	0.125 LB A/A	21 a	19 a	16 ab	15 abc	18 a	18 ab	23 a	26 ab
3	Goal Tender	0.125 LB A/A	17 ab	19 a	20 a	20 a	18 ab	20 a	27 a	28 ab
4	Goal 2 XL	0.25 LB A/A	12 b	10 b	8 c	10 c	10 b	11 c	21 a	21 bc
5	Goal Tender	0.25 LB A/A	11 b	9 b	11 bc	10 c	11 ab	12 c	20 a	17 c
6	Goal 2 XL	0.125 LB A/A	17 ab	18 a	16 ab	15 abc	19 a	17 ab	24 a	26 ab
7	Goal Tender	0.125 LB A/A	18 ab	20 a	17 ab	19 a	18 a	19 a	25 a	25 ab
8	Goal 2 XL	0.25 LB A/A	16 ab	14 ab	18 ab	13 abc	15 ab	14 bc	23 a	23 abc
9	Goal Tender	0.25 LB A/A	18 ab	17 a	16 ab	15 abc	16 ab	16 ab	22 a	25 ab
10	Dual Magnum	0.95 LB A/A	18 ab	17 a	15 ab	18 ab	18 ab	17 ab	26 a	25 ab
11	Dual Magnum	1.24 LB A/A	18 ab	18 a	16 ab	17 abc	15 ab	16 ab	27 a	26 ab
12	Dual Magnum	1.24 LB A/A	12 b	9 b	13 abc	11 bc	12 ab	10 c	19 a	21 abc
LSD (P=.05)			6.9	6.4	6.0	6.7	7.2	4.0	8.0	6.0
Standard Deviation			4.8	4.4	4.1	4.6	5.0	2.8	5.6	4.2
CV			29.67	28.55	27.57	31.28	32.28	17.92	23.72	17.3
Bartlett's X2			14.045	27.154	13.248	11.886	9.684	10.621	16.852	7.926
P(Bartlett's X2)			0.23	0.004*	0.277	0.372	0.559	0.476	0.112	0.72

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

Column 38: T2 = ((C23)+[C24]+[C25]+[C26]+[C27]+[C28]+[C29]+[C30]+[C31]+[C32]+[C33]+[C34]+[C35]+[C36]+[C37])/15

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Weed Code	plant 3	plant 4	plant 5	plant 6	plant 7	plant 8	plant 9	plant 10		
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS		
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht		
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm		
Rating Date	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05		
Crop Stage										
Assessed By										
Trt-Eval Interval	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A		
ARM Action Codes										
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
		Unit	Unit	Unit	Unit	Unit	Unit	Unit		
		41	42	43	44	45	46	47		
		48								
1	None	28 a	27 a	26 a	26 abc	25 abc	27 a	25 ab	28 a	
2	Goal 2 XL	0.125 LB A/A	27 ab	27 a	26 ab	26 abc	23 a-d	27 a	27 a	27 a
3	Goal Tender	0.125 LB A/A	28 a	27 a	28 a	29 ab	26 ab	28 a	27 a	25 a
4	Goal 2 XL	0.25 LB A/A	20 c	18 d	15 d	18 d	17 d	18 c	19 bc	22 ab
5	Goal Tender	0.25 LB A/A	20 c	17 d	20 bcd	22 cd	21 bcd	19 bc	18 c	17 b
6	Goal 2 XL	0.125 LB A/A	26 ab	24 abc	25 abc	25 a-d	24 abc	25 ab	26 a	26 a
7	Goal Tender	0.125 LB A/A	27 ab	27 a	29 a	30 a	29 a	25 ab	25 ab	24 a
8	Goal 2 XL	0.25 LB A/A	21 bc	21 bcd	19 cd	23 bcd	26 ab	24 ab	25 ab	22 ab
9	Goal Tender	0.25 LB A/A	27 a	27 a	25 abc	27 abc	27 ab	27 a	25 ab	25 a
10	Dual Magnum	0.95 LB A/A	25 abc	25 ab	26 ab	26 abc	28 ab	27 a	27 a	26 a
11	Dual Magnum	1.24 LB A/A	25 abc	25 abc	25 ab	23 bcd	25 abc	26 ab	27 a	26 a
12	Dual Magnum	1.24 LB A/A	20 c	19 cd	20 bcd	21 cd	18 cd	20 bc	22 abc	22 ab
LSD (P=.05)		5.0	5.4	5.3	6.1	6.5	5.8	5.6	5.8	
Standard Deviation		3.5	3.7	3.7	4.2	4.5	4.0	3.9	4.0	
CV		14.2	15.79	15.61	17.18	18.7	16.53	16.08	16.52	
Bartlett's X2		6.407	8.552	10.121	11.707	8.004	4.188	4.354	9.655	
P(Bartlett's X2)		0.845	0.663	0.52	0.386	0.713	0.964	0.958	0.562	

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

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Weed Code	plant 11	plant 12	plant 13	plant 14	plant 15	AVG15pla	plant 1	plant 2
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm
Rating Date	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05	Nov-15-05	Dec-01-05	Dec-01-05
Crop Stage								
Assessed By								
Trt-Eval Interval	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A	61 DA-A	77 DA-A	77 DA-A
ARM Action Codes						T3		
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit	Unit
		49	50	51	52	53	54	55
1	None							
2	Goal 2 XL	0.125 LB A/A						
3	Goal Tender	0.125 LB A/A						
4	Goal 2 XL	0.25 LB A/A						
5	Goal Tender	0.25 LB A/A						
6	Goal 2 XL	0.125 LB A/A						
7	Goal Tender	0.125 LB A/A						
8	Goal 2 XL	0.25 LB A/A						
9	Goal Tender	0.25 LB A/A						
10	Dual Magnum	0.95 LB A/A						
11	Dual Magnum	1.24 LB A/A						
12	Dual Magnum	1.24 LB A/A						
LSD (P=.05)		5.4	6.6	9.1	6.5	5.4	3.0	4.7
Standard Deviation		3.7	4.6	6.3	4.5	3.8	2.1	3.3
CV		14.93	18.46	26.91	21.11	18.2	8.9	10.11
Bartlett's X2		15.669	10.911	20.135	20.224	10.837	6.194	4.111
P(Bartlett's X2)		0.154	0.451	0.044*	0.027*	0.287	0.86	0.967

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

Column 54: T3 = ((C39)+[C40]+[C41]+[C42]+[C43]+[C44]+[C45]+[C46]+[C47]+[C48]+[C49]+[C50]+[C51]+[C52]+[C53])/15

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Weed Code	plant 3	plant 4	plant 5	plant 6	plant 7	plant 8	plant 9	plant 10		
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS		
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht		
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm		
Rating Date	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05		
Crop Stage										
Assessed By										
Trt-Eval Interval	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A		
ARM Action Codes										
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
		Unit	Unit	Unit	Unit	Unit	Unit	Unit		
		57	58	59	60	61	62	63		
1	None		31 abc	29 abc	32 abc	33 ab	30 abc	32 ab	32 ab	32 a
2	Goal 2 XL	0.125 LB A/A	33 ab	31 abc	32 abc	32 ab	33 ab	30 ab	31 ab	33 a
3	Goal Tender	0.125 LB A/A	36 a	35 a	36 a	36 a	35 a	36 ab	30 abc	33 a
4	Goal 2 XL	0.25 LB A/A	26 c	28 c	28 bc	27 bc	25 bc	74 a	24 c	23 b
5	Goal Tender	0.25 LB A/A	29 bc	29 bc	26 c	23 c	24 c	21 b	26 bc	27 ab
6	Goal 2 XL	0.125 LB A/A	29 bc	31 abc	32 abc	32 ab	32 abc	31 ab	29 abc	31 a
7	Goal Tender	0.125 LB A/A	33 ab	34 ab	34 ab	34 ab	32 abc	30 ab	35 a	34 a
8	Goal 2 XL	0.25 LB A/A	32 ab	31 abc	34 ab	29 abc	27 abc	29 ab	30 abc	33 a
9	Goal Tender	0.25 LB A/A	33 ab	32 abc	34 ab	31 ab	32 abc	33 ab	34 a	30 a
10	Dual Magnum	0.95 LB A/A	32 ab	34 ab	32 abc	32 ab	33 ab	33 ab	34 a	34 a
11	Dual Magnum	1.24 LB A/A	27 bc	30 abc	30 abc	31 ab	31 abc	33 ab	32 ab	30 a
12	Dual Magnum	1.24 LB A/A	28 bc	29 bc	29 bc	29 abc	28 abc	29 ab	28 abc	27 ab
LSD (P=.05)			5.0	4.9	5.4	7.0	7.1	42.0	5.8	6.3
Standard Deviation			3.5	3.4	3.8	4.8	4.9	29.1	4.0	4.4
CV			11.37	10.9	11.94	15.79	16.34	85.14	13.27	14.37
Bartlett's X2			10.986	13.656	9.82	35.058	6.515	111.168	6.224	12.676
P(Bartlett's X2)			0.444	0.253	0.547	0.001*	0.837	0.001*	0.858	0.315

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

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Weed Code	plant 11	plant 12	plant 13	plant 14	plant 15	AVG15pla	DAUCS	DAUCS	
Crop Code	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	DAUCS	
Rating Data Type	ht	ht	ht	ht	ht	15 plt av	fruit	wt	
Rating Unit	cm	cm	cm	cm	cm	cm	#/5ft	lb/5ft	
Rating Date	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05	Dec-01-05	Dec-07-05	Dec-07-05	
Crop Stage							Navajo	Navajo	
Assessed By									
Trt-Eval Interval	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A	77 DA-A	
ARM Action Codes						T4			
Trt Treatment	Rate								
No. Name	Rate Unit	65	66	67	68	69	70	71	72
1 None		31 a	34 a	33 a	32 a	31 a	32 abc	53 a	2 b-e
2 Goal 2 XL	0.125 LB A/A	30 a	34 a	32 a	32 a	33 a	32 abc	48 ab	2 abc
3 Goal Tender	0.125 LB A/A	33 a	34 a	35 a	34 a	38 a	34 a	49 ab	2 a
4 Goal 2 XL	0.25 LB A/A	23 b	22 d	18 b	18 b	18 b	28 bc	37 b	1 de
5 Goal Tender	0.25 LB A/A	28 ab	26 cd	25 ab	28 a	30 a	27 c	44 ab	1 e
6 Goal 2 XL	0.125 LB A/A	32 a	31 abc	32 a	33 a	30 a	31 abc	46 ab	2 abc
7 Goal Tender	0.125 LB A/A	31 a	33 ab	32 a	30 a	33 a	33 abc	51 ab	2 a-d
8 Goal 2 XL	0.25 LB A/A	30 a	33 ab	33 a	33 a	33 a	31 abc	50 ab	2 abc
9 Goal Tender	0.25 LB A/A	32 a	30 abc	30 a	31 a	33 a	32 abc	47 ab	2 abc
10 Dual Magnum	0.95 LB A/A	33 a	30 abc	30 a	33 a	35 a	33 ab	47 ab	2 ab
11 Dual Magnum	1.24 LB A/A	31 a	34 a	32 a	33 a	33 a	31 abc	49 ab	2 abc
12 Dual Magnum	1.24 LB A/A	29 ab	27 bcd	29 a	31 a	29 a	29 abc	52 a	2 cde
LSD (P=.05)		6.3	5.6	8.1	7.5	8.1	5.2	12.6	0.4
Standard Deviation		4.4	3.9	5.6	5.2	5.6	3.6	8.8	0.3
CV		14.55	12.78	18.81	17.08	17.91	11.6	18.4	14.42
Bartlett's X2		9.604	10.515	19.966	22.156	28.722	21.95	22.309	4.72
P(Bartlett's X2)		0.566	0.485	0.046*	0.023*	0.003*	0.025*	0.022*	0.944

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

Column 70: T4 = ((C55)+[C56]+[C57]+[C58]+[C59]+[C60]+[C61]+[C62]+[C63]+[C64]+[C65]+[C66]+[C67]+[C68]+[C69])/15

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Carrot response to Goal 2XL, Goal Tender, and Dual Magnum.

Trial ID: Veg1-06

Study Dir.: Andrew MacRae

Location: Ponder farm

Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Andrew MacRae

Title: POST DOC

Affiliation: Univ. of Georgia

Postal Code: 31794

Investigator: Stanley Culpepper

Title: Ext. Weed Science

Affiliation: Univ. of Georgia

Postal Code: 31794

TRIAL LOCATION

City: TyTy

Trial Status: completed

State/Prov.: GA

Trial Reliability: good

Postal Code: 31794

Initiation Date: Sep-14-05

Country: USA

Planned Completion Date: _____

E-Longitude of LL Corner °: _____

N-Latitude of LL Corner °: _____

Altitude of LL Corner: _____ Unit: _____ Angle y-axis to North °: _____

Directions:

COOPERATOR/LANDOWNER

Cooperator: _____

Country: _____

Org: _____

Phone No: _____

Address 1: _____

Fax No: _____

Address 2: _____

City: _____

State/Prov: _____

Postal Code: _____

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Guidelines: _____ Guideline Description: _____

Objective:

Conclusions:

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	.		

Crop 1: DAUCS CARROT

Variety: Navajo

Planting Date: Sep-14-05

Planting Method: seeded

Rate: 10 per ft Depth: 0.25 in Perennial Age: _____

Row Spacing: 12 inch Spacing Within Row: _____ Seed Bed: flat

Soil Temperature: 88 F Soil Moisture: dry-irrigate Emergence Date: Sep-19-05

Crop 2: DAUCS CARROT

Variety: Sugar Snax 54

Planting Date: Sep-14-05

Planting Method: seeded

Rate: 10 per ft Depth: 0.25 in Perennial Age: _____

Row Spacing: 12 inch Spacing Within Row: _____ Seed Bed: flat

Soil Temperature: 88 F Soil Moisture: dry-irrigate Emergence Date: Sep-19-05

SITE AND DESIGN

Plot Width, Unit: 6 FT Plot Length, Unit: 20 FT Reps: 4

Site Type: research station

Tillage Type: conventional Study Design: RANDOMIZED COMPLETE BLOCK

Trial Initiation Comments:

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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: sandy loam
% Silt: 4	pH: 6.4	Soil Name: Tifton sandy loam
% Clay: 2	CEC: _____	Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: irrigated

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A	B
Application Date:	Sep-15-05	Oct-09-05
Time of Day:	8:30 am	7:30 am
Application Method:	Broadcast	Broadcast
Application Timing:	PRE	POST
Applic. Placement:	soil	overtop
Air Temp., Unit:	75 F	72 F
% Relative Humidity:	65	75
Wind Velocity, Unit:	3 mph	0 mph
Dew Presence (Y/N):	n	y
Water Hardness:	0	0
Soil Temp., Unit:	72 F	72 F
Soil Moisture:	moist	moist
% Cloud Cover:	100	100

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	DAUCS PRE	DAUCS POST
Stage Scale:	not up	2-3 leaf
Height, Unit:	0 inch	2.5 inch
Crop 2 Code, Stage:	DAUCS PRE	DAUCS POST
Stage Scale:	not up	2-3 leaf
Height, Unit:	0 inch	2.5 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