

# University of Georgia

**Determining plant back interval when applying the 3-Way fumigant system.**

Trial ID: Veg17-08

Study Dir.: Edwards, Culpepper

Location: TVP

Investigator: Stanley Culpepper

Reps: 3

Plots: 6 by 100 feet

Spray vol: 14.8 gal/ac

Mix size: 1 liters (min 2.315)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Grow Unit	Appl Stg	Code	Amt to Measure	Product	Plot No. 1	Plot No. 2	Plot No. 3	By Rep
1	MB 50:50 VIF (210 lb) 13 d										101	205	301	
2	MB 50:50 VIF (210 lb) 13 d + 1										102	206	302	
3	MB 50:50 VIF (210 lb) 13 d + 2										103	207	303	
4	MB 50:50 VIF (210 lb) 13 d + 4										104	208	304	
5	3-WAY LDPE 13 d										105	201	305	
6	3-WAY LDPE 13 d + 1										106	202	306	
7	3-WAY LDPE 13 d + 2										107	203	307	
8	3-WAY LDPE 13 d + 3										108	204	308	

Sort Order: Treatment

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
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\* '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:** Determine the amount of fumigant gas in the bed at planting and to determine the impact of poking the plant hole on gas emissions.

#### Fumigant Gas Amounts In Bed At Planting:

- At 13 d after fumigating when initial hole poking and the first planting occurred there was 145 ppm MB in the bed and 24.3 ppm of the 3-way (could be telone or metam).
- On day 14 after airing the bed for one day there was 28.4 ppm MB and 8 ppm 3-way.
- On day 15 after airing the bed for two days there was 12.6 ppm MB and 3.5 ppm 3-way.
- On day 17 after airing the bed for four days there was no fumigant detected.

#### TOMTAO RESPONSE:

- Visual stunting from MB at 145, 28, 12, and 0 ppm was 50, 18, 12, and 0% at 12 DAP.
- Visual stunting from 3-way at 24, 8, 4 and 0 ppm was 41, 18, 8, and 0% at 12 DAP.
- Tomato was harvested and graded eight times. No statistical differences were noted but less yield was evident with plant date 1 compared to plant date 3 or 4 for both fumigants.

#### PEPPER RESPONSE

- Visual stunting from MB at 145, 28, 12, and 0 ppm was 45, 27, 20, and 0% at 12 DAP.

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2. Visual stunting from 3-way at 24, 8, 4 and 0 ppm was 63, 20, 20, and 0% at 12 DAP.
3. Jumbo pepper was harvested six times. No statistical differences were noted but less yield was evident with plant date 1 compared to plant date 3 or 4 with both fumigants.

## CANTALOUPE RESPONSE:

1. Visual stunting from MB at 145, 28, 12, and 0 ppm was 85, 22, 20, and 0% at 12 DAP.
2. Visual stunting from 3-way at 24, 8, 4 and 0 ppm was 79, 22, 13, and 0% at 12 DAP.
3. Cantaloupe were harvested 12 times. No statistical impact on fruit weight occurred but obvious trends for less fruit weight were noted on plant date 0 and plant date 1 for both fumigants. Also plant date 1 and plant date 2 with MB did produce at least 13% less fruit than plant date 4.

## CONCLUSIONS:

1. Fumigant gases in the bed must not be detected to secure no negative crop response with these fumigants. Conditions following planting were miserable and thus magnified the injury noted in this study.

## GENERAL COMMENTS:

1. MB applied 8 inch below bedtop with 3 knives with 32 inch bed top.
2. 3-WAY: Pic Chlor 60 applied 8 inch below bedtop with 3 knives and Vapam applied 4 inches below bed top. Pic Chlor 60 at 21 GPA broadcast and Vapam at 75 GPA broadcast. Broadcast rates provided but fumigants only applied in bed.
3. All holes were poked at the same time on day 13.
4. A non-treated strip of 98:2 MB was included in all reps for visual comparison.

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Study Dir.: Edwards, Culpepper

Location: TVP

Investigator: Stanley Culpepper

Weed Code	Holesfor LYPES	Holesfor CPSAN	Holesfor LYPES	Holesfor LYPES	LYPES	LYPES	LYPES	LYPES	
Crop Code	MinniRae	MinniRae	MinniRae	MinniRae	INJURY	INURY	INJURY	INJURY	
Rating Data Type	PPM	PPM	PPM	PPM	%	%	%	%	
Rating Unit	Mar-13-08	Mar-14-08	Mar-15-08	Mar-17-08	Mar-24-08	Apr-04-08	Apr-21-08	Apr-29-08	
Rating Date	Day0Plan	Day1Plan	Day2Plan	Day4Plan	24 DA-A	35 DA-A	52 DA-A	60 DA-A	
Trt-Eval Interval									
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	Unit	
		1	2	3	4	6	7	8	
		9							
1	MB 50:50 VIF (210 lb) 13 d	145 a				50 a	30 ab	13 a	7 a
2	MB 50:50 VIF (210 lb) 13 d + 1		28 a			18 b	18 abc	4 b	0 b
3	MB 50:50 VIF (210 lb) 13 d + 2			13 a		12 bc	8 cd	2 b	0 b
4	MB 50:50 VIF (210 lb) 13 d + 4				0 a	0 c	0 d	0 b	0 b
5	3-WAY LDPE 13 d	24 b				42 a	32 a	8 ab	0 b
6	3-WAY LDPE 13 d + 1		8 b			18 b	15 bcd	6 ab	0 b
7	3-WAY LDPE 13 d + 2			4 b		8 bc	10 cd	2 b	0 b
8	3-WAY LDPE 13 d + 3				0 a	0 c	0 d	0 b	0 b
LSD (P=.05)		93.4	19.6	1.3	0.0	13.3	15.0	8.2	3.6
Standard Deviation		26.6	5.6	0.4	0.0	7.6	8.5	4.7	2.0
CV		31.39	30.65	4.65	0.0	41.28	60.34	106.41	244.95
Bartlett's X2		6.865	2.209	0.074	0.0	8.995	5.491	2.164	0.0
P(Bartlett's X2)		0.009*	0.137	0.786	.	0.109	0.359	0.826	.

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

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Weed Code	LYPES	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CUMMC	CUMMC	
Crop Code	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	INJURY	
Rating Data Type	%	%	%	%	%	%	%	%	
Rating Unit									
Rating Date	May-28-08	Mar-24-08	Apr-04-08	Apr-21-08	Apr-29-08	May-28-08	Mar-24-08	Apr-04-08	
Trt-Eval Interval	89 DA-A	24 DA-A	35 DA-A	52 DA-A	60 DA-A	89 DA-A	24 DA-A	35 DA-A	
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	Unit	
		10	12	13	14	15	16	18	19
1	MB 50:50 VIF (210 lb) 13 d	7 a	45 ab	43 b	30 b	33 a	20 a	85 a	47 a
2	MB 50:50 VIF (210 lb) 13 d + 1	0 b	27 bc	25 cd	13 c	10 bc	8 bc	22 b	18 b
3	MB 50:50 VIF (210 lb) 13 d + 2	0 b	20 cd	12 de	8 cd	0 c	3 c	20 b	8 bc
4	MB 50:50 VIF (210 lb) 13 d + 4	0 b	0 d	0 e	0 d	0 c	0 c	0 c	0 c
5	3-WAY LDPE 13 d	0 b	63 a	60 a	50 a	27 ab	19 a	79 a	45 a
6	3-WAY LDPE 13 d + 1	0 b	20 cd	25 cd	14 c	3 c	9 bc	22 b	15 bc
7	3-WAY LDPE 13 d + 2	0 b	20 cd	28 c	15 c	10 bc	15 ab	13 bc	7 bc
8	3-WAY LDPE 13 d + 3	0 b	0 d	0 e	0 d	0 c	0 c	0 c	0 c
LSD (P=.05)		3.6	19.0	13.1	10.0	18.5	9.4	12.9	15.6
Standard Deviation		2.0	10.8	7.5	5.7	10.6	5.4	7.3	8.9
CV		244.95	44.4	30.99	35.06	101.55	57.84	24.39	50.89
Bartlett's X2		0.0	2.208	5.752	0.83	5.413	2.95	4.345	13.535
P(Bartlett's X2)		.	0.82	0.331	0.975	0.144	0.708	0.501	0.019*

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## University of Georgia

Weed Code	CUMMC	CUMMC	CUMMC	AVG7PLAN	CUMMC	CUMMC	CUMMC	CUMMC	CUMMC
Crop Code	INJURY	INJURY	INJURY	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS
Rating Data Type	%	%	%	CM	PLANT 1	PLANT 2	PLANT 3	PLANT 4	PLANT 4
Rating Unit									
Rating Date	Apr-21-08	Apr-29-08	May-28-08	Apr-05-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08
Trt-Eval Interval	52 DA-A	60 DA-A	89 DA-A	21 DAP	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit
1	MB 50:50 VIF (210 lb) 13 d	37 a	33 a	0 a	5 d	59 ab	53 a	54 a	30 c
2	MB 50:50 VIF (210 lb) 13 d + 1	17 b	15 b	0 a	10 ab	58 ab	58 a	50 a	51 ab
3	MB 50:50 VIF (210 lb) 13 d + 2	7 bcd	0 c	0 a	7 cd	57 ab	59 a	57 a	65 a
4	MB 50:50 VIF (210 lb) 13 d + 4	0 d	0 c	0 a	9 ab	63 a	62 a	58 a	66 a
5	3-WAY LDPE 13 d	17 b	13 b	0 a	6 cd	44 b	44 a	39 a	31 bc
6	3-WAY LDPE 13 d + 1	13 bc	3 c	0 a	10 ab	61 ab	58 a	57 a	57 a
7	3-WAY LDPE 13 d + 2	2 cd	0 c	0 a	8 bc	61 ab	67 a	67 a	54 a
8	3-WAY LDPE 13 d + 3	0 d	0 c	0 a	10 a	54 ab	71 a	66 a	62 a
LSD (P=.05)		11.7	7.3	0.0	2.1	16.0	32.5	29.0	19.7
Standard Deviation		6.7	4.2	0.0	1.2	9.1	18.5	16.5	11.2
CV		57.42	51.36	0.0	14.97	15.98	31.41	29.54	21.7
Bartlett's X2		2.082	0.055	0.0	16.701	11.659	7.714	13.362	4.019
P(Bartlett's X2)		0.838	0.997	.	0.019*	0.112	0.358	0.064	0.778

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

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Weed Code	CUMMC	CUMMC	CUMMC	AVG7PLAN	CUMMC	CUMMC	CUMMC	
Crop Code	HEIGHTS	HEIGHTS	HEIGHTS	CUMMC	#/PLOT	WEIGHT/LBS	#/PLOT	
Rating Data Type	PLANT 5	PLANT 6	PLANT 7	HEIGHTS				
Rating Unit				CM				
Rating Date	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Jun-06-08	Jun-06-08	Jun-11-08	
Trt-Eval Interval	60 DA-A	60 DA-A	60 DA-A	61 DA-A	98 DA-A	98 DA-A	103 DA-A	
ARM Action Codes				T4				
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	
		30	31	32	33	35	36	37
1	MB 50:50 VIF (210 lb) 13 d	51 a	16 b	50 a	45 c	7 bc	24 bc	3 ab
2	MB 50:50 VIF (210 lb) 13 d + 1	58 a	54 a	47 a	54 abc	5 c	18 c	1 b
3	MB 50:50 VIF (210 lb) 13 d + 2	61 a	61 a	68 a	61 ab	14 ab	48 ab	2 ab
4	MB 50:50 VIF (210 lb) 13 d + 4	57 a	67 a	65 a	63 ab	12 abc	40 abc	2 b
5	3-WAY LDPE 13 d	60 a	55 a	57 a	47 bc	8 abc	26 bc	3 ab
6	3-WAY LDPE 13 d + 1	65 a	56 a	51 a	58 abc	10 abc	29 abc	3 ab
7	3-WAY LDPE 13 d + 2	60 a	62 a	68 a	63 ab	16 a	53 a	0 b
8	3-WAY LDPE 13 d + 3	65 a	68 a	60 a	64 a	8 abc	26 bc	5 a
LSD (P=.05)		22.6	21.3	25.7	14.2	7.1	23.2	2.9
Standard Deviation		12.9	12.2	14.7	8.1	4.1	13.2	1.6
CV		21.62	22.26	25.22	14.35	40.92	39.92	65.39
Bartlett's X2		6.158	3.093	8.811	6.108	2.517	2.107	10.545
P(Bartlett's X2)		0.521	0.876	0.267	0.527	0.926	0.954	0.16

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

Column 28: T4 = @AVG([C26],[C32])

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Weed Code	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS	
Crop Code								
Rating Data Type								
Rating Unit								
Rating Date	Jun-11-08	Jun-13-08	Jun-13-08	Jun-16-08	Jun-16-08	Jun-18-08	Jun-18-08	
Trt-Eval Interval	103 DA-A	105 DA-A	105 DA-A	108 DA-A	108 DA-A	110 DA-A	110 DA-A	
ARM Action Codes								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	
		38	39	40	41	42	43	
							44	
1	MB 50:50 VIF (210 lb) 13 d	16 a	2 a	8 a	2 a	12 a	1 a	5 a
2	MB 50:50 VIF (210 lb) 13 d + 1	5 ab	1 a	6 a	1 a	7 a	2 a	10 a
3	MB 50:50 VIF (210 lb) 13 d + 2	9 ab	1 a	5 a	2 a	9 a	1 a	3 a
4	MB 50:50 VIF (210 lb) 13 d + 4	7 ab	0 a	1 a	1 a	4 a	1 a	4 a
5	3-WAY LDPE 13 d	13 ab	2 a	8 a	2 a	6 a	1 a	4 a
6	3-WAY LDPE 13 d + 1	14 ab	1 a	4 a	2 a	8 a	1 a	5 a
7	3-WAY LDPE 13 d + 2	1 b	1 a	2 a	1 a	3 a	1 a	5 a
8	3-WAY LDPE 13 d + 3	19 a	1 a	5 a	3 a	13 a	1 a	2 a
LSD (P=.05)		12.5	2.1	8.8	4.4	20.7	2.6	12.8
Standard Deviation		7.1	1.2	5.0	2.5	11.8	1.5	7.3
CV		69.11	100.73	104.22	144.68	151.57	143.04	151.54
Bartlett's X2		10.765	2.899	6.143	8.163	7.761	8.44	15.443
P(Bartlett's X2)		0.149	0.894	0.523	0.318	0.354	0.208	0.031*

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

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Weed Code	CUMMC #/PLOT	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS	CUMMC #/PLOT
Crop Code							
Rating Data Type							
Rating Unit							
Rating Date	Jun-20-08	Jun-20-08	Jun-23-08	Jun-23-08	Jun-25-08	Jun-25-08	Jun-27-08
Trt-Eval Interval	112 DA-A	112 DA-A	115 DA-A	115 DA-A	117 DA-A	117 DA-A	119 DA-A
ARM Action Codes							
Trt Treatment							
No. Name							
Rate Unit	45	46	47	48	49	50	51
1 MB 50:50 VIF (210 lb) 13 d	1 ab	5 ab	1 a	4 ab	0 a	1 a	1 a
2 MB 50:50 VIF (210 lb) 13 d + 1	2 a	12 a	1 a	6 ab	2 a	9 a	1 a
3 MB 50:50 VIF (210 lb) 13 d + 2	0 b	3 b	0 a	2 b	1 a	4 a	2 a
4 MB 50:50 VIF (210 lb) 13 d + 4	2 ab	8 ab	2 a	11 a	0 a	2 a	1 a
5 3-WAY LDPE 13 d	2 ab	10 ab	0 a	2 b	1 a	5 a	1 a
6 3-WAY LDPE 13 d + 1	2 ab	6 ab	0 a	2 b	1 a	4 a	0 a
7 3-WAY LDPE 13 d + 2	0 b	2 b	1 a	4 ab	2 a	8 a	1 a
8 3-WAY LDPE 13 d + 3	0 b	1 b	1 a	6 ab	0 a	2 a	1 a
LSD (P=.05)	1.3	8.5	1.7	8.5	1.8	9.0	2.0
Standard Deviation	0.7	4.9	0.9	4.8	1.0	5.2	1.1
CV	66.81	84.57	108.35	108.45	115.3	113.44	114.17
Bartlett's X2	2.404	6.148	3.184	10.753	4.674	5.524	4.398
P(Bartlett's X2)	0.934	0.523	0.785	0.15	0.70	0.596	0.733

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



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Weed Code	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS	CUMMC #/PLOT	CUMMC WEIGHT/LBS			
Crop Code										
Rating Data Type										
Rating Unit										
Rating Date	Jun-27-08	Jun-30-08	Jun-30-08	Jul-02-08	Jul-02-08	Jul-07-08	Jul-07-08			
Trt-Eval Interval	119 DA-A	122 DA-A	122 DA-A	124 DA-A	124 DA-A	129 DA-A	129 DA-A			
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	52	53	54	55	56	57	58
1	MB 50:50 VIF (210 lb) 13 d	6 a	1 a	3 a	0 b	1 b	2 a	7 a		
2	MB 50:50 VIF (210 lb) 13 d + 1	3 a	0 a	2 a	1 ab	4 b	0 a	2 a		
3	MB 50:50 VIF (210 lb) 13 d + 2	8 a	2 a	12 a	1 ab	7 ab	3 a	15 a		
4	MB 50:50 VIF (210 lb) 13 d + 4	7 a	2 a	10 a	2 ab	12 ab	2 a	8 a		
5	3-WAY LDPE 13 d	3 a	1 a	7 a	1 ab	5 ab	2 a	11 a		
6	3-WAY LDPE 13 d + 1	2 a	1 a	7 a	1 b	3 b	3 a	15 a		
7	3-WAY LDPE 13 d + 2	7 a	1 a	4 a	1 ab	9 ab	1 a	4 a		
8	3-WAY LDPE 13 d + 3	6 a	2 a	10 a	3 a	18 a	2 a	8 a		
LSD (P=.05)	10.6	2.3	11.7	2.2	12.3	2.9	13.5			
Standard Deviation	6.1	1.3	6.7	1.2	7.0	1.7	7.7			
CV	118.96	102.94	98.35	87.31	92.93	91.33	89.07			
Bartlett's X2	4.925	3.796	6.746	7.154	15.398	4.391	4.331			
P(Bartlett's X2)	0.669	0.704	0.456	0.307	0.031*	0.734	0.741			

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

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Weed Code	HAR1-12 CUMMC #/PLOT	HAR1-12 CUMMC WT/LBS	LYPES #/PLOT JUMBO	LYPES WEIGHT/LBS JUMBO	LYPES #/PLOT JUMBO	LYPES WEIGHT/LBS JUMBO	LYPES #/PLOT LARGE
Rating Data Type							
Rating Unit							
Rating Date	May-20-09	May-20-09	Jun-05-08	Jun-05-08	Jun-09-08	Jun-09-08	Jun-09-08
Trt-Eval Interval	446 DA-A	446 DA-A	97 DA-A	97 DA-A	101 DA-A	101 DA-A	101 DA-A
ARM Action Codes	T1	T2					
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit
59			60		62		67
1	MB 50:50 VIF (210 lb) 13 d	21 cd	92 bc	1 b	3 c	8 a	3 a
2	MB 50:50 VIF (210 lb) 13 d + 1	18 d	84 c	6 a	25 a	6 a	3 a
3	MB 50:50 VIF (210 lb) 13 d + 2	30 a	125 a	2 b	7 bc	2 a	1 a
4	MB 50:50 VIF (210 lb) 13 d + 4	27 ab	115 ab	3 ab	10 abc	5 a	2 a
5	3-WAY LDPE 13 d	23 bcd	99 abc	3 ab	13 abc	5 a	2 a
6	3-WAY LDPE 13 d + 1	25 abc	99 abc	4 ab	18 ab	5 a	3 a
7	3-WAY LDPE 13 d + 2	26 abc	101 abc	3 ab	10 abc	4 a	2 a
8	3-WAY LDPE 13 d + 3	29 ab	116 ab	4 ab	15 abc	4 a	2 a
	LSD (P=.05)	5.6	26.5	3.5	13.8	5.7	2.5
	Standard Deviation	3.2	15.1	2.0	7.9	3.3	1.5
	CV	12.95	14.58	61.97	62.73	64.64	64.41
	Bartlett's X2	3.725	6.602	7.507	6.954	14.915	14.319
	P(Bartlett's X2)	0.811	0.471	0.378	0.434	0.037*	0.046*

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

Column 53: T1 = [C35]+[C37]+[C39]+[C41]+[C43]+[C45]+[C47]+[C49]+[C51]+[C53]+[C55]+[C57]

Column 54: T2 = [C36]+[C38]+[C40]+[C42]+[C44]+[C46]+[C48]+[C50]+[C52]+[C54]+[C56]+[C58]

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Weed Code	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	
Crop Code	LARGE	MEDIUM	MEDIUM	SMALL	SMALL	JUMBO	JUMBO	
Rating Data Type	Jun-09-08	Jun-09-08	Jun-09-08	Jun-09-08	Jun-09-08	Jun-13-08	Jun-13-08	
Rating Unit	101 DA-A	101 DA-A	101 DA-A	101 DA-A	101 DA-A	105 DA-A	105 DA-A	
Rating Date								
Trt-Eval Interval								
ARM Action Codes								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	
		68	69	70	71	72	74	75
1	MB 50:50 VIF (210 lb) 13 d	2 a	2 a	1 bc	2 ab	0 a	14 a	7 a
2	MB 50:50 VIF (210 lb) 13 d + 1	2 ab	3 a	1 bc	3 a	0 a	13 a	6 a
3	MB 50:50 VIF (210 lb) 13 d + 2	1 ab	1 a	0 bc	1 ab	0 a	14 a	7 a
4	MB 50:50 VIF (210 lb) 13 d + 4	0 b	4 a	1 b	1 ab	0 a	17 a	9 a
5	3-WAY LDPE 13 d	1 ab	5 a	2 a	2 ab	0 a	14 a	7 a
6	3-WAY LDPE 13 d + 1	1 ab	2 a	1 bc	1 b	0 a	13 a	7 a
7	3-WAY LDPE 13 d + 2	1 ab	4 a	1 b	1 ab	0 a	15 a	8 a
8	3-WAY LDPE 13 d + 3	1 ab	1 a	0 c	1 ab	0 a	16 a	8 a
LSD (P=.05)		1.2	3.4	0.6	2.0	0.3	5.8	3.1
Standard Deviation		0.7	2.0	0.3	1.1	0.2	3.3	1.8
CV		62.28	70.51	45.85	74.71	91.78	22.93	23.96
Bartlett's X2		6.653	11.443	7.637	2.631	5.688	7.076	11.911
P(Bartlett's X2)		0.466	0.076	0.366	0.757	0.577	0.421	0.104

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

## University of Georgia

Weed Code	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	
Crop Code	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT	
Rating Data Type	LARGE	LARGE	MEDIUM	MEDIUM	SMALL	SMALL	JUMBO	
Rating Unit								
Rating Date	Jun-13-08	Jun-13-08	Jun-13-08	Jun-13-08	Jun-13-08	Jun-13-08	Jun-18-08	
Trt-Eval Interval	105 DA-A	105 DA-A	105 DA-A	105 DA-A	105 DA-A	105 DA-A	110 DA-A	
ARM Action Codes								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	
		76	77	78	79	80	81	
		83						
1	MB 50:50 VIF (210 lb) 13 d	5 a	2 a	1 a	0 a	1 a	0 a	17 b
2	MB 50:50 VIF (210 lb) 13 d + 1	5 a	2 a	0 a	0 a	1 a	0 a	17 b
3	MB 50:50 VIF (210 lb) 13 d + 2	5 a	2 a	2 a	1 a	2 a	0 a	22 ab
4	MB 50:50 VIF (210 lb) 13 d + 4	6 a	2 a	2 a	0 a	1 a	0 a	25 a
5	3-WAY LDPE 13 d	9 a	3 a	3 a	1 a	3 a	0 a	19 ab
6	3-WAY LDPE 13 d + 1	6 a	2 a	2 a	1 a	2 a	0 a	22 ab
7	3-WAY LDPE 13 d + 2	6 a	2 a	3 a	1 a	2 a	0 a	22 ab
8	3-WAY LDPE 13 d + 3	4 a	1 a	3 a	1 a	1 a	0 a	24 a
LSD (P=.05)		5.4	2.0	3.0	0.9	3.0	0.5	6.4
Standard Deviation		3.1	1.1	1.7	0.5	1.7	0.3	3.7
CV		54.41	55.41	83.05	93.19	94.83	118.04	17.52
Bartlett's X2		4.077	4.313	4.851	7.001	1.699	2.921	5.407
P(Bartlett's X2)		0.771	0.743	0.563	0.321	0.975	0.892	0.493

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

## University of Georgia

Weed Code	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	
Crop Code	JUMBO	LARGE	LARGE	MEDIUM	MEDIUM	SMALL	SMALL	
Rating Data Type	Jun-18-08	Jun-18-08	Jun-18-08	Jun-18-08	Jun-18-08	Jun-18-08	Jun-18-08	
Rating Unit	110 DA-A	110 DA-A	110 DA-A	110 DA-A	110 DA-A	110 DA-A	110 DA-A	
Rating Date								
Trt-Eval Interval								
ARM Action Codes								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	
		84	85	86	87	88	89	
		90						
1	MB 50:50 VIF (210 lb) 13 d	11 a	1 a	0 a	0 b	0 b	0 a	0 a
2	MB 50:50 VIF (210 lb) 13 d + 1	11 a	1 a	0 a	0 b	0 b	1 a	0 a
3	MB 50:50 VIF (210 lb) 13 d + 2	17 a	2 a	1 a	1 b	0 b	1 a	0 a
4	MB 50:50 VIF (210 lb) 13 d + 4	17 a	2 a	1 a	0 b	0 b	0 a	0 a
5	3-WAY LDPE 13 d	11 a	2 a	1 a	2 ab	1 ab	1 a	0 a
6	3-WAY LDPE 13 d + 1	15 a	2 a	1 a	4 a	1 a	0 a	0 a
7	3-WAY LDPE 13 d + 2	14 a	2 a	1 a	1 b	0 b	2 a	0 a
8	3-WAY LDPE 13 d + 3	15 a	1 a	1 a	1 b	0 b	0 a	0 a
LSD (P=.05)		5.9	2.1	0.8	2.2	0.6	1.9	0.4
Standard Deviation		3.4	1.2	0.4	1.3	0.3	1.1	0.2
CV		24.57	71.55	72.64	108.46	115.45	129.61	180.05
Bartlett's X2		4.654	5.41	8.7	9.791	10.381	6.161	12.793
P(Bartlett's X2)		0.702	0.492	0.275	0.134	0.11	0.521	0.077

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

## University of Georgia

Weed Code	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Crop Code	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT
Rating Data Type	JUMBO	JUMBO	LARGE	LARGE	MEDIUM	MEDIUM	SMALL
Rating Unit	JUN-23-08	JUN-23-08	JUN-23-08	JUN-23-08	JUN-23-08	JUN-23-08	JUN-23-08
Rating Date	115 DA-A	115 DA-A	115 DA-A	115 DA-A	115 DA-A	115 DA-A	115 DA-A
Trt-Eval Interval							
ARM Action Codes							
Trt Treatment	92	93	94	95	96	97	98
No. Name Rate Unit							
1 MB 50:50 VIF (210 lb) 13 d	31 ab	14 b	4 ab	1 ab	1 a	0 a	1 a
2 MB 50:50 VIF (210 lb) 13 d + 1	23 b	14 b	4 ab	1 ab	2 a	1 a	1 a
3 MB 50:50 VIF (210 lb) 13 d + 2	35 ab	21 ab	5 ab	2 ab	2 a	0 a	1 a
4 MB 50:50 VIF (210 lb) 13 d + 4	38 a	25 a	1 b	0 b	1 a	0 a	2 a
5 3-WAY LDPE 13 d	26 ab	17 b	2 ab	1 ab	2 a	0 a	1 a
6 3-WAY LDPE 13 d + 1	34 ab	21 ab	5 ab	2 ab	2 a	1 a	0 a
7 3-WAY LDPE 13 d + 2	35 ab	20 ab	8 a	3 a	2 a	1 a	2 a
8 3-WAY LDPE 13 d + 3	35 ab	21 ab	5 ab	2 ab	3 a	1 a	1 a
LSD (P=.05)	12.1	7.1	5.2	2.0	4.2	1.1	2.1
Standard Deviation	6.9	4.1	3.0	1.2	2.4	0.6	1.2
CV	21.49	21.32	73.41	80.92	126.53	143.12	104.68
Bartlett's X2	8.154	7.096	3.746	4.989	4.785	10.647	2.343
P(Bartlett's X2)	0.319	0.419	0.808	0.661	0.572	0.155	0.938

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

## University of Georgia

Weed Code	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	
Crop Code	SMALL	JUMBO	JUMBO	LARGE	LARGE	MEDIUM	MEDIUM	
Rating Data Type	Jun-23-08	Jun-27-08	Jun-27-08	Jun-27-08	Jun-27-08	Jun-27-08	Jun-27-08	
Rating Unit	115 DA-A	119 DA-A	119 DA-A	119 DA-A	119 DA-A	119 DA-A	119 DA-A	
Rating Date								
Trt-Eval Interval								
ARM Action Codes								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	
99	101	102	103	104	105	106		
1	MB 50:50 VIF (210 lb) 13 d	0 a	20 a	11 a	6 a	2 a	2 a	0 a
2	MB 50:50 VIF (210 lb) 13 d + 1	0 a	19 a	12 a	4 a	1 a	4 a	1 a
3	MB 50:50 VIF (210 lb) 13 d + 2	0 a	20 a	12 a	5 a	2 a	1 a	0 a
4	MB 50:50 VIF (210 lb) 13 d + 4	0 a	17 a	11 a	6 a	2 a	0 a	0 a
5	3-WAY LDPE 13 d	0 a	13 a	8 a	4 a	2 a	2 a	1 a
6	3-WAY LDPE 13 d + 1	0 a	20 a	12 a	7 a	3 a	2 a	1 a
7	3-WAY LDPE 13 d + 2	0 a	20 a	11 a	6 a	2 a	4 a	2 a
8	3-WAY LDPE 13 d + 3	0 a	19 a	11 a	5 a	2 a	3 a	1 a
LSD (P=.05)	0.3	14.8	9.5	6.4	2.3	5.2	1.7	
Standard Deviation	0.2	8.5	5.4	3.7	1.3	3.0	1.0	
CV	120.87	45.61	49.42	67.06	68.14	126.99	136.54	
Bartlett's X2	6.336	14.368	16.467	11.522	10.646	3.183	5.886	
P(Bartlett's X2)	0.501	0.045*	0.021*	0.117	0.155	0.786	0.436	

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

## University of Georgia

Weed Code	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES						
Crop Code	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT						
Rating Data Type	SMALL	SMALL	JUMBO	JUMBO	LARGE	LARGE	MEDIUM						
Rating Unit	SMALL	SMALL	JUMBO	JUMBO	LARGE	LARGE	MEDIUM						
Rating Date	Jun-27-08	Jun-27-08	Jul-02-08	Jul-02-08	Jul-02-08	Jul-02-08	Jul-02-08						
Trt-Eval Interval	119 DA-A	119 DA-A	124 DA-A	124 DA-A	124 DA-A	124 DA-A	124 DA-A						
ARM Action Codes													
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate						
		Unit	Unit	Unit	Unit	Unit	Unit						
107			108		110		111		112		113		114
1	MB 50:50 VIF (210 lb) 13 d	0 a	0 a	18 a	11 a	8 a	3 a	3 a					
2	MB 50:50 VIF (210 lb) 13 d + 1	1 a	0 a	21 a	12 a	13 a	5 a	5 a					
3	MB 50:50 VIF (210 lb) 13 d + 2	1 a	0 a	28 a	15 a	15 a	6 a	8 a					
4	MB 50:50 VIF (210 lb) 13 d + 4	0 a	0 a	22 a	13 a	7 a	2 a	1 a					
5	3-WAY LDPE 13 d	1 a	0 a	15 a	9 a	8 a	2 a	0 a					
6	3-WAY LDPE 13 d + 1	0 a	0 a	26 a	14 a	12 a	4 a	5 a					
7	3-WAY LDPE 13 d + 2	0 a	0 a	26 a	14 a	10 a	4 a	6 a					
8	3-WAY LDPE 13 d + 3	1 a	0 a	26 a	13 a	6 a	3 a	5 a					
LSD (P=.05)		1.4	0.3	17.4	8.9	11.3	4.1	6.8					
Standard Deviation		0.8	0.1	9.9	5.1	6.4	2.3	3.9					
CV		150.06	149.97	43.25	40.53	65.33	62.61	94.98					
Bartlett's X2		4.02	5.988	3.349	2.582	8.162	10.097	11.975					
P(Bartlett's X2)		0.547	0.307	0.851	0.921	0.319	0.183	0.063					

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



## University of Georgia

Weed Code	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS	LYPES #/PLOT	LYPES WEIGHT/LBS			
Crop Code	MEDIUM	SMALL	SMALL	JUMBO	JUMBO	LARGE	LARGE			
Rating Data Type	Jul-02-08	Jul-02-08	Jul-02-08	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08			
Rating Unit	124 DA-A	124 DA-A	124 DA-A	130 DA-A	130 DA-A	130 DA-A	130 DA-A			
Rating Date										
Trt-Eval Interval										
ARM Action Codes										
Trt No.	Treatment Name	Rate	Unit	115	116	117	119	120	121	122
1	MB 50:50 VIF (210 lb) 13 d	1 a	2 a	0 a	11 a	5 a	2 a	1 a		
2	MB 50:50 VIF (210 lb) 13 d + 1	1 a	3 a	0 a	9 a	4 a	3 a	1 a		
3	MB 50:50 VIF (210 lb) 13 d + 2	2 a	0 a	0 a	17 a	8 a	4 a	1 a		
4	MB 50:50 VIF (210 lb) 13 d + 4	0 a	2 a	0 a	16 a	8 a	3 a	1 a		
5	3-WAY LDPE 13 d	0 a	1 a	0 a	11 a	5 a	2 a	1 a		
6	3-WAY LDPE 13 d + 1	1 a	2 a	0 a	13 a	6 a	3 a	1 a		
7	3-WAY LDPE 13 d + 2	2 a	3 a	0 a	11 a	5 a	3 a	1 a		
8	3-WAY LDPE 13 d + 3	1 a	1 a	0 a	14 a	6 a	4 a	1 a		
LSD (P=.05)		1.9	4.0	0.6	7.9	3.7	4.9	1.8		
Standard Deviation		1.1	2.3	0.4	4.5	2.1	2.8	1.0		
CV		95.46	144.14	146.09	35.38	36.19	93.54	95.32		
Bartlett's X2		10.291	7.22	6.18	8.434	9.977	2.557	2.568		
P(Bartlett's X2)		0.113	0.301	0.403	0.296	0.19	0.923	0.922		

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

## University of Georgia

Weed Code	LYPES	LYPES	LYPES	LYPES	HAR1-8	HAR1-8	HAR1-8								
Crop Code	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	LYPES	LYPES	LYPES								
Rating Data Type	MEDIUM	MEDIUM	SMALL	SMALL	JUMBO	JUMBO	LARGE								
Rating Unit	MEDIUM	MEDIUM	SMALL	SMALL	JUMBO	JUMBO	LARGE								
Rating Date	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08								
Trt-Eval Interval	130 DA-A	130 DA-A	130 DA-A	130 DA-A	130 DA-A	130 DA-A	130 DA-A								
ARM Action Codes					T7	T8	T9								
Trt No.	Treatment Name	Rate	Unit	123	124	125	126	128	129	130					
1	MB 50:50 VIF (210 lb) 13 d	1	a	0	a	0	b	0	b	119	a	64	c	31	a
2	MB 50:50 VIF (210 lb) 13 d + 1	2	a	1	a	2	ab	0	ab	115	a	86	abc	35	a
3	MB 50:50 VIF (210 lb) 13 d + 2	1	a	0	a	2	ab	0	ab	140	a	88	abc	38	a
4	MB 50:50 VIF (210 lb) 13 d + 4	4	a	1	a	2	ab	0	ab	142	a	95	ab	25	a
5	3-WAY LDPE 13 d	0	a	0	a	0	b	0	b	107	a	71	bc	30	a
6	3-WAY LDPE 13 d + 1	4	a	1	a	1	b	0	ab	138	a	95	a	39	a
7	3-WAY LDPE 13 d + 2	2	a	0	a	1	b	0	ab	137	a	83	abc	38	a
8	3-WAY LDPE 13 d + 3	3	a	1	a	3	a	0	a	142	a	92	ab	28	a
LSD (P=.05)		3.7		0.9		2.2		0.4		32.2		21.7		16.4	
Standard Deviation		2.1		0.5		1.3		0.2		18.4		12.4		9.4	
CV		94.59		95.69		104.72		110.03		14.17		14.67		28.33	
Bartlett's X2		12.427		12.235		6.553		7.16		10.385		6.1		3.567	
P(Bartlett's X2)		0.087		0.093		0.256		0.209		0.168		0.528		0.828	

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

Column 113: T7 = [62]+[65]+[74]+[83]+[92]+[101]+[110]+[119]

Column 114: T8 = [63]+[66]+[75]+[84]+[93]+[102]+[111]+[120]

Column 115: T9 = [67]+[76]+[85]+[94]+[103]+[112]+[121]

## University of Georgia

Weed Code	HAR1-8 LYPES	HAR1-8 LYPES	HAR1-8 LYPES	HAR1-8 LYPES	HAR1-8 LYPES	HAR1-8 LYPES	HAR1-8 LYPES	
Crop Code	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	
Rating Data Type	LARGE	MEDIUM	MEDIUM	SMALL	SMALL	ALL SIZE	ALL SIZE	
Rating Unit	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08	Jul-08-08	
Rating Date	130 DA-A	130 DA-A	130 DA-A	130 DA-A	130 DA-A	130 DA-A	130 DA-A	
Trt-Eval Interval	T10	T11	T12	T13	T14	T15	T16	
ARM Action Codes								
Trt Treatment	Rate							
No. Name	Rate Unit	131	132	133	134	135	137	138
1 MB 50:50 VIF (210 lb) 13 d		11 a	10 a	3 a	6 ab	1 a	166 a	79 c
2 MB 50:50 VIF (210 lb) 13 d + 1		12 a	16 a	4 a	11 a	2 a	177 a	104 abc
3 MB 50:50 VIF (210 lb) 13 d + 2		14 a	16 a	5 a	9 ab	1 a	203 a	107 abc
4 MB 50:50 VIF (210 lb) 13 d + 4		9 a	11 a	3 a	8 ab	1 a	187 a	108 abc
5 3-WAY LDPE 13 d		10 a	14 a	4 a	9 ab	1 a	160 a	87 bc
6 3-WAY LDPE 13 d + 1		14 a	22 a	6 a	5 b	1 a	205 a	116 a
7 3-WAY LDPE 13 d + 2		13 a	23 a	6 a	11 a	2 a	210 a	105 abc
8 3-WAY LDPE 13 d + 3		11 a	18 a	5 a	9 ab	1 a	197 a	109 ab
LSD (P=.05)		6.0	14.6	4.3	4.5	0.9	49.4	26.1
Standard Deviation		3.4	8.3	2.5	2.6	0.5	28.2	14.9
CV		28.88	50.24	55.92	30.01	42.41	15.01	14.64
Bartlett's X2		3.513	10.213	14.042	3.949	8.809	7.767	5.493
P(Bartlett's X2)		0.834	0.177	0.05	0.786	0.267	0.354	0.60

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

Column 116: T10 = [68]+[77]+[86]+[95]+[104]+[113]+[122]

Column 117: T11 = [69]+[78]+[87]+[96]+[105]+[114]+[123]

Column 118: T12 = [70]+[79]+[88]+[97]+[106]+[115]+[124]

Column 119: T13 = [71]+[80]+[89]+[98]+[107]+[116]+[125]

Column 120: T14 = [72]+[81]+[90]+[99]+[108]+[117]+[126]

Column 121: T15 = [128]+[130]+[132]+[134]

Column 122: T16 = [129]+[131]+[133]+[135]

## University of Georgia

Weed Code	AVG9PLAN	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Crop Code	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Rating Data Type	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS	HEIGHTS
Rating Unit	CM	PLANT 1	PLANT 2	PLANT 3	PLANT 4	PLANT 5	PLANT 6	PLANT 7	PLANT 7
Rating Date	Apr-05-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08
Trt-Eval Interval	21 DAP	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
1	MB 50:50 VIF (210 lb) 13 d	11 bc	26 b	41 b	44 a	46 a	43 a	44 b	47 a
2	MB 50:50 VIF (210 lb) 13 d + 1	13 b	50 a	49 ab	50 a	50 a	47 a	49 ab	46 a
3	MB 50:50 VIF (210 lb) 13 d + 2	13 b	44 a	49 ab	49 a	48 a	46 a	44 b	50 a
4	MB 50:50 VIF (210 lb) 13 d + 4	16 a	47 a	52 a	51 a	49 a	51 a	52 ab	48 a
5	3-WAY LDPE 13 d	10 c	44 a	52 a	46 a	48 a	43 a	47 ab	44 a
6	3-WAY LDPE 13 d + 1	12 b	50 a	48 ab	50 a	48 a	49 a	50 ab	51 a
7	3-WAY LDPE 13 d + 2	12 bc	41 a	48 ab	46 a	48 a	50 a	47 ab	46 a
8	3-WAY LDPE 13 d + 3	16 a	52 a	52 a	53 a	50 a	50 a	54 a	51 a
LSD (P=.05)		2.4	14.0	9.8	12.2	7.5	9.1	7.8	8.2
Standard Deviation		1.4	8.0	5.6	7.0	4.3	5.2	4.4	4.7
CV		10.67	17.97	11.46	14.32	8.85	11.02	9.17	9.81
Bartlett's X2		4.597	20.913	8.742	7.898	3.182	6.239	1.943	10.354
P(Bartlett's X2)		0.709	0.004*	0.272	0.342	0.868	0.512	0.963	0.169

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

## University of Georgia

Weed Code	LYPES HEIGHTS PLANT 8	LYPES HEIGHTS PLANT 9	AVG9PLAN LYPES HEIGHTS CM	AVG20PLA CPSAN HEIGHT CM	CPSAN L-HEIGHT PLANT 1	CPSAN R-HEIGHT PLANT 1	CPSAN L-HEIGHT PLANT 2	CPSAN R-HEIGHT PLANT 2	
Crop Code									
Rating Data Type									
Rating Unit									
Rating Date	Apr-29-08	Apr-29-08	Apr-29-08	Apr-05-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	
Trt-Eval Interval	60 DA-A	60 DA-A	46 DAP	21DAP	60 DA-A	60 DA-A	60 DA-A	60 DA-A	
ARM Action Codes			T5						
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	Rate Unit	
149	150	151	153	155	156	157	158		
1	MB 50:50 VIF (210 lb) 13 d	46 a	50 a	43 b	9 cd	30 a	23 ab	30 a	34 a
2	MB 50:50 VIF (210 lb) 13 d + 1	48 a	44 a	48 ab	11 abc	29 a	26 ab	26 a	28 ab
3	MB 50:50 VIF (210 lb) 13 d + 2	43 a	50 a	47 ab	13 ab	28 a	24 ab	27 a	29 ab
4	MB 50:50 VIF (210 lb) 13 d + 4	47 a	49 a	50 a	15 a	33 a	31 a	29 a	30 ab
5	3-WAY LDPE 13 d	47 a	46 a	46 ab	6 d	26 a	19 b	13 b	16 c
6	3-WAY LDPE 13 d + 1	49 a	52 a	50 a	12 abc	29 a	27 ab	28 a	27 ab
7	3-WAY LDPE 13 d + 2	51 a	49 a	47 ab	11 bc	30 a	27 ab	25 ab	27 ab
8	3-WAY LDPE 13 d + 3	55 a	53 a	52 a	13 ab	29 a	30 a	28 a	25 b
LSD (P=.05)		11.1	8.4	5.8	3.9	8.2	8.5	12.6	7.3
Standard Deviation		6.3	4.8	3.3	2.2	4.7	4.8	7.2	4.2
CV		13.11	9.75	6.96	19.83	15.99	18.68	27.8	15.29
Bartlett's X2		7.945	7.006	6.744	19.086	7.078	9.764	16.912	11.213
P(Bartlett's X2)		0.337	0.428	0.456	0.008*	0.421	0.202	0.018*	0.13

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

Column 133: T5 = @AVG([C142].[C150])

## University of Georgia

Weed Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code	L-HEIGHT	R-HEIGHT	L-HEIGHT	R-HEIGHT	L-HEIGHT	R-HEIGHT	L-HEIGHT	R-HEIGHT	R-HEIGHT
Rating Data Type	PLANT 3	PLANT 3	PLANT 4	PLANT 4	PLANT 5	PLANT 5	PLANT 6	PLANT 6	PLANT 6
Rating Unit	PLANT 3	PLANT 3	PLANT 4	PLANT 4	PLANT 5	PLANT 5	PLANT 6	PLANT 6	PLANT 6
Rating Date	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08
Trt-Eval Interval	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
1	MB 50:50 VIF (210 lb) 13 d	31 a	25 a	25 b	26 a	25 ab	28 ab	17 b	14 b
2	MB 50:50 VIF (210 lb) 13 d + 1	26 a	25 a	26 b	26 a	25 ab	25 ab	27 ab	23 ab
3	MB 50:50 VIF (210 lb) 13 d + 2	27 a	32 a	28 ab	30 a	28 ab	25 ab	33 a	28 a
4	MB 50:50 VIF (210 lb) 13 d + 4	32 a	32 a	33 a	31 a	30 ab	31 a	33 a	33 a
5	3-WAY LDPE 13 d	22 a	23 a	26 b	24 a	21 ab	22 b	25 ab	25 ab
6	3-WAY LDPE 13 d + 1	28 a	28 a	26 ab	28 a	24 ab	29 a	26 ab	28 a
7	3-WAY LDPE 13 d + 2	18 a	23 a	28 ab	27 a	19 b	25 ab	25 ab	23 ab
8	3-WAY LDPE 13 d + 3	28 a	28 a	26 ab	27 a	31 a	27 ab	28 ab	27 a
LSD (P=.05)		12.6	10.8	5.9	8.6	11.1	6.0	12.0	10.5
Standard Deviation		7.2	6.2	3.4	4.9	6.3	3.4	6.8	6.0
CV		27.07	22.86	12.32	18.0	24.84	12.92	25.68	23.89
Bartlett's X2		17.429	14.358	7.832	14.278	22.648	5.244	19.896	9.367
P(Bartlett's X2)		0.015*	0.045*	0.348	0.046*	0.002*	0.63	0.006*	0.227

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

## University of Georgia

Weed Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN
Crop Code	L-HEIGHT	R-HEIGHT	L-HEIGHT	R-HEIGHT	L-HEIGHT	R-HEIGHT	L-HEIGHT	R-HEIGHT	R-HEIGHT
Rating Data Type	PLANT 7	PLANT 7	PLANT 8	PLANT 8	PLANT 9	PLANT 9	PLANT 10	PLANT 10	PLANT 10
Rating Unit	PLANT 7	PLANT 7	PLANT 8	PLANT 8	PLANT 9	PLANT 9	PLANT 10	PLANT 10	PLANT 10
Rating Date	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08	Apr-29-08
Trt-Eval Interval	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A	60 DA-A
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit							
1	MB 50:50 VIF (210 lb) 13 d	26 ab	23 a	27 ab	20 c	17 c	23 a	19 ab	8 c
2	MB 50:50 VIF (210 lb) 13 d + 1	26 ab	26 a	23 ab	22 bc	17 bc	20 a	21 ab	21 abc
3	MB 50:50 VIF (210 lb) 13 d + 2	28 ab	30 a	31 a	33 a	30 a	30 a	32 a	29 a
4	MB 50:50 VIF (210 lb) 13 d + 4	31 a	32 a	32 a	31 ab	31 a	30 a	30 a	29 a
5	3-WAY LDPE 13 d	19 b	21 a	21 b	26 abc	23 abc	22 a	14 b	14 bc
6	3-WAY LDPE 13 d + 1	30 a	31 a	28 ab	25 abc	27 abc	27 a	26 ab	28 ab
7	3-WAY LDPE 13 d + 2	23 ab	26 a	26 ab	26 abc	29 ab	25 a	26 ab	30 a
8	3-WAY LDPE 13 d + 3	27 ab	29 a	30 a	29 abc	30 a	30 a	27 ab	28 ab
LSD (P=.05)		9.3	11.2	8.1	8.9	10.6	9.2	13.2	13.3
Standard Deviation		5.3	6.4	4.6	5.1	6.1	5.2	7.5	7.6
CV		20.47	23.54	17.08	19.11	24.0	20.21	30.79	32.29
Bartlett's X2		2.022	4.637	8.07	8.829	11.071	6.177	9.412	15.091
P(Bartlett's X2)		0.959	0.704	0.326	0.265	0.136	0.519	0.224	0.035*

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

## University of Georgia

Weed Code	AVG20PLA	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	
Rating Data Type	HEIGHT	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	#/PLOT	WEIGHT/LBS	
Rating Unit	CM							
Rating Date	Apr-29-08	May-20-08	May-20-08	May-27-08	May-27-08	Jun-02-08	Jun-02-08	
Trt-Eval Interval	46 DAP	81 DA-A	81 DA-A	88 DA-A	88 DA-A	94 DA-A	94 DA-A	
ARM Action Codes	T6							
Trt Treatment	Rate							
No. Name	Rate Unit	175	177	178	179	180	181	182
1 MB 50:50 VIF (210 lb) 13 d		24 bc	15 bcd	5 bc	3 abc	1 ab	25 c	10 c
2 MB 50:50 VIF (210 lb) 13 d + 1		24 bc	22 abc	8 abc	2 abc	1 b	35 bc	13 bc
3 MB 50:50 VIF (210 lb) 13 d + 2		29 ab	31 a	11 a	6 a	3 a	59 a	23 a
4 MB 50:50 VIF (210 lb) 13 d + 4		31 a	35 a	13 a	4 abc	2 ab	50 ab	21 ab
5 3-WAY LDPE 13 d		21 c	8 d	3 c	2 abc	1 b	22 c	8 c
6 3-WAY LDPE 13 d + 1		28 ab	27 ab	10 ab	5 ab	2 ab	42 abc	15 bc
7 3-WAY LDPE 13 d + 2		25 bc	11 cd	4 c	0 c	0 b	36 abc	13 bc
8 3-WAY LDPE 13 d + 3		28 ab	29 ab	11 ab	1 bc	0 b	37 abc	13 bc
LSD (P=.05)		5.1	13.2	5.1	4.4	1.7	21.0	7.3
Standard Deviation		2.9	7.6	2.9	2.5	1.0	12.0	4.2
CV		11.02	33.96	36.35	87.25	88.08	31.22	29.24
Bartlett's X2		8.355	11.386	11.801	3.556	3.308	7.978	10.067
P(Bartlett's X2)		0.302	0.123	0.107	0.736	0.769	0.335	0.185

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

Column 155: T6 = @AVG([C155].[C174])



## University of Georgia

Weed Code	CPSAN #/PLOT	CPSAN WEIGHT/LBS	CPSAN #/PLOT	CPSAN WEIGHT/LBS	CPSAN #/PLOT	CPSAN WEIGHT/LBS	HAR1-6 CPSAN #/PLOT
Crop Code							
Rating Data Type							
Rating Unit							
Rating Date	Jun-10-08	Jun-10-08	Jun-17-08	Jun-17-08	Jul-01-08	Jul-01-08	Jul-01-08
Trt-Eval Interval	102 DA-A	102 DA-A	109 DA-A	109 DA-A	123 DA-A	123 DA-A	123 DA-A
ARM Action Codes							T3
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit
		183	184	185	186	187	188
1	MB 50:50 VIF (210 lb) 13 d	39 a	15 a	66 a	24 a	16 a	6 a
2	MB 50:50 VIF (210 lb) 13 d + 1	37 a	13 a	60 a	23 a	16 a	6 a
3	MB 50:50 VIF (210 lb) 13 d + 2	39 a	14 a	49 a	18 a	9 a	3 a
4	MB 50:50 VIF (210 lb) 13 d + 4	45 a	17 a	42 a	15 a	16 a	6 a
5	3-WAY LDPE 13 d	44 a	16 a	63 a	23 a	17 a	6 a
6	3-WAY LDPE 13 d + 1	37 a	13 a	57 a	21 a	17 a	6 a
7	3-WAY LDPE 13 d + 2	25 a	10 a	61 a	21 a	18 a	6 a
8	3-WAY LDPE 13 d + 3	39 a	14 a	61 a	21 a	16 a	6 a
LSD (P=.05)		23.8	8.6	26.9	8.9	11.3	4.3
Standard Deviation		13.6	4.9	15.4	5.1	6.4	2.4
CV		35.59	34.95	26.74	24.42	40.99	43.12
Bartlett's X2		2.67	7.347	2.265	1.315	10.721	7.219
P(Bartlett's X2)		0.914	0.394	0.944	0.988	0.151	0.406
							189
							164 ab
							172 ab
							193 a
							193 a
							156 ab
							185 ab
							151 b
							183 ab
							33.5
							19.1
							10.93
							8.346
							0.303

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

Column 168: T3 = [C177]+[C179]+[C181]+[C183]+[C185]+[C187]

# University of Georgia

Weed Code	HAR1-6			
Crop Code	CPSAN			
Rating Data Type	WT/LBS			
Rating Unit				
Rating Date	Jul-01-08			
Trt-Eval Interval	123 DA-A			
ARM Action Codes	T17			
Trt No.	Treatment Name	Rate	Unit	
				190
1	MB 50:50 VIF (210 lb) 13 d	61	abc	
2	MB 50:50 VIF (210 lb) 13 d + 1	64	abc	
3	MB 50:50 VIF (210 lb) 13 d + 2	72	a	
4	MB 50:50 VIF (210 lb) 13 d + 4	73	a	
5	3-WAY LDPE 13 d	56	bc	
6	3-WAY LDPE 13 d + 1	67	ab	
7	3-WAY LDPE 13 d + 2	53	c	
8	3-WAY LDPE 13 d + 3	65	abc	
LSD (P=.05)		11.7		
Standard Deviation		6.7		
CV		10.47		
Bartlett's X2		5.846		
P(Bartlett's X2)		0.558		

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

Column 169: T17 = [178]+[180]+[182]+[184]+[186]+[188]

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# University of Georgia

Determining plant back interval when applying the 3-Way fumigant system.

Trial ID: Veg17-08 Study Dir.: Edwards, Culpepper  
 Location: TVP 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:** Tifton **Trial Status:** completed  
**State/Prov.:** GA **Trial Reliability:** good  
**Postal Code:** 31795 **Initiation Date:** Feb-29-08  
**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.			
2.			

**Crop 1:** LYPES TOMATO **Variety:** BELLA ROSA  
**Planting Date:** \_\_\_\_\_ **Planting Method:** TRANSPLANT  
**Rate:** 1 2 ft **Depth:** 1 in **Perennial Age:** \_\_\_\_\_  
**Row Spacing:** 6 ft **Spacing Within Row:** 2 ft **Seed Bed:** raised mulch  
**Soil Temperature:** 55 F **Soil Moisture:** FAIR **Emergence Date:** \_\_\_\_\_

**Crop 2:** CPSAN PEPPER **Variety:** HERITAGE  
**Planting Date:** \_\_\_\_\_ **Planting Method:** TRANSPLANT  
**Rate:** 1 ft **Depth:** 1 in **Perennial Age:** \_\_\_\_\_  
**Row Spacing:** 15 inch **Spacing Within Row:** 12 inch **Seed Bed:** raised mulch  
**Soil Temperature:** 55 F **Soil Moisture:** FAIR **Emergence Date:** \_\_\_\_\_

**Crop 3:** CUMMC CANTALOUPE **Variety:** ATHENA  
**Planting Date:** \_\_\_\_\_ **Planting Method:** TRANSPLANT  
**Rate:** 1 2 ft **Depth:** 1 in **Perennial Age:** \_\_\_\_\_  
**Row Spacing:** 6 ft **Spacing Within Row:** 2 ft **Seed Bed:** raised mulch  
**Soil Temperature:** 55 F **Soil Moisture:** FAIR **Emergence Date:** \_\_\_\_\_

# University of Georgia

### SITE AND DESIGN

Plot Width, Unit: 6 FT Plot Length, Unit: 100 FT Reps: 3  
 Site Type: TVP  
 Tillage Type: Conventional Study Design: FACTORIAL

Trial Initiation Comments:

	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: 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 irrigation

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

### APPLICATION DESCRIPTION

	A
Application Date:	Feb-29-08
Time of Day:	11 am
Application Method:	in bed
Application Timing:	preplant
Applic. Placement:	see comme
Air Temp., Unit:	77 F
% Relative Humidity:	64
Wind Velocity, Unit:	12 MPH
Dew Presence (Y/N):	n
Water Hardness:	
Soil Temp., Unit:	60 F
Soil Moisture:	moist
% Cloud Cover:	80

# University of Georgia

### CROP STAGE AT EACH APPLICATION

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

### WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	
Stage Scale:	
Density, Unit:	
Weed 2 Code, Stage:	
Stage Scale:	
Density, Unit:	

### APPLICATION EQUIPMENT

	A
Appl. Equipment:	see
Operating Pressure:	comments
Nozzle Type:	
Nozzle Size:	
Nozzle Spacing, Unit:	
Nozzles/Row:	
Band Width, Unit:	
Boom Length, Unit:	
Boom Height, Unit:	
Ground Speed, Unit:	
Incorporation Equip.:	
Hours to Incorp.:	
Incorp. Depth, Unit:	
Carrier:	
Spray Volume, Unit:	
Spray pH:	
Propellant:	
Tank Mix (Y/N):	

Trt No	Treatment Application Comment