

University of Georgia

Long-Term Effects of Methyl Bromide Alternatives on Weeds, Diseases, & Nematodes

YEAR 4 (spring pepper crop)

Trial ID: Veg23-07(spring)

Study Dir.: Culpepper/Langston/Davis

Location: TVP

Investigator: Stanley Culpepper

Reps: 4

Plots: 12 by 25 feet

Spray vol: 24 gal/ac

Mix size: 3 liters (min 2.5027)

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Form Unit	Rate Unit	Grow Stg	Appl Code	Amt to Measure	Product	Plot No. By Rep			
											1	2	3	4
1	No Fumigant No Herbicide							A B			101	211	315	411
2	No Fumigant Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		102	212	316	412
3	MEBR 67:33 (350 lb/A) No Herbicide							A B			107	207	311	405
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		108	208	312	406
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide							A B			109	203	307	401
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		110	204	308	402
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide							A A B			103	209	305	409
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		104	210	306	410
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide							A A B			113	201	309	415
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		114	202	310	416
11	T-C35 (35 G) (8" inject) No Herbicide							A B			115	213	301	403
12	T-C35 (35 G) (8"inject) Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		116	214	302	404
13	T2 (12 G) + Pic (150 lb) No Herbicide							A B			105	205	313	413
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		106	206	314	414
15	Vapam (75 G) No Herbicide							A B			111	215	303	407
16	Vapam (75 G) Command Dual Magnum	3 7.62	ME L	1	QT/A PT/A	PRE PRE	B B		31.25 ml/mx 15.62 ml/mx		112	216	304	408

Sort Order: Treatment

University of Georgia

Reps: 4 Plots: 12 by 25 feet
 Spray vol: 24 gal/ac Mix size: 3 liters (min 2.5027)

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	4
---------	----------------	-----------	-----------	-----------	-----------	----------	-----------	-----------------	---------------	------------	----------	---

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
312.467	ml	Command	3	ME	
156.234	ml	Dual Magnum	7.62	L	

* 'Per area' calculations based on spray volume= 24 gal/ac, mix size= 3 liters (mix size basis).
 * Product amount calculations increased 25 % for overage adjustment.

Trial Comments

OBJECTIVE: Determine weed, disease, and nematode shifts when applying the same fumigant on the same area for at least 5 years.

RESULTS FROM SPRING PEPPER CROP IN YEAR 4:

PEPPER STAND AND GROWTH (20 to 80 plants per plot measured):

1. Pepper stand was not impacted by treatments (fumigant or herbicide).
2. Crops were planted 21 day after fumigating. The 3-WAY, MIDAS and Vapam stunted early season pepper growth. Stunting was greatest with MIDAS and then the 3-WAY.

WEED RESPONSE:

1. Weed emergence was extremely low, this may have been due to an extremely cool spring followed by a rapidly growing pepper crop once the temperature warmed.
2. Yellow nutsedge: The non-treated control, Telone C35, and the T2 + Pic systems had more plants than all other treatments.
3. Large crabgrass: Greatest populations were noted in the non-treated control and in the Telone C35 system when no herbicide was applied.
4. Purslane: all fumigant systems or herbicides reduced pink purslane similarly compared to the non-treated control.
5. No differences were noted with other weed species.

Pepper Yield (entire plot harvested 4 times for Jumbo fruit only):

1. Main effects were significant.
2. Harvest 1: Lower yields were produced in MIDAS plots because of early season stunting (pooled over herbicide).
3. Harvest 2: Lower yields were produced in the no fumigant, MIDAS and Vapam alone (pooled over herbicide).
4. Harvest 3: Lower yields were produced in the no fumigant systems (pooled over herbicide).
5. Harvest 4: Highest yields were produced in the MIDAS, likely recovering from lower yields earlier. (pooled over herbicides)
6. Harvest 1-4: Yields were similar to MB by all fumigant systems except the no fumigant control. (pooled over herbicides)
7. When pooled over fumigants, the herbicide system improved yields during harvest 1, harvest 3, and cumulative harvests.

GENERAL COMMENTS:

1. Fumigants were applied, beds were formed and mulch was laid. MB, MIDAS, and PIC were applied with super bedder plastic layer injected 8 inches deep with 3 knives on a 32 inch bedtop. Vapam was injected 4 inches deep with the injection knives 4 inches on the final bed just prior to covering with mulch. Telone II and Telone C35 were injected 10-12 inches deep with a Yetter applicator.

University of Georgia

Long-Term Effects of Methyl Bromide Alternatives on Weeds, Diseases, & Nematodes

YEAR 4 (spring pepper crop)

Trial ID: Veg23-07(spring)

Study Dir.: Culpepper/Langston/Davis

Location: TVP

Investigator: Stanley Culpepper

Weed Code	bed 1 CPSAN	bed 2 CPSAN	plant 1 CPSAN	plant 2 CPSAN	plant 3 CPSAN	plant 4 CPSAN	plant 5 CPSAN		
Crop Code	# per plot	# per plot	ht	ht	ht	ht	ht		
Rating Data Type	#	#	cm	cm	cm	cm	cm		
Rating Unit	May-01-07	May-01-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07		
Rating Date	63 DA-A	63 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A		
Trt-Eval Interval	ARM Action Codes								
Trt No.	Treatment Name	Rate	1	2	3	4	5	6	7
		Rate Unit							
1	No Fumigant No Herbicide		40 a	39 abc	16 ab	16 ab	19 a	18 b	18 ab
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A	40 a	40 ab	18 ab	15 ab	18 a	17 b	19 a
3	MEBR 67:33 (350 lb/A) No Herbicide		40 a	40 a	16 b	16 ab	19 a	18 b	18 ab
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A	40 a	40 a	16 ab	17 a	16 a	17 b	17 ab
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide		40 a	38 bc	16 b	15 ab	16 a	16 b	16 ab
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A	39 a	38 c	16 b	17 a	18 a	15 b	18 ab
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide		39 a	40 a	20 a	18 a	15 a	16 b	17 ab
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A	40 a	40 a	18 ab	16 ab	16 a	15 b	17 ab
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide		38 a	40 a	17 ab	15 ab	14 a	15 b	14 b
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A	38 a	40 a	15 b	14 b	15 a	15 b	14 b
11	T-C35 (35 G) (8" inject) No Herbicide		40 a	40 ab	16 ab	16 ab	18 a	37 a	17 ab
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A	40 a	40 a	16 b	15 ab	17 a	17 b	17 ab
13	T2 (12 G) + Pic (150 lb) No Herbicide		40 a	40 a	15 b	14 b	16 a	16 b	17 ab
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A	40 a	40 a	15 b	16 ab	16 a	14 b	15 ab
15	Vapam (75 G) No Herbicide		40 a	39 ab	15 b	15 ab	17 a	16 b	14 b

University of Georgia

Weed Code	bed 1 CPSAN	bed 2 CPSAN	plant 1 CPSAN	plant 2 CPSAN	plant 3 CPSAN	plant 4 CPSAN	plant 5 CPSAN								
Crop Code	# per plot	# per plot	ht	ht	ht	ht	ht								
Rating Data Type	#	#	cm	cm	cm	cm	cm								
Rating Unit	May-01-07	May-01-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07								
Rating Date	63 DA-A	63 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A								
Trt-Eval Interval															
ARM Action Codes															
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7					
16	Vapam (75 G) Command Dual Magnum	40	a	40	a	17	ab	18	a	14	a	13	b	16	ab
		1	QT/A												
		1	PT/A												
LSD (P=.05)		1.7		1.6		3.1		3.1		4.0		17.5		4.0	
Standard Deviation		1.2		1.1		2.2		2.2		2.8		12.2		2.8	
CV		2.99		2.86		13.43		13.91		17.2		71.82		16.91	
Bartlett's X2		26.624		20.94		20.515		13.616		22.003		123.463		18.505	
P(Bartlett's X2)		0.003*		0.022*		0.153		0.555		0.108		0.001*		0.237	

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

University of Georgia

Weed Code	plant 6 CPSAN	plant 7 CPSAN	plant 8 CPSAN	plant 9 CPSAN	plant 10 CPSAN	plant 11 CPSAN	plant 12 CPSAN			
Crop Code	ht	ht	ht	ht	ht	ht	ht			
Rating Data Type	cm	cm	cm	cm	cm	cm	cm			
Rating Unit	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07			
Rating Date	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A			
Trt-Eval Interval	ARM Action Codes									
Trt No.	Treatment Name	Rate	Unit	8	9	10	11	12	13	14
1	No Fumigant No Herbicide			19 a	17 a	17 a	17 abc	19 a	17 b-e	18 ab
2	No Fumigant Command Dual Magnum	1 1	QT/A PT/A	18 ab	17 a	19 a	18 ab	19 a	18 abc	18 abc
3	MEBR 67:33 (350 lb/A) No Herbicide			15 ab	17 a	19 a	18 ab	17 ab	15 cde	19 a
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 1	QT/A PT/A	17 ab	14 a	17 a	16 a-d	16 ab	17 a-e	18 abc
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			16 ab	15 a	16 a	14 bcd	14 b	15 de	16 abc
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 1	QT/A PT/A	17 ab	16 a	15 a	15 a-d	15 ab	17 a-e	16 abc
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			17 ab	19 a	17 a	19 a	18 ab	18 abc	18 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 1	QT/A PT/A	15 ab	18 a	17 a	17 abc	17 ab	16 b-e	17 abc
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			15 ab	19 a	14 a	16 a-d	16 ab	15 cde	15 c
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 1	QT/A PT/A	15 ab	14 a	15 a	14 cd	15 ab	14 e	15 bc
11	T-C35 (35 G) (8" inject) No Herbicide			15 ab	18 a	15 a	17 abc	16 ab	18 abc	19 a
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 1	QT/A PT/A	16 ab	16 a	15 a	14 bcd	15 ab	17 a-d	17 abc
13	T2 (12 G) + Pic (150 lb) No Herbicide			17 ab	17 a	16 a	17 abc	17 ab	17 b-e	19 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 1	QT/A PT/A	16 ab	17 a	14 a	16 a-d	16 ab	20 a	17 abc
15	Vapam (75 G) No Herbicide			14 b	19 a	15 a	15 a-d	19 a	18 ab	18 abc
16	Vapam (75 G) Command Dual Magnum	1 1	QT/A PT/A	16 ab	15 a	14 a	13 d	16 ab	16 b-e	16 abc
LSD (P=.05)	4.0	4.2	4.4	3.2	3.8	2.5	2.9			
Standard Deviation	2.8	2.9	3.1	2.2	2.6	1.7	2.1			
CV	17.46	17.7	19.42	14.02	15.96	10.39	12.14			
Bartlett's X2	12.845	21.71	12.297	22.535	13.051	13.759	15.876			
P(Bartlett's X2)	0.614	0.116	0.656	0.095	0.598	0.544	0.39			

University of Georgia

Weed Code	plant 6	plant 7	plant 8	plant 9	plant 10	plant 11	plant 12
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 13 CPSAN	plant 14 CPSAN	plant 15 CPSAN	plant 16 CPSAN	plant 17 CPSAN	plant 18 CPSAN	plant 19 CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07			
Trt-Eval Interval	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	15	16	17	18	19	20	21
1	No Fumigant No Herbicide			16 a	16 ab	20 a	18 b	18 a	18 ab	19 ab
2	No Fumigant Command Dual Magnum	1 1	QT/A PT/A	19 a	17 ab	15 cde	20 b	16 a	17 ab	19 abc
3	MEBR 67:33 (350 lb/A) No Herbicide			19 a	19 a	17 a-e	44 a	19 a	18 ab	16 a-f
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 1	QT/A PT/A	17 a	16 ab	18 a-d	18 b	19 a	19 a	19 ab
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			14 a	16 ab	14 de	16 b	16 a	15 b	14 ef
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 1	QT/A PT/A	16 a	16 ab	16 cde	16 b	15 a	14 b	13 f
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			16 a	18 ab	17 a-e	18 b	17 a	17 ab	20 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 1	QT/A PT/A	16 a	17 ab	17 b-e	16 b	17 a	18 ab	17 a-f
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			16 a	18 ab	16 cde	16 b	17 a	16 ab	15 c-f
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 1	QT/A PT/A	16 a	15 b	14 e	16 b	14 a	16 ab	15 def
11	T-C35 (35 G) (8" inject) No Herbicide			17 a	16 ab	20 ab	18 b	17 a	17 ab	16 b-f
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 1	QT/A PT/A	17 a	17 ab	18 abc	18 b	15 a	17 ab	16 a-f
13	T2 (12 G) + Pic (150 lb) No Herbicide			19 a	17 ab	17 a-e	18 b	18 a	16 ab	17 a-e
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 1	QT/A PT/A	16 a	17 ab	15 cde	18 b	16 a	16 ab	18 a-d
15	Vapam (75 G) No Herbicide			18 a	18 ab	16 cde	18 b	16 a	17 ab	17 a-e
16	Vapam (75 G) Command Dual Magnum	1 1	QT/A PT/A	17 a	17 ab	18 a-d	17 b	16 a	16 ab	16 a-f
LSD (P=.05)		4.1	3.1	2.9	18.2	3.6	3.6	3.3		
Standard Deviation		2.9	2.1	2.0	12.8	2.5	2.5	2.3		
CV		17.01	12.74	12.19	67.3	15.33	15.29	13.73		
Bartlett's X2		9.765	18.152	4.742	128.203	19.317	8.719	14.346		
P(Bartlett's X2)		0.834	0.255	0.994	0.001*	0.20	0.892	0.499		

University of Georgia

	plant 13	plant 14	plant 15	plant 16	plant 17	plant 18	plant 19
Weed Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code	ht	ht	ht	ht	ht	ht	ht
Rating Data Type	cm	cm	cm	cm	cm	cm	cm
Rating Unit	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07	Apr-10-07
Rating Date	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A
Trt-Eval Interval							
ARM Action Codes							

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

University of Georgia

Weed Code	plant 20 CPSAN	AVG20PLA CPSAN	plant 1 CPSAN	plant 2 CPSAN	plant 3 CPSAN	plant 4 CPSAN	plant 5 CPSAN			
Crop Code	ht	ht	ht	ht	ht	ht	ht			
Rating Data Type	cm	cm	cm	cm	cm	cm	cm			
Rating Unit	Apr-10-07	Apr-10-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Rating Date	42 DA-A	42 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
Trt-Eval Interval	T1									
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	22	23	24	25	26	27	28
1	No Fumigant No Herbicide			19 a	18 abc	19 a	20 ab	21 a	22 ab	22 a
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		19 ab	18 abc	20 a	21 ab	20 a	23 a	21 a
3	MEBR 67:33 (350 lb/A) No Herbicide			17 abc	19 a	20 a	19 ab	18 ab	21 ab	22 a
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		20 a	17 a-d	19 a	20 ab	22 a	21 ab	21 a
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			13 de	15 e	18 a	20 ab	21 a	21 ab	20 a
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		12 e	16 de	20 a	20 ab	21 a	20 ab	18 a
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			17 abc	17 a-d	20 a	23 ab	22 a	21 ab	20 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		18 abc	17 b-e	20 a	23 ab	22 a	21 ab	21 a
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			15 cde	16 de	19 a	21 ab	20 a	21 ab	20 a
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		15 cde	15 e	18 a	20 ab	18 ab	19 ab	19 a
11	T-C35 (35 G) (8" inject) No Herbicide			18 abc	18 ab	19 a	24 a	21 a	21 ab	21 a
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		15 b-e	16 b-e	17 a	19 ab	21 a	16 b	20 a
13	T2 (12 G) + Pic (150 lb) No Herbicide			17 a-d	17 a-e	22 a	20 ab	14 b	22 ab	20 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		17 a-d	16 b-e	21 a	20 ab	21 a	21 ab	18 a
15	Vapam (75 G) No Herbicide			17 a-d	16 b-e	19 a	18 b	18 ab	22 ab	19 a
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		17 abc	16 cde	17 a	20 ab	22 a	17 ab	17 a
LSD (P=.05)				3.2	1.7	4.3	4.2	5.3	5.1	5.0
Standard Deviation				2.2	1.2	3.0	2.9	3.7	3.6	3.5
CV				13.45	7.26	15.72	14.47	18.47	17.38	17.83
Bartlett's X2				25.011	22.07	21.968	16.412	30.041	36.045	9.415
P(Bartlett's X2)				0.05*	0.106	0.109	0.355	0.012*	0.002*	0.804

University of Georgia

Weed Code	plant 20	AVG20PLA	plant 1	plant 2	plant 3	plant 4	plant 5
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-10-07	Apr-10-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	42 DA-A	42 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes		T1					

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

Column 23: T1 = @AVG([C3].[C22])

University of Georgia

Weed Code	plant 6	plant 7	plant 8	plant 9	plant 10	plant 11	plant 12			
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN			
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	29	30	31	32	33	34	35
1	No Fumigant No Herbicide			22 ab	22 ab	20 ab	20 ab	22 a	23 a	22 a
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		23 a	22 a	22 ab	21 ab	23 a	24 a	20 a
3	MEBR 67:33 (350 lb/A) No Herbicide			22 ab	20 ab	21 ab	22 a	23 a	22 a	18 a
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		22 ab	21 ab	19 ab	20 ab	21 a	19 a	22 a
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			20 ab	19 ab	21 ab	21 ab	20 a	19 a	19 a
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		21 ab	21 ab	21 ab	19 ab	19 a	19 a	18 a
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			23 a	20 ab	24 a	21 ab	23 a	21 a	20 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		22 a	21 ab	23 a	22 a	21 a	22 a	23 a
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			19 ab	19 ab	21 ab	17 b	19 a	19 a	22 a
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		17 bc	18 ab	14 b	19 ab	18 a	20 a	15 a
11	T-C35 (35 G) (8" inject) No Herbicide			23 a	22 ab	17 ab	22 a	23 a	24 a	23 a
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		22 ab	21 ab	21 ab	20 ab	18 a	19 a	21 a
13	T2 (12 G) + Pic (150 lb) No Herbicide			20 ab	22 ab	21 ab	21 ab	23 a	22 a	22 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		20 ab	21 ab	22 a	20 ab	21 a	20 a	23 a
15	Vapam (75 G) No Herbicide			13 c	17 b	21 ab	18 ab	20 a	24 a	22 a
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		18 abc	19 ab	19 ab	19 ab	18 a	21 a	19 a
LSD (P=.05)				4.8	4.2	6.8	4.5	4.0	4.6	6.7
Standard Deviation				3.4	3.0	4.8	3.2	2.8	3.2	4.7
CV				16.74	14.66	23.53	15.84	13.51	15.57	23.15
Bartlett's X2				28.209	8.627	37.956	22.168	19.3	15.61	31.872
P(Bartlett's X2)				0.02*	0.896	0.001*	0.103	0.20	0.338	0.007*

University of Georgia

Weed Code	plant 6	plant 7	plant 8	plant 9	plant 10	plant 11	plant 12
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 13 CPSAN	plant 14 CPSAN	plant 15 CPSAN	plant 16 CPSAN	plant 17 CPSAN	plant 18 CPSAN	plant 19 CPSAN
Crop Code							
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit
36							
37							
38							
39							
40							
41							
42							
1	No Fumigant No Herbicide						
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A					
3	MEBR 67:33 (350 lb/A) No Herbicide						
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A					
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide						
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A					
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide						
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A					
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide						
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A					
11	T-C35 (35 G) (8" inject) No Herbicide						
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A					
13	T2 (12 G) + Pic (150 lb) No Herbicide						
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A					
15	Vapam (75 G) No Herbicide						
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A					
LSD (P=.05)	4.9	5.1	3.5	5.5	4.5	6.0	6.0
Standard Deviation	3.4	3.5	2.4	3.8	3.1	4.2	4.2
CV	16.23	17.2	11.67	19.21	14.82	21.76	21.16
Bartlett's X2	28.481	22.336	9.717	23.138	10.065	24.148	17.644
P(Bartlett's X2)	0.019*	0.099	0.837	0.081	0.816	0.063	0.282

University of Georgia

Weed Code	plant 13	plant 14	plant 15	plant 16	plant 17	plant 18	plant 19
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 20 CPSAN	plant 21 CPSAN	plant 22 CPSAN	plant 23 CPSAN	plant 24 CPSAN	plant 25 CPSAN	plant 26 CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	43	44	45	46	47	48	49
1	No Fumigant No Herbicide			19 ab	19 abc	21 ab	23 ab	21 ab	22 ab	24 a
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		16 ab	20 ab	21 ab	23 abc	21 ab	22 ab	20 abc
3	MEBR 67:33 (350 lb/A) No Herbicide			20 ab	21 ab	18 b	21 a-d	22 a	21 abc	21 abc
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		19 ab	20 ab	20 ab	21 a-d	22 a	21 abc	21 abc
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			20 ab	16 c	19 ab	17 d	17 b	19 bc	18 c
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		14 b	17 bc	20 ab	19 bcd	19 ab	18 bc	19 abc
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			22 a	21 ab	22 ab	23 abc	21 ab	22 ab	22 ab
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		20 ab	21 ab	20 ab	20 a-d	20 ab	18 c	23 a
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			17 ab	21 ab	21 ab	21 a-d	19 ab	21 abc	20 abc
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		18 ab	19 abc	19 ab	18 cd	19 ab	19 bc	18 bc
11	T-C35 (35 G) (8" inject) No Herbicide			21 ab	23 a	23 a	23 a	21 ab	20 abc	22 ab
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		19 ab	18 abc	22 ab	22 abc	20 ab	20 bc	22 abc
13	T2 (12 G) + Pic (150 lb) No Herbicide			21 ab	22 a	22 ab	22 abc	22 a	24 a	21 abc
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		22 ab	21 ab	22 ab	19 bcd	21 ab	21 abc	18 c
15	Vapam (75 G) No Herbicide			22 a	21 ab	22 ab	22 abc	19 ab	22 ab	22 ab
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		21 ab	20 ab	20 ab	19 a-d	19 ab	20 bc	20 abc
LSD (P=.05)				6.6	3.7	3.6	3.6	3.4	3.4	3.6
Standard Deviation				4.6	2.6	2.5	2.5	2.3	2.4	2.5
CV				23.71	13.12	12.31	12.32	11.68	11.46	12.18
Bartlett's X2				32.037	15.654	22.766	20.333	17.766	9.005	21.931
P(Bartlett's X2)				0.006*	0.405	0.089	0.16	0.275	0.877	0.11

University of Georgia

	plant 20	plant 21	plant 22	plant 23	plant 24	plant 25	plant 26
Weed Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code	ht	ht	ht	ht	ht	ht	ht
Rating Data Type	cm	cm	cm	cm	cm	cm	cm
Rating Unit	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Rating Date	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
Trt-Eval Interval							
ARM Action Codes							

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

University of Georgia

Weed Code	plant 27 CPSAN	plant 28 CPSAN	plant 29 CPSAN	plant 30 CPSAN	plant 31 CPSAN	plant 32 CPSAN	plant 33 CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	50	51	52	53	54	55	56
1	No Fumigant No Herbicide			22 a	23 a	24 a	23 a	21 ab	22 abc	21 abc
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		22 a	20 abc	20 abc	22 abc	21 ab	21 abc	21 abc
3	MEBR 67:33 (350 lb/A) No Herbicide			20 a	22 ab	22 ab	21 a-d	20 ab	23 a	21 abc
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		22 a	22 ab	22 abc	21 abc	21 ab	21 abc	22 ab
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			19 a	18 bc	17 c	15 d	43 a	15 d	16 d
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		19 a	17 c	18 bc	16 cd	16 b	14 d	16 d
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			23 a	23 a	21 abc	18 a-d	17 b	23 ab	23 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		20 a	21 ab	21 abc	22 abc	21 ab	21 abc	20 abc
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			21 a	20 abc	18 bc	20 a-d	18 b	19 c	20 abc
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		19 a	19 abc	19 bc	17 bcd	18 b	19 bc	18 cd
11	T-C35 (35 G) (8" inject) No Herbicide			21 a	21 ab	21 abc	21 abc	22 ab	22 abc	21 abc
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		21 a	20 abc	21 abc	21 a-d	19 b	21 abc	22 ab
13	T2 (12 G) + Pic (150 lb) No Herbicide			22 a	22 ab	22 ab	22 ab	22 ab	19 bc	22 ab
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		19 a	20 ab	20 abc	22 ab	22 ab	22 abc	22 ab
15	Vapam (75 G) No Herbicide			22 a	19 abc	20 abc	21 a-d	20 ab	21 abc	21 abc
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		20 a	21 ab	20 abc	21 a-d	20 ab	19 bc	19 bc
LSD (P=.05)				4.4	3.2	4.1	5.0	19.4	3.3	3.1
Standard Deviation				3.1	2.3	2.8	3.5	13.5	2.3	2.1
CV				14.99	11.16	14.1	17.25	63.91	11.37	10.57
Bartlett's X2				33.735	14.754	11.344	42.254	134.752	17.918	10.343
P(Bartlett's X2)				0.004*	0.469	0.728	0.001*	0.001*	0.267	0.737

University of Georgia

Weed Code	plant 27	plant 28	plant 29	plant 30	plant 31	plant 32	plant 33
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 34 CPSAN	plant 35 CPSAN	plant 36 CPSAN	plant 37 CPSAN	plant 38 CPSAN	plant 39 CPSAN	plant 40 CPSAN			
Crop Code	ht	ht	ht	ht	ht	ht	ht			
Rating Data Type	cm	cm	cm	cm	cm	cm	cm			
Rating Unit	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Rating Date	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
Trt-Eval Interval										
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	57	58	59	60	61	62	63
1	No Fumigant No Herbicide			23 a	22 a	23 a	21 a	21 a	22 a	20 ab
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		20 abc	19 ab	20 abc	22 a	21 a	20 a-d	20 ab
3	MEBR 67:33 (350 lb/A) No Herbicide			21 ab	22 a	22 ab	21 a	21 ab	22 a	19 ab
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		20 abc	20 a	21 ab	21 a	23 a	20 abc	22 a
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			17 cd	15 bc	16 c	16 bc	14 c	16 de	17 ab
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		14 d	13 c	17 bc	15 c	16 bc	15 e	16 ab
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			22 a	21 a	21 ab	20 a	23 a	20 abc	21 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		21 ab	21 a	18 abc	22 a	18 abc	19 a-e	19 ab
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			19 abc	17 abc	18 bc	19 ab	18 abc	17 cde	17 ab
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		18 bc	17 abc	17 bc	19 ab	18 abc	18 a-e	14 b
11	T-C35 (35 G) (8" inject) No Herbicide			21 ab	21 a	21 ab	22 a	22 a	22 a	21 a
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		21 ab	21 a	19 abc	21 a	20 ab	20 a-d	21 a
13	T2 (12 G) + Pic (150 lb) No Herbicide			21 ab	22 a	19 abc	23 a	21 ab	18 a-e	22 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		22 a	20 ab	19 abc	21 a	18 abc	17 b-e	20 ab
15	Vapam (75 G) No Herbicide			21 ab	19 ab	21 ab	22 a	20 ab	19 a-e	19 ab
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		22 ab	19 ab	19 abc	20 ab	18 abc	21 ab	20 ab
LSD (P=.05)				3.2	4.5	4.1	3.6	4.2	3.5	5.5
Standard Deviation				2.2	3.2	2.9	2.5	2.9	2.4	3.9
CV				10.95	16.45	14.97	12.46	15.18	12.77	20.23
Bartlett's X2				19.49	32.053	10.332	20.769	20.909	22.705	21.258
P(Bartlett's X2)				0.192	0.006*	0.798	0.144	0.14	0.091	0.129

University of Georgia

Weed Code	plant 34	plant 35	plant 36	plant 37	plant 38	plant 39	plant 40
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 41 CPSAN	plant 42 CPSAN	plant 43 CPSAN	plant 44 CPSAN	plant 45 CPSAN	plant 46 CPSAN	plant 47 CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	64	65	66	67	68	69	70
1	No Fumigant No Herbicide			21 a	21 a	24 a	24 a	24 a	23 ab	24 a
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		18 ab	20 a	19 abc	23 ab	23 ab	25 a	20 ab
3	MEBR 67:33 (350 lb/A) No Herbicide			20 a	22 a	20 abc	21 abc	20 a-e	20 a-d	21 ab
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		21 a	22 a	23 ab	23 ab	23 abc	21 a-d	21 ab
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			19 ab	16 bc	17 c	17 abc	16 ef	18 cd	17 bc
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		15 b	15 c	18 bc	16 bc	14 f	17 d	15 c
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			22 a	23 a	22 abc	22 abc	23 abc	22 a-d	20 ab
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		21 a	21 a	20 abc	19 abc	19 b-e	20 a-d	20 abc
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			18 ab	20 a	21 abc	19 abc	18 def	19 bcd	20 ab
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		18 ab	20 a	19 bc	18 abc	19 cde	19 bcd	20 abc
11	T-C35 (35 G) (8" inject) No Herbicide			20 a	20 ab	22 abc	22 abc	20 a-d	20 a-d	20 ab
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		19 a	19 ab	21 abc	19 abc	22 a-d	21 a-d	21 ab
13	T2 (12 G) + Pic (150 lb) No Herbicide			21 a	21 a	18 bc	15 c	18 cde	20 a-d	19 abc
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		20 a	21 a	22 abc	21 abc	23 ab	22 a-d	18 bc
15	Vapam (75 G) No Herbicide			18 ab	20 ab	21 abc	19 abc	19 cde	22 abc	20 ab
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		20 a	23 a	20 abc	19 abc	20 a-d	18 bcd	20 ab
LSD (P=.05)				3.4	3.7	4.1	6.0	3.6	4.2	4.1
Standard Deviation				2.4	2.6	2.9	4.2	2.5	2.9	2.8
CV				12.43	12.99	14.17	21.31	12.72	14.42	14.41
Bartlett's X2				12.122	11.316	21.764	22.666	8.919	10.785	9.938
P(Bartlett's X2)				0.67	0.73	0.114	0.091	0.882	0.768	0.824

University of Georgia

	plant 41	plant 42	plant 43	plant 44	plant 45	plant 46	plant 47
Weed Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code	ht	ht	ht	ht	ht	ht	ht
Rating Data Type	cm	cm	cm	cm	cm	cm	cm
Rating Unit	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Rating Date	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
Trt-Eval Interval							
ARM Action Codes							

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

University of Georgia

Weed Code	plant 48 CPSAN	plant 49 CPSAN	plant 50 CPSAN	plant 51 CPSAN	plant 52 CPSAN	plant 53 CPSAN	plant 54 CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	71	72	73	74	75	76	77
1	No Fumigant No Herbicide			23 ab	21 abc	23 a	24 a	23 a	21 a	22 a
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		22 abc	22 a	22 a	21 ab	22 a	21 a	17 ab
3	MEBR 67:33 (350 lb/A) No Herbicide			24 ab	16 bc	22 a	21 ab	20 abc	21 a	22 a
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		21 abc	23 a	22 a	21 ab	22 ab	23 a	21 a
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			16 de	17 abc	14 b	13 e	16 cd	12 c	16 ab
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		14 e	15 c	14 b	15 de	12 d	14 bc	12 b
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			22 abc	19 abc	21 a	21 ab	21 abc	22 a	22 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		21 abc	19 abc	21 a	20 abc	20 abc	21 a	22 a
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			20 bcd	17 abc	19 ab	20 abc	20 abc	20 ab	18 ab
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		19 cd	17 abc	19 ab	18 bcd	17 bcd	19 ab	18 ab
11	T-C35 (35 G) (8" inject) No Herbicide			19 cd	21 abc	20 a	22 ab	20 abc	22 a	17 ab
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		21 abc	21 ab	21 a	20 abc	20 abc	21 ab	19 ab
13	T2 (12 G) + Pic (150 lb) No Herbicide			24 a	21 abc	18 ab	18 bcd	21 abc	20 ab	21 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		21 abc	21 ab	19 a	20 abc	21 abc	22 a	20 a
15	Vapam (75 G) No Herbicide			21 abc	22 a	20 a	17 cde	20 abc	16 abc	22 a
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		20 bc	19 abc	22 a	21 ab	22 a	20 ab	20 a
LSD (P=.05)				3.5	5.0	4.4	3.4	4.8	5.7	6.1
Standard Deviation				2.5	3.5	3.0	2.4	3.3	4.0	4.3
CV				12.22	18.27	15.48	12.46	17.05	20.19	22.45
Bartlett's X2				7.795	29.623	23.276	11.315	15.843	30.36	28.812
P(Bartlett's X2)				0.932	0.013*	0.078	0.73	0.323	0.011*	0.017*

University of Georgia

Weed Code	plant 48	plant 49	plant 50	plant 51	plant 52	plant 53	plant 54
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 55 CPSAN	plant 56 CPSAN	plant 57 CPSAN	plant 58 CPSAN	plant 59 CPSAN	plant 60 CPSAN	plant 61 CPSAN		
Crop Code									
Rating Data Type	ht	ht	ht	ht	ht	ht	ht		
Rating Unit	cm	cm	cm	cm	cm	cm	cm		
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07		
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A		
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate		
		Unit							
1	No Fumigant No Herbicide		78	79	80	81	82	83	84
			23 a	22 ab	22 a	20 abc	23 b	20 ab	20 a
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A	20 abc	22 ab	20 ab	20 abc	21 b	19 ab	21 a
3	MEBR 67:33 (350 lb/A) No Herbicide		21 ab	20 ab	21 ab	22 a	21 b	20 ab	21 a
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A	20 abc	22 ab	21 ab	20 abc	21 b	19 ab	19 a
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide		12 d	15 cd	15 bc	15 bc	17 b	17 b	19 a
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A	14 cd	13 d	12 c	14 c	70 a	30 a	17 a
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide		21 ab	23 a	20 ab	20 abc	21 b	18 b	20 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A	20 abc	22 ab	20 ab	21 ab	18 b	18 ab	16 a
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide		22 ab	18 abc	19 ab	19 abc	20 b	20 ab	20 a
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A	19 abc	17 bcd	17 abc	19 abc	20 b	19 ab	16 a
11	T-C35 (35 G) (8" inject) No Herbicide		20 abc	20 ab	21 ab	19 abc	22 b	19 ab	22 a
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A	20 abc	20 abc	21 ab	20 abc	19 b	19 ab	17 a
13	T2 (12 G) + Pic (150 lb) No Herbicide		21 ab	22 ab	17 abc	21 ab	21 b	20 ab	19 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A	20 abc	19 abc	20 ab	20 abc	20 b	22 ab	20 a
15	Vapam (75 G) No Herbicide		22 ab	21 ab	18 ab	19 abc	18 b	17 b	19 a
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A	17 bcd	21 ab	20 ab	18 abc	20 b	20 ab	16 a
LSD (P=.05)			5.6	4.1	5.1	5.6	38.2	10.4	4.9
Standard Deviation			3.9	2.8	3.6	3.9	26.8	7.3	3.5
CV			20.36	14.45	18.93	20.4	115.27	37.07	18.32
Bartlett's X2			21.884	23.99	22.592	34.998	178.37	75.194	46.718
P(Bartlett's X2)			0.111	0.065	0.093	0.002*	0.001*	0.001*	0.001*

University of Georgia

	plant 55	plant 56	plant 57	plant 58	plant 59	plant 60	plant 61
Weed Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code							
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 62 CPSAN	plant 63 CPSAN	plant 64 CPSAN	plant 65 CPSAN	plant 66 CPSAN	plant 67 CPSAN	plant 68 CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	85	86	87	88	89	90	91
1	No Fumigant No Herbicide			20 abc	21 a	15 b	21 abc	21 abc	20 abc	19 abc
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		22 ab	21 ab	23 a	22 ab	22 ab	23 a	22 a
3	MEBR 67:33 (350 lb/A) No Herbicide			23 a	20 ab	22 a	20 abc	22 ab	20 abc	21 ab
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		21 ab	22 a	22 a	23 a	21 ab	22 a	21 ab
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			16 cd	17 bc	18 ab	17 de	17 cd	16 d	14 bc
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		16 d	16 c	18 ab	16 de	16 d	17 cd	13 c
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			21 ab	20 abc	21 a	21 abc	21 ab	21 abc	22 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		19 bcd	20 ab	22 a	20 abc	21 abc	22 ab	21 ab
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			21 ab	19 abc	19 ab	16 e	16 d	19 abc	20 abc
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		18 bcd	20 abc	19 ab	19 cde	19 a-d	18 bcd	19 abc
11	T-C35 (35 G) (8" inject) No Herbicide			22 ab	21 a	20 ab	21 abc	23 ab	20 abc	16 abc
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		21 ab	21 ab	19 ab	19 bcd	19 bcd	20 abc	19 abc
13	T2 (12 G) + Pic (150 lb) No Herbicide			20 abc	20 ab	21 ab	20 abc	20 abc	21 abc	22 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		19 a-d	22 a	21 ab	20 abc	20 a-d	19 a-d	20 ab
15	Vapam (75 G) No Herbicide			21 ab	21 a	20 ab	21 abc	23 a	20 abc	20 abc
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		19 a-d	20 ab	21 ab	21 abc	21 ab	22 ab	20 abc
LSD (P=.05)				3.2	3.5	5.1	2.9	3.4	3.2	5.7
Standard Deviation				2.2	2.4	3.6	2.0	2.4	2.2	4.0
CV				11.17	12.1	18.05	10.28	11.86	11.11	20.9
Bartlett's X2				9.365	16.577	32.459	20.889	14.729	7.123	31.519
P(Bartlett's X2)				0.858	0.345	0.006*	0.14	0.471	0.954	0.007*

University of Georgia

	plant 62	plant 63	plant 64	plant 65	plant 66	plant 67	plant 68
Weed Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code							
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 69 CPSAN	plant 70 CPSAN	plant 71 CPSAN	plant 72 CPSAN	plant 73 CPSAN	plant 74 CPSAN	plant 75 CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	ht			
Rating Unit	cm	cm	cm	cm	cm	cm	cm			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	92	93	94	95	96	97	98
1	No Fumigant No Herbicide			22 a	16 ab	22 a	22 a	22 ab	20 ab	18 ab
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		22 a	22 a	20 ab	22 a	23 a	22 ab	17 ab
3	MEBR 67:33 (350 lb/A) No Herbicide			20 abc	21 a	22 a	22 a	18 bcd	21 ab	17 ab
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		22 a	19 ab	21 ab	22 a	23 a	22 ab	21 a
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			16 c	12 b	15 cd	12 b	15 cd	11 d	11 b
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		17 bc	15 ab	15 d	12 b	15 d	15 c	15 ab
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			20 abc	21 a	23 a	22 a	21 ab	21 ab	21 a
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		19 abc	19 ab	21 ab	21 a	20 a-d	22 ab	20 ab
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			20 abc	18 ab	19 abc	18 a	19 a-d	19 abc	18 ab
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		18 abc	18 ab	17 bcd	20 a	20 a-d	19 abc	18 ab
11	T-C35 (35 G) (8" inject) No Herbicide			20 ab	19 ab	20 ab	22 a	22 ab	23 ab	19 ab
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		20 abc	20 a	21 ab	18 a	18 bcd	18 bc	19 ab
13	T2 (12 G) + Pic (150 lb) No Herbicide			19 abc	20 a	22 ab	21 a	22 ab	19 abc	21 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		19 abc	20 a	19 abc	20 a	20 abc	19 abc	20 ab
15	Vapam (75 G) No Herbicide			21 ab	21 a	21 ab	21 a	23 a	21 ab	22 a
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		20 abc	18 ab	20 ab	22 a	23 ab	23 a	22 a
LSD (P=.05)				3.6	6.3	3.9	5.2	4.3	4.3	7.9
Standard Deviation				2.5	4.4	2.7	3.6	3.0	3.0	5.5
CV				12.85	23.81	13.86	18.37	15.07	15.52	29.6
Bartlett's X2				16.019	50.511	22.277	35.71	17.455	36.431	45.153
P(Bartlett's X2)				0.381	0.001*	0.101	0.002*	0.292	0.002*	0.001*

University of Georgia

Weed Code	plant 69	plant 70	plant 71	plant 72	plant 73	plant 74	plant 75
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	ht
Rating Unit	cm	cm	cm	cm	cm	cm	cm
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	plant 76 CPSAN	plant 77 CPSAN	plant 78 CPSAN	plant 79 CPSAN	plant 80 CPSAN	AVG80PLA CPSAN	CPSAN			
Crop Code										
Rating Data Type	ht	ht	ht	ht	ht	ht	weed cts			
Rating Unit	cm	cm	cm	cm	cm	cm	CYPES			
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Mar-29-07			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	30 DA-A			
ARM Action Codes						T2				
Trt No.	Treatment Name	Rate	Unit	99	100	101	102	103	104	105
1	No Fumigant No Herbicide			17 ab	22 ab	22 a	20 a-d	14 ab	21 ab	8 a
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A		16 ab	21 ab	19 a	20 abc	20 a	21 abc	0 b
3	MEBR 67:33 (350 lb/A) No Herbicide			20 ab	22 a	22 a	20 a-d	18 ab	21 abc	0 b
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A		20 ab	20 abc	20 a	16 cd	20 a	21 abc	0 b
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide			15 ab	11 d	15 b	17 bcd	16 ab	17 f	0 b
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A		13 b	15 c	15 b	15 d	12 b	17 f	0 b
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide			22 a	21 ab	22 a	23 a	20 a	21 a	0 b
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A		21 ab	18 abc	21 a	19 a-d	18 ab	20 abc	0 b
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide			19 ab	19 abc	22 a	20 a-d	18 ab	19 de	0 b
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A		18 ab	17 bc	18 ab	18 a-d	18 ab	18 ef	0 b
11	T-C35 (35 G) (8" inject) No Herbicide			21 a	19 abc	21 a	22 ab	19 a	21 abc	0 b
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A		18 ab	18 abc	18 ab	19 a-d	19 a	20 bcd	0 b
13	T2 (12 G) + Pic (150 lb) No Herbicide			22 a	20 ab	20 a	20 a-d	20 a	21 abc	14 a
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A		20 ab	21 ab	21 a	20 a-d	18 ab	20 abc	1 b
15	Vapam (75 G) No Herbicide			21 a	19 abc	20 a	19 a-d	18 ab	20 a-d	0 b
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A		21 ab	18 abc	20 a	19 a-d	21 a	20 cd	0 b
LSD (P=.05)				6.8	4.1	3.9	4.2	5.9	1.2	6.3
Standard Deviation				4.8	2.9	2.7	3.0	4.1	0.8	4.4
CV				25.27	15.48	14.04	15.61	22.97	4.24	311.95
Bartlett's X2				53.513	39.533	15.18	28.887	33.902	17.04	24.676
P(Bartlett's X2)				0.001*	0.001*	0.366	0.017*	0.004*	0.316	0.001*

University of Georgia

Weed Code	plant 76	plant 77	plant 78	plant 79	plant 80	AVG80PLA	
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	ht	ht	ht	ht	ht	ht	weed cts
Rating Unit	cm	cm	cm	cm	cm	cm	CYPES
Rating Date	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Apr-24-07	Mar-29-07
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A	30 DA-A
ARM Action Codes						T2	

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

Column 104: T2 = @AVG([C24].[C103])

University of Georgia

Weed Code		CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code		weed cts	weed cts	weed cts	weed cts	weed cts	weed cts	weed cts
Rating Data Type		CYPES	CYPES	IPOLA	IAQTA	PORPI	AMAVI	DIGSA
Rating Unit								
Rating Date		Apr-24-07	May-03-07	May-03-07	May-03-07	May-03-07	May-03-07	May-03-07
Trt-Eval Interval		56 DA-A	65 DA-A	65 DA-A	65 DA-A	65 DA-A	65 DA-A	65 DA-A
ARM Action Codes								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit	Unit
		106	107	108	109	110	111	112
1	No Fumigant No Herbicide	18 b	25 b	0 a	0 b	13 a	1 b	15 a
2	No Fumigant Command Dual Magnum	4 b	4 c	0 a	0 b	1 b	0 b	0 b
3	MEBR 67:33 (350 lb/A) No Herbicide	0 b	0 c	0 a	0 b	0 cd	0 b	1 b
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	0 b	0 c	0 a	0 b	0 cd	0 b	0 b
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide	0 b	0 c	0 a	1 b	0 d	0 b	1 b
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	0 b	0 c	0 a	0 b	0 d	0 b	0 b
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide	0 b	1 c	0 a	0 b	0 d	0 b	0 b
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	0 b	0 c	0 a	0 b	0 d	0 b	0 b
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide	0 b	0 c	0 a	0 b	0 d	1 a	2 b
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	0 b	0 c	0 a	0 b	0 d	0 b	0 b
11	T-C35 (35 G) (8" inject) No Herbicide	14 b	19 bc	0 a	3 a	0 d	0 b	13 a
12	T-C35 (35 G) (8"inject) Command Dual Magnum	0 b	4 c	0 a	0 b	0 d	0 b	0 b
13	T2 (12 G) + Pic (150 lb) No Herbicide	40 a	43 a	0 a	0 b	1 bc	0 b	0 b
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	3 b	5 c	0 a	0 b	0 d	0 b	0 b
15	Vapam (75 G) No Herbicide	1 b	2 c	0 a	0 b	0 cd	0 b	0 b
16	Vapam (75 G) Command Dual Magnum	0 b	0 c	0 a	0 b	0 cd	0 b	0 b
LSD (P=.05)		17.7	16.1	0.0	2.1	0.8	0.7	8.5
Standard Deviation		12.4	11.3	0.0	1.5	0.6	0.5	6.0
CV		249.68	174.86	0.0	687.62	55.53	369.99	298.32
Bartlett's X2		34.974	67.247	0.0	6.686	9.279	3.057	43.502
P(Bartlett's X2)		0.001*	0.001*	.	0.01*	0.158	0.217	0.001*

University of Georgia

Weed Code							
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	weed cts	weed cts	weed cts	weed cts	weed cts	weed cts	weed cts
Rating Unit	CYPES	CYPES	IPOLA	IAQTA	PORPI	AMAVI	DIGSA
Rating Date	Apr-24-07	May-03-07	May-03-07	May-03-07	May-03-07	May-03-07	May-03-07
Trt-Eval Interval	56 DA-A	65 DA-A	65 DA-A	65 DA-A	65 DA-A	65 DA-A	65 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	harv 1 CPSAN	harv 1 CPSAN	harv 2 CPSAN	harv 2 CPSAN	harv 3 CPSAN	harv 3 CPSAN	harv 4 CPSAN
Crop Code	# jumbo	wt/lbs	# jumbo	wt/lbs	# jumbo	wt/lbs	# jumbo
Rating Data Type	#	lbs	#	lbs	#	lbs	#
Rating Unit							
Rating Date	Jun-01-07	Jun-01-07	Jun-07-07	Jun-07-07	Jun-14-07	Jun-14-07	Jun-29-07
Trt-Eval Interval	94 DA-A	94 DA-A	100 DA-A	100 DA-A	107 DA-A	107 DA-A	122 DA-A
ARM Action Codes							
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit
1	No Fumigant No Herbicide						
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A					
3	MEBR 67:33 (350 lb/A) No Herbicide						
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A					
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide						
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A					
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide						
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A					
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide						
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A					
11	T-C35 (35 G) (8" inject) No Herbicide						
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A					
13	T2 (12 G) + Pic (150 lb) No Herbicide						
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A					
15	Vapam (75 G) No Herbicide						
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A					
LSD (P=.05)	27.5	13.2	29.2	14.0	28.4	12.0	30.3
Standard Deviation	19.3	9.3	20.4	9.8	19.8	8.4	21.2
CV	21.09	20.34	22.22	22.91	17.24	15.86	23.71
Bartlett's X2	7.581	9.088	6.849	6.167	11.377	10.354	10.285
P(Bartlett's X2)	0.939	0.873	0.962	0.977	0.725	0.797	0.801

University of Georgia

Weed Code	harv 1	harv 1	harv 2	harv 2	harv 3	harv 3	harv 4
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Rating Data Type	# jumbo	wt/lbs	# jumbo	wt/lbs	# jumbo	wt/lbs	# jumbo
Rating Unit	#	lbs	#	lbs	#	lbs	#
Rating Date	Jun-01-07	Jun-01-07	Jun-07-07	Jun-07-07	Jun-14-07	Jun-14-07	Jun-29-07
Trt-Eval Interval	94 DA-A	94 DA-A	100 DA-A	100 DA-A	107 DA-A	107 DA-A	122 DA-A
ARM Action Codes							

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

University of Georgia

Weed Code	harv 4	harv1-4	harv1-4
Crop Code	CPSAN	CPSAN	CPSAN
Rating Data Type	wt/lbs	#jumbo	wt/lbs
Rating Unit	lbs	#	lbs
Rating Date	Jun-29-07		
Trt-Eval Interval	122 DA-A		
ARM Action Codes		T4	T3
Trt No.	Treatment Name	Rate	Rate
		Unit	Unit
		120	121
		122	
1	No Fumigant No Herbicide	30 de	305 d
2	No Fumigant Command Dual Magnum	1 QT/A 1 PT/A	377 abc
3	MEBR 67:33 (350 lb/A) No Herbicide	42 a-e	378 abc
4	MEBR 67:33 (350 lb/A) Command Dual Magnum	1 QT/A 1 PT/A	413 abc
5	MIDAS 50:50 (175 lb/A)VIF No Herbicide	54 a	361 c
6	MIDAS 50:50 (175 lb/A)VIF Command Dual Magnum	1 QT/A 1 PT/A	391 abc
7	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3, No Herbicide	43 a-d	402 abc
8	T2(12 G)+Pic(150lb) yr2,4 MEBR 67:33 (350lb) yr1,3 Command Dual Magnum	1 QT/A 1 PT/A	407 abc
9	T2 (12 G) + Vapam(75 G) + Pic (150 lb) No Herbicide	33 cde	394 abc
10	T2 (12 G) + Vapam(75 G) + Pic 150 lb Command Dual Magnum	1 QT/A 1 PT/A	419 ab
11	T-C35 (35 G) (8" inject) No Herbicide	33 cde	390 abc
12	T-C35 (35 G) (8"inject) Command Dual Magnum	1 QT/A 1 PT/A	416 abc
13	T2 (12 G) + Pic (150 lb) No Herbicide	35 cde	369 abc
14	T2 (12 G) + Pic (150 lb) Command Dual Magnum	1 QT/A 1 PT/A	424 a
15	Vapam (75 G) No Herbicide	28 e	362 bc
16	Vapam (75 G) Command Dual Magnum	1 QT/A 1 PT/A	400 abc
LSD (P=.05)		12.6	48.1
Standard Deviation		8.8	33.7
CV		22.97	8.68
Bartlett's X2		10.738	7.73
P(Bartlett's X2)		0.771	0.934
			20.5
			14.3
			7.99
			7.211
			0.952

University of Georgia

Weed Code	harv 4	harv1-4	harv1-4
Crop Code	CPSAN	CPSAN	CPSAN
Rating Data Type	wt/lbs	#jumbo	wt/lbs
Rating Unit	lbs	#	lbs
Rating Date	Jun-29-07		
Trt-Eval Interval	122 DA-A		
ARM Action Codes		T4	T3

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

Column 121: T4 = [113]+[115]+[117]+[119]

Column 122: T3 = ([C114]+[C116]+[C118]+[C120])

University of Georgia

Long-Term Effects of Methyl Bromide Alternatives on Weeds, Diseases, & Nematodes YEAR 4 (spring pepper crop)

Trial ID: Veg23-07(spring) Study Dir.: Culpepper/Langston/Davis
Location: TVP Investigator: Stanley Culpepper

GENERAL TRIAL INFORMATION

Study Director: Culpepper/Langston **Title:** UGA Extension
Affiliation: University of Georgia
Postal Code: 31794

Investigator: Stanley Culpepper **Title:** Ext. Weed Science
Affiliation: University of Georgia
Postal Code: 31794

TRIAL LOCATION

City: Tifton **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** excellent
Postal Code: 31794 **Initiation Date:** Feb-27-07
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.	DIGSA	large crabgrass	
2.	PORPI	pink purslane	
3.	CYPES	yellow nutsedge	
4.	IAQTA	smallflower morningglory	
5.	MOLVE	carpetweed	
6.	AMAVI	livid amaranth	

Crop 1: CPSAN bell pepper **Variety:** Heritage
Planting Date: Mar-19-07 **Planting Method:** transplant
Rate: 1 per ft **Depth:** 1 in **Perennial Age:** _____
Row Spacing: 15 inch **Spacing Within Row:** 12 inch **Seed Bed:** mulch
Soil Temperature: 74 F **Soil Moisture:** drip **Emergence Date:** _____

Crop 2: _____ **Variety:** _____
Planting Date: _____ **Planting Method:** _____
Rate: _____ **Depth:** _____ **Perennial Age:** _____
Row Spacing: _____ **Spacing Within Row:** _____ **Seed Bed:** _____
Soil Temperature: _____ **Soil Moisture:** _____ **Emergence Date:** _____

University of Georgia

Crop 3: _____ Variety: _____
 Planting Date: _____ Planting Method: _____
 Rate: _____ Depth: _____ Perennial Age: _____
 Row Spacing: _____ Spacing Within Row: _____ Seed Bed: _____
 Soil Temperature: _____ Soil Moisture: _____ Emergence Date: _____

SITE AND DESIGN

Plot Width, Unit: 12 FT Plot Length, Unit: 25 FT Reps: 4
 Site Type: Tifton Vegetable Park
 Tillage Type: conventional Study Design: FACTORIAL

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

MAINTENANCE

Field Prep./Maintenance: Fumigant plots are 12 feet wide and 60 feet long. Soil is only moved within a plot with a ripper and a roto-tiller.

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

SOIL DESCRIPTION

% Sand: 90 % OM: 1.1 Texture: sand
 % Silt: 8 pH: 6.1 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: drip

Closest Weather Station: _____ Distance: _____ Unit: _____

APPLICATION DESCRIPTION

	A	B
Application Date:	Feb-27-07	Feb-27-07
Time of Day:	1 pm	1 pm
Application Method:	band	band
Application Timing:	preplant	under mul
Applic. Placement:	shank inj	broadcast
Air Temp., Unit:	77 f	77 f
% Relative Humidity:	35	35
Wind Velocity, Unit:	5 MPH	5 MPH
Dew Presence (Y/N):	N	N
Water Hardness:		
Soil Temp., Unit:	60 f	60 f
Soil Moisture:	moist	moist
% Cloud Cover:	0	0

University of Georgia

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	CPSAN preplant	CPSAN
Stage Scale:	not up	
Height, Unit:	0 inch	
Crop 2 Code, Stage:		
Stage Scale:		
Height, Unit:		
Crop 3 Code, Stage:		
Stage Scale:		
Height, Unit:		

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	DIGSA preplant	DIGSA
Stage Scale:	not up	
Density, Unit:	see data	
Weed 2 Code, Stage:	PORPI preplant	PORPI
Stage Scale:	not up	
Density, Unit:	see data	
Weed 3 Code, Stage:	CYPES preplant	CYPES
Stage Scale:	not up	
Density, Unit:	see data	
Weed 4 Code, Stage:	IAQTA preplant	IAQTA
Stage Scale:	not up	
Density, Unit:	see data	
Weed 5 Code, Stage:	MOLVE preplant	MOLVE
Stage Scale:	not up	
Density, Unit:	see data	
Weed 6 Code, Stage:	AMAVI preplant	AMAVI
Stage Scale:	not up	
Density, Unit:	see data	

University of Georgia

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	see	boom
Operating Pressure:	comments	26
Nozzle Type:		flat fan
Nozzle Size:		11002
Nozzle Spacing, Unit:		12 inch
Nozzles/Row:		5
Band Width, Unit:		
Boom Length, Unit:		6 feet
Boom Height, Unit:		15 inch
Ground Speed, Unit:		3 mph
Incorporation Equip.:		
Hours to Incorp.:		
Incorp. Depth, Unit:		
Carrier:		water
Spray Volume, Unit:		24 GPA
Spray pH:		
Propellant:		CO2
Tank Mix (Y/N):		Y

Trt No	Treatment Application Comment