

University of Georgia

Pepper & nutsedge response to methyl brom. fumigant/herbicide alternatives.

Trial ID: Veg1-03
Location: ponder farm

Study Dir.: Stanley Culpepper
Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Stanley 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:** good
Postal Code: 31794 **Initiation Date:** Feb-04-03
Country: U.S.A.

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

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	CYPZZ	80% purple, 20% yellow	

Crop 1: CPSAN PEPPER **Variety:** Stelleto
Planting Date: Mar-14-03 **Planting Method:** transplant
Rate: 1 per foot **Depth:** 1.5 in
Row Spacing: 16 inch **Spacing Within Row:** 12 inch **Seed Bed:** plastic
Soil Temperature: 78 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: plastic **Study Design:** SPLIT-PLOT

SOIL DESCRIPTION

% Sand: 94 **% OM:** 1.2 **Texture:** sand
% Silt: 4 **pH:** 5.9 **Soil Name:** Tifton sandy loam
% Clay: 2

Overall Moisture Conditions: .

APPLICATION DESCRIPTION

	A	B
Application Date:	Feb-04-03	Feb-20-03
Time of Day:	12:00p.m.	2 PM
Application Method:	Broadcast	Broadcast
Application Timing:	PRE/fumig	KPAM
Applic. Placement:	PRE/injec	tillrovat
Air Temp., Unit:	68 F	68 F
% Relative Humidity:	48	48
Wind Velocity, Unit:	2 MPH	2 mph
Dew Presence (Y/N):	N	N
Soil Temp., Unit:	62 F	63 F
Soil Moisture:	moist	moist
% Cloud Cover:	100	100

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	CPSAN .	CPSAN .
Stage Scale:	.	.
Height, Unit:	0. .	0. .

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WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	CYPZZ PRE	CYPZZ PRE
Stage Scale:	.	.
Density, Unit:

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	see comme	see comme

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Pepper & nutsedge response to methyl brom. fumigant/herbicide alternatives.

Trial ID: Veg1-03

Study Dir.: Stanley Culpepper

Location: ponder farm

Investigator: Stanley Culpepper

Weed Code		pepper stunting %	pepper stunting %	pepper stunting percent	CYPZZ plants #/plot	CYPZZ plants #/plot	CYPZZ plants #/plot	Plant 1 pepper height cm		
Crop Code		Apr-03-03	Apr-21-03	May-05-03	Apr-03-03	Apr-14-03	Jun-15-03	May-01-03		
Rating Data Type		58 DA-A	76 DA-A	90 DA-A	58 DA-A					
Rating Unit										
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
1	MB (300 lbs/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	0.0	8.3	10.0	0.0	0.0	14.3	47.3
2	MB (300 lbs/A) in bed no herbicide			0.0	3.3	6.7	0.0	1.3	47.0	55.3
3	Telone II (12 GPA) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	0.0	3.3	3.3	21.3	41.7	40.0	46.7
4	Telone II (12 GPA) prebed Pic (150 lb/A) in bed no herbicide			0.0	0.0	6.7	18.0	27.0	174.0	50.0
5	T C35 (35 G/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	0.0	0.0	10.0	2.7	4.0	83.0	47.0
6	T C35 (35 G/A) in bed no herbicide			0.0	0.0	0.0	26.3	29.0	81.3	53.7
7	T C35 (35 G/A) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	0.0	0.0	13.3	0.0	0.0	58.0	46.7
8	T C35 (35 G/A) prebed Pic (150 lb/A) in bed no herbicide			0.0	0.0	0.0	0.0	0.0	70.7	48.7
9	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	0.0	5.0	5.0	0.3	2.3	14.3	50.0
10	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later no herbicide			0.0	0.0	6.7	1.7	4.7	157.3	53.3
11	Inline (35 G) Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	8.3	11.7	13.3	2.0	0.7	70.7	44.3
12	Inline (35 G) no herbicide			0.0	0.0	0.0	2.0	8.7	255.0	52.0
13	MI (175 lb) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	0.0	0.0	0.0	0.3	26.3	41.3	48.3
14	MI (175 lb) in bed no herbicide			0.0	3.3	3.3	3.0	3.3	22.0	43.7

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Weed Code				CYPZZ	CYPZZ	CYPZZ	Plant 1			
Crop Code		pepper	pepper				pepper			
Rating Data Type		stunting	stunting	plants	plants	plants	height			
Rating Unit		%	%	#/plot	#/plot	#/plot	cm			
Rating Date		Apr-03-03	Apr-21-03	Apr-03-03	Apr-14-03	Jun-15-03	May-01-03			
Trt-Eval Interval		58 DA-A	76 DA-A	58 DA-A						
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7
15	Non-treated			0.0	5.0	10.0	115.0	78.3	106.3	48.0
	Command	2	pt/a							
	Dual Magnum	1	pt/a							
	Devrinol	4	lb/a							
16	Non-treated no herbicide			0.0	0.0	0.0	213.3	278.3	296.7	46.3
17	MI (120 lb) in bed			0.0	4.0	3.3	4.3	36.3	41.3	49.3
	Command	2	pt/a							
	Dual Magnum	1	pt/a							
	Devrinol	4	lb/a							
18	MI (120 lb) in bed no herbicide			0.0	0.0	5.0	1.7	0.0	63.7	55.3
19	CJ (metam 75 G)			0.0	0.0	0.0	0.0	0.0	155.0	
	LSD (P=.05)	3.22		7.84	12.96	77.30	68.05	184.45	7.31	
	Standard Deviation	1.95		4.75	7.86	46.85	41.24	111.78	4.39	
	CV	444.86		205.1	154.42	216.03	144.57	118.52	8.91	
	Bartlett's X2	0.0		1.694	3.519	106.189	76.414	51.214	19.848	
	P(Bartlett's X2)	.		0.975	0.991	0.001*	0.001*	0.001*	0.282	

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

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Weed Code		Plant 2 pepper height cm	Plant 3 pepper height cm	Plant 4 pepper height cm	Plant 5 pepper height cm	Plant 6 pepper height cm	Plant 7 pepper height cm	Plant 8 pepper height cm		
Crop Code		May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03		
Rating Data Type										
Rating Unit										
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	8	9	10	11	12	13	14
1	MB (300 lbs/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	54.3	46.7	52.7	42.0	49.3	43.7	49.0
2	MB (300 lbs/A) in bed no herbicide			47.0	52.3	52.0	55.7	55.0	51.7	53.3
3	Telone II (12 GPA) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	51.0	50.0	53.7	49.7	49.3	48.7	50.3
4	Telone II (12 GPA) prebed Pic (150 lb/A) in bed no herbicide			48.7	50.0	43.3	49.7	48.3	49.0	49.3
5	T C35 (35 G/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	48.7	49.0	46.7	50.7	49.7	49.3	46.0
6	T C35 (35 G/A) in bed no herbicide			47.3	53.0	49.0	51.3	49.0	50.0	50.3
7	T C35 (35 G/A) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	51.7	47.3	50.7	48.3	50.0	48.3	49.3
8	T C35 (35 G/A) prebed Pic (150 lb/A) in bed no herbicide			52.0	49.3	51.3	45.7	48.3	50.7	51.0
9	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	48.0	47.7	50.0	50.7	48.3	52.0	51.0
10	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later no herbicide			48.7	54.0	52.3	55.3	51.3	56.7	52.7
11	Inline (35 G) Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	43.0	45.7	43.7	43.3	46.0	47.0	46.7
12	Inline (35 G) no herbicide			50.3	50.0	50.7	50.0	48.7	51.7	53.0
13	MI (175 lb) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	50.7	46.7	52.3	51.7	51.3	47.7	53.3
14	MI (175 lb) in bed no herbicide			49.0	50.7	44.0	46.3	53.0	53.7	52.3
15	Non-treated Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	46.0	46.3	52.0	39.0	54.3	40.7	48.7
16	Non-treated no herbicide			42.0	43.0	43.3	46.3	41.0	47.7	43.7

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Weed Code	Plant 2 pepper height cm	Plant 3 pepper height cm	Plant 4 pepper height cm	Plant 5 pepper height cm	Plant 6 pepper height cm	Plant 7 pepper height cm	Plant 8 pepper height cm			
Crop Code	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03			
Rating Data Type										
Rating Unit										
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	8	9	10	11	12	13	14
17	MI (120 lb) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	50.3	51.0	49.0	50.3	53.0	51.3	46.3
18	MI (120 lb) in bed no herbicide			49.3	52.3	49.3	50.7	49.3	51.3	47.0
19	CJ (metam 75 G)									
LSD (P=.05)		7.55		6.72	7.74	7.45	10.00	7.26	7.76	
Standard Deviation		4.53		4.03	4.64	4.47	6.00	4.35	4.66	
CV		9.28		8.19	9.43	9.18	12.06	8.79	9.38	
Bartlett's X2		26.278		13.406	22.475	20.98	9.797	16.293	14.858	
P(Bartlett's X2)		0.07		0.709	0.167	0.227	0.912	0.503	0.535	

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

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Weed Code	Plant 9 pepper height cm	Plant 10 pepper height cm	Plant 11 pepper height cm	Plant 12 pepper height cm	Plant 13 pepper height cm	Plant 14 pepper height cm	Plant 15 pepper height cm			
Crop Code	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03			
Rating Data Type										
Rating Unit										
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	15	16	17	18	19	20	21
1	MB (300 lbs/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	48.0	51.0	41.3	52.3	48.0	51.7	43.7
2	MB (300 lbs/A) in bed no herbicide			49.3	48.7	50.7	52.7	49.3	52.3	52.3
3	Telone II (12 GPA) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	42.7	51.3	47.3	51.0	48.7	50.0	47.7
4	Telone II (12 GPA) prebed Pic (150 lb/A) in bed no herbicide			47.0	45.0	48.0	50.3	43.7	45.0	46.7
5	T C35 (35 G/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	51.3	49.0	50.7	47.3	52.0	49.0	50.3
6	T C35 (35 G/A) in bed no herbicide			46.0	48.7	49.7	55.3	48.7	55.3	48.3
7	T C35 (35 G/A) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	44.3	47.3	48.0	46.0	47.7	47.7	47.0
8	T C35 (35 G/A) prebed Pic (150 lb/A) in bed no herbicide			52.3	51.7	51.7	51.0	49.0	48.3	51.3
9	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	54.3	46.7	53.0	43.0	50.7	50.7	52.3
10	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later no herbicide			53.0	51.3	54.7	51.3	50.3	52.0	50.0
11	Inline (35 G) Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	43.0	49.7	44.0	47.3	38.7	45.7	42.0
12	Inline (35 G) no herbicide			49.3	52.7	47.7	50.3	50.7	48.7	42.0
13	MI (175 lb) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	43.7	50.7	49.0	52.7	50.7	50.7	50.0
14	MI (175 lb) in bed no herbicide			45.3	53.7	48.0	46.0	45.0	53.0	49.3
15	Non-treated Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	42.7	46.0	37.7	51.7	43.0	57.3	39.0
16	Non-treated no herbicide			46.3	44.3	44.7	41.7	48.7	45.7	47.7

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Weed Code	Plant 9 pepper height cm	Plant 10 pepper height cm	Plant 11 pepper height cm	Plant 12 pepper height cm	Plant 13 pepper height cm	Plant 14 pepper height cm	Plant 15 pepper height cm
Crop Code	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03
Rating Data Type							
Rating Unit							
Rating Date							
Trt-Eval Interval							
ARM Action Codes							
Trt No.	15	16	17	18	19	20	21
Treatment Name							
Rate	48.7	49.0	46.0	54.0	44.7	49.7	51.7
Unit							
17 MI (120 lb) in bed Command Dual Magnum Devrinol							
Rate							
Unit							
18 MI (120 lb) in bed no herbicide	47.0	52.7	51.0	51.0	51.0	50.0	50.0
19 CJ (metam 75 G)							
LSD (P=.05)	10.08	8.73	9.43	10.51	7.22	8.30	9.45
Standard Deviation	6.05	5.24	5.66	6.30	4.33	4.98	5.67
CV	12.74	10.6	11.8	12.68	9.06	9.93	11.85
Bartlett's X2	14.994	14.006	16.818	35.851	22.272	20.569	11.56
P(Bartlett's X2)	0.596	0.667	0.397	0.005*	0.174	0.246	0.826

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

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Weed Code	Plant 16	Plant 17	Plant 18	Plant 19	Plant 20	Average	pepper			
Crop Code	pepper	pepper	pepper	pepper	pepper	pepper	pepper			
Rating Data Type	height	height	height	height	height	height	US Fancy			
Rating Unit	cm	cm	cm	cm	cm	cm	#/20'			
Rating Date	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	Jun-06-03			
Trt-Eval Interval										
ARM Action Codes						T1				
Trt No.	Treatment Name	Rate	Unit	22	23	24	25	26	27	28
1	MB (300 lbs/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	48.7	46.0	55.3	43.7	52.0	48.3	24.0
2	MB (300 lbs/A) in bed no herbicide			52.3	48.3	51.3	50.3	53.3	51.7	17.7
3	Telone II (12 GPA) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	50.0	45.3	52.3	44.0	49.7	49.0	31.3
4	Telone II (12 GPA) prebed Pic (150 lb/A) in bed no herbicide			55.7	47.0	47.3	41.7	43.7	47.5	26.3
5	T C35 (35 G/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	49.3	52.7	46.7	49.7	44.3	49.0	28.7
6	T C35 (35 G/A) in bed no herbicide			51.0	51.0	55.3	52.3	51.7	50.8	25.3
7	T C35 (35 G/A) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	49.0	44.7	49.3	45.0	53.3	48.1	34.3
8	T C35 (35 G/A) prebed Pic (150 lb/A) in bed no herbicide			54.3	52.3	53.0	51.7	54.7	50.9	31.3
9	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	50.3	51.0	50.0	51.0	49.0	50.0	39.3
10	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later no herbicide			50.7	47.3	51.7	50.3	52.0	52.0	31.7
11	Inline (35 G) Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	45.7	44.0	46.7	47.7	49.0	45.2	27.3
12	Inline (35 G) no herbicide			50.7	50.3	46.7	48.0	51.3	49.7	25.0
13	MI (175 lb) in bed Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	54.0	53.7	51.0	52.0	51.7	50.6	25.0
14	MI (175 lb) in bed no herbicide			52.7	48.3	51.7	53.7	53.7	49.7	20.3
15	Non-treated Command Dual Magnum Devrinol	2 1 4	pt/a pt/a lb/a	47.0	40.7	48.7	36.7	47.7	45.7	12.3
16	Non-treated no herbicide			48.7	47.0	48.7	48.7	45.7	45.6	10.3

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Weed Code	Plant 16 pepper height cm	Plant 17 pepper height cm	Plant 18 pepper height cm	Plant 19 pepper height cm	Plant 20 pepper height cm	Average pepper height cm	pepper US Fancy #/20'
Crop Code	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	May-01-03	Jun-06-03
Rating Data Type							
Rating Unit							
Rating Date							
Trt-Eval Interval							
ARM Action Codes						T1	
Trt No.	22	23	24	25	26	27	28
Treatment Name							
Rate							
Unit							
17 MI (120 lb) in bed	50.0	47.3	49.3	60.3	56.0	50.4	34.3
Command							
Dual Magnum							
Devrinol							
18 MI (120 lb) in bed no herbicide	53.0	53.3	53.0	57.7	53.3	51.4	27.3
19 CJ (metam 75 G)							
LSD (P=.05)	10.90	9.60	8.21	13.67	8.88	4.89	13.97
Standard Deviation	6.54	5.76	4.92	8.20	5.32	2.93	8.38
CV	12.89	11.91	9.76	16.69	10.51	5.96	31.96
Bartlett's X2	21.318	26.133	18.996	24.101	17.024	12.02	11.478
P(Bartlett's X2)	0.212	0.072	0.329	0.117	0.453	0.799	0.831

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

Column 27: T1 = ([7]+[8]+[9]+[10]+[11]+[12]+[13]+[14]+[15]+[16]+[17]+[18]+[19]+[20]+[21]+[22]+[23]+[24]+[25]+[26])/20

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Weed Code			pepper US Fancy lb/20' Jun-06-03	pepper US Fancy #/20' Jun-17-03	pepper US Fancy lb/20' Jun-17-03	pepper US #1 #/20' Jun-17-03	pepper US #1 lb/20' Jun-17-03	pepper other #/20' Jun-17-03	pepper other lb/20' Jun-17-03
Crop Code									
Rating Data Type									
Rating Unit									
Rating Date									
Trt-Eval Interval									
ARM Action Codes									
Trt No.	Treatment Name	Rate	29	30	31	32	33	34	35
		Unit							
1	MB (300 lbs/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	9.2	6.0	2.9	78.7	28.7	64.0	13.5
2	MB (300 lbs/A) in bed no herbicide		6.5	5.0	2.5	70.3	25.2	72.3	14.8
3	Telone II (12 GPA) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	11.9	6.3	3.1	71.3	26.4	41.7	8.9
4	Telone II (12 GPA) prebed Pic (150 lb/A) in bed no herbicide		10.5	5.7	2.9	71.3	26.4	55.0	10.4
5	T C35 (35 G/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	10.6	11.0	5.1	61.7	23.5	38.7	7.2
6	T C35 (35 G/A) in bed no herbicide		9.5	9.3	4.4	58.3	21.5	42.0	8.0
7	T C35 (35 G/A) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	12.2	6.3	3.1	68.0	24.5	60.3	11.5
8	T C35 (35 G/A) prebed Pic (150 lb/A) in bed no herbicide		11.5	10.7	5.2	77.3	30.7	47.7	8.8
9	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	14.7	7.3	3.4	64.0	23.7	63.3	9.9
10	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later no herbicide		11.6	10.0	4.9	66.3	24.7	42.3	8.1
11	Inline (35 G) Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	10.4	9.3	4.7	66.3	24.6	51.3	9.7
12	Inline (35 G) no herbicide		9.4	8.3	3.9	62.7	24.0	54.3	10.8
13	MI (175 lb) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	9.2	3.0	1.2	64.0	24.5	58.3	13.4
14	MI (175 lb) in bed no herbicide		7.5	2.0	2.3	68.3	25.7	54.7	12.3
15	Non-treated Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	5.0	8.7	4.5	45.7	17.9	28.7	10.8
16	Non-treated no herbicide		3.8	2.3	1.3	48.0	17.3	34.7	8.1

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Weed Code		pepper	pepper	pepper	pepper	pepper	pepper	pepper
Crop Code		US Fancy	US Fancy	US Fancy	US #1	US #1	other	other
Rating Data Type		lb/20'	#/20'	lb/20'	#/20'	lb/20'	#/20'	lb/20'
Rating Unit								
Rating Date		Jun-06-03	Jun-17-03	Jun-17-03	Jun-17-03	Jun-17-03	Jun-17-03	Jun-17-03
Trt-Eval Interval								
ARM Action Codes								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit	Unit
29								
30								
31								
32								
33								
34								
35								
17	MI (120 lb) in bed	13.0	6.3	3.5	62.3	23.2	37.3	7.5
	Command							
	Dual Magnum							
	Devrinol							
18	MI (120 lb) in bed no herbicide	10.0	6.0	3.0	61.0	23.1	54.0	10.9
19	CJ (metam 75 G)							
	LSD (P=.05)	5.44	5.13	2.51	21.76	8.04	20.78	5.66
	Standard Deviation	3.27	3.08	1.51	13.05	4.82	12.46	3.40
	CV	33.32	44.77	43.83	20.16	19.93	24.91	33.14
	Bartlett's X2	12.605	13.714	16.079	23.089	16.253	27.389	24.855
	P(Bartlett's X2)	0.762	0.687	0.518	0.146	0.506	0.053	0.098

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

University of Georgia

Weed Code			total pepper	total pepper	total pepper	total pepper
Crop Code			US Fancy	US Fancy	all	all
Rating Data Type			#/20'	lb/20'	#/20'	lb/20'
Rating Unit			Aug-02-03	Aug-02-03	Aug-02-03	Aug-02-03
Rating Date						
Trt-Eval Interval						
ARM Action Codes			T2	T3	T4	T5
Trt No.	Treatment Name	Rate Rate Unit				
			36	37	38	39
1	MB (300 lbs/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	30.0	12.1	54.3	172.7
2	MB (300 lbs/A) in bed no herbicide		22.7	8.9	48.9	165.3
3	Telone II (12 GPA) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	37.7	15.0	50.2	150.7
4	Telone II (12 GPA) prebed Pic (150 lb/A) in bed no herbicide		32.0	13.4	50.2	158.3
5	T C35 (35 G/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	39.7	15.8	46.4	140.0
6	T C35 (35 G/A) in bed no herbicide		34.7	13.9	43.4	135.0
7	T C35 (35 G/A) prebed Pic (150 lb/A) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	40.7	15.3	51.2	169.0
8	T C35 (35 G/A) prebed Pic (150 lb/A) in bed no herbicide		42.0	16.7	56.2	167.0
9	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	46.7	18.1	51.8	174.0
10	T C35 (17.5G/A) prebed K-pam (46 G) 10 d later no herbicide		41.7	16.4	49.2	150.3
11	Inline (35 G) Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	36.7	15.0	49.3	154.3
12	Inline (35 G) no herbicide		33.3	13.3	48.1	150.3
13	MI (175 lb) in bed Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	28.0	10.4	48.3	150.3
14	MI (175 lb) in bed no herbicide		22.3	9.8	47.8	145.3
15	Non-treated Command Dual Magnum Devrinol	2 pt/a 1 pt/a 4 lb/a	21.0	9.5	38.3	95.3
16	Non-treated no herbicide		12.7	5.1	30.5	95.3

University of Georgia

Weed Code		total pepper	total pepper	total pepper	total pepper	
Crop Code		US Fancy	US Fancy	all	all	
Rating Data Type		#/20'	lb/20'	#/20'	lb/20'	
Rating Unit		Aug-02-03	Aug-02-03	Aug-02-03	Aug-02-03	
Rating Date		T2	T3	T4	T5	
Trt-Eval Interval						
ARM Action Codes						
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	
		Unit				
			36	37	38	39
17	MI (120 lb) in bed Command	2 pt/a	40.7	16.5	47.3	140.3
	Dual Magnum	1 pt/a				
	Devrinol	4 lb/a				
18	MI (120 lb) in bed no herbicide		33.3	13.0	47.0	148.3
19	CJ (metam 75 G)					
	LSD (P=.05)		15.16	6.10	10.18	28.50
	Standard Deviation		9.09	3.66	6.11	17.09
	CV		27.47	27.66	12.81	11.56
	Bartlett's X2		12.715	13.694	17.43	20.233
	P(Bartlett's X2)		0.755	0.689	0.426	0.262

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

Column 36: T2 = [28]+[30]

Column 37: T3 = [29]+[31]

Column 38: T4 = [29]+[31]+[33]+[35]

Column 39: T5 = [28]+[30]+[32]+[34]

Trial Comments

GENERAL COMMENTS: Herbicides applied PRE after forming bed and just prior to laying plastic. Herbicides applied at 27.4 GPA. Fumigants applied with various pieces of equipment. KPAM applied to soil surface with spray boom and incorporated in 3-4 inches just prior to forming bed and laying plastic. Prebed treatments were applied with the Yetter rig while in bed treatments were applied with the super bedder plastic layer. Inline applied through drip the day following the laying of plastic.

OBJECTIVE: Evaluate the most effective MeBr alternative fumigant system for the control of nutsedge.

PEPPER STUNTING:

1. Fumigants did not impact plant growth.
2. Pooled over fumigants, herbicide system caused 3 to 5% more stunting than the herbicide. The most stunting noted throughout the crop was 13%. Stunting was most likely due to the Dual Magnum.

NUTSEDGE CONTROL (Main effects were significant):

1. All fumigants, when pooled over the herbicide system, reduced nutsedge emergence at 8 and 10 wk after fumigating similarly when compared to the no fumigant.
2. At 18 week after treatment, when pooled over herbicide systems, a trend for less control by Inline and T2 fb pic was detectable when compared to other fumigants.
- 3) Pooled over fumigants, there were obvious trends in nutsedge emergence reduction by the herbicide system at 8 and 10 wk after fumigating. At 18 wk after fumigating, the herbicide system reduced emerged nutsedge by 60%.

PEPPER HEIGHT:

- 1) Neither fumigants nor the herbicide system impacted pepper heights at this 6 weeks after transplanting.

HARVESTABLE FRUIT:

Harvest 1:

- 1) Pooled over herbicide systems, all fumigants provided a greater number and weight of fancy fruit compared to the no fumigant. The greatest numerical number and weight of fancy fruit were noted with C35 + KPAM, C35 prebed fb pic, and MIDAS at 120 lb.
- 2) Pooled over fumigants, a greater number and weight of US fancy fruit were noted with the herbicide system as compared to no herbicide system.

harvest 2:

- 1) Pooled over herbicide system, all fumigants provided a greater number of fancy fruit compared to the no fumigant. The greatest numerical number of fancy fruit were noted with C35 in bed, MIDAS at 175 lb, and C35 + KPAM.

