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2. These results are opposite of what would be expected unless the chloropicrin is somehow limiting breakdown or volatilization of DMDS. More research is needed in this area.

3. All beds were aired for 1 d to remove remaining gases. When transplanting, DMDS was detectable by smell only in the 79:21 @ 60 G beds.

Weed Response (weed control evaluations were made by comparing treatments to no herbicide, no mulch):

1. Nutsedge populations were light and could not compete with the crabgrass. All fumigant treatments provided excellent control.

2. Large crabgrass was the dominant pest. Late in the year, the 3-WAY provided 99% control. DMDS 79:21 at 60 and 50 G provided statistically similar control, although numerically these treatments were 10 to 13% less effective than the 3-WAY. Control with 79:21 at 60 G was 72% more effective under Blockade mulch when compared to LDPE mulch.

Pepper Heights

1. 20 plants per plot were measured in mid-April and again in early May.

2. No differences were noted in plant heights.

3. All treatments provided good control, even of grass, through mid April thus competition did not impact plant heights.

Pepper Yield:

1. Jumbo and X-Large pepper fruit were harvested once a week for four consecutive weeks.

2. The only treatments that provided yields statistically similar to the 3-WAY were the following: 1) 79:21 at 50 or 40 G or 2) 90:10 at 60 G. Yields from these DMDS treatments were numerically at least 10% lower than the 3-WAY.

3. It is unknown why 79:21 at 60 G produced lower yields. There may have been an unseen response to gas still being detectable in the bed at time of planting as this was the only treatment where DMDS was detected by smell.

4. Grass control did impact yields, especially in the later harvest. Additionally, large crabgrass impacted the ability to harvest the fruit.

CONCLUSIONS:

1. Controlling nutsedge with DMDS does not appear to be an issue, especially in the spring.

2. DMDS mixtures will not adequately control annual grasses. A program must be developed and recommended with this fumigant to provide season long control of annual grass.

3. Plant back issues with DMDS applied under high barrier mulches is a huge concern.

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Large crabgrass and bell pepper response to various DMDS mixtures.

Trial ID: Veg9-08

Study Dir.: Sosnoskie, Culpepper

Location: Ponder Farm

Investigator: Stanley Culpepper

Weed Code	gas	CYPRO	CYPRO	DIGSA	DIGSA	DIGSA	DIGSA	plant 1	
Crop Code	CPSAN							CPSAN	
Part Rated								left	
Rating Data Type	ppm	Control	Control	Control	Control	Control	Control	ht	
Rating Unit	per plor	%	%	%	%	%	%	cm	
Rating Date	Mar-26-08	Apr-18-08	Apr-30-08	Apr-18-08	Apr-30-08	May-20-08	Jun-18-08	Apr-17-08	
Footnote Number		1	1	1	1				
Trt-Eval Interval	28 DA-A	51 DA-A	63 DA-A	51 DA-A	63 DA-A	83 DA-A	112 DA-A	50 DA-A	
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit							
			1	3	4	5	6	7	
			8	10					
1	DMDS 79:21 60 GPA LDPE mulch	4 f	96 b	91 a	93 ab	58 cd	33 f	20 f	21 a
2	DMDS 79:21 60 GPA Blockade Mulch	1391 a	100 a	100 a	100 a	98 a	92 ab	89 ab	18 a
3	DMDS 79:21 50 GPA Blockade Mulch	860 b	100 a	99 a	99 a	98 a	86 abc	86 b	18 a
4	DMDS 79:21 40 GPA Blockade Mulch	846 b	100 a	99 a	98 ab	89 ab	65 cde	63 c	17 a
5	DMDS 79:21 30 GPA Blockade Mulch	576 c	100 a	99 a	92 bc	76 abc	50 def	38 e	18 a
6	DMDS 90:10 60 GPA Blockade Mulch	1476 a	100 a	100 a	99 ab	87 ab	72 bcd	73 c	18 a
7	DMDS 90:10 50 GPA Blockade Mulch	1289 a	100 a	100 a	98 ab	89 ab	63 cde	63 c	19 a
8	DMDS 90:10 40 GPA Blockade Mulch	295 de	100 a	100 a	99 ab	71 bcd	48 def	43 e	18 a
9	DMDS 90:10 30 GPA Blockade Mulch	206 ef	100 a	98 a	98 ab	77 abc	44 ef	40 e	21 a
10	DMDS 100% @ 60 GPA Blockade Mulch	462 cd	99 a	99 a	98 ab	85 ab	70 bcd	62 cd	19 a
11	DMDS 100% @ 50 GPA Blockade Mulch	73 ef	100 a	97 a	96 ab	73 bcd	54 def	50 de	18 a
12	DMDS 100% @ 40 GPA Blockade Mulch	17 f	99 a	96 a	96 ab	70 bcd	53 def	40 e	17 a
13	DMDS 100% @ 30 GPA Blockade Mulch	38 f	100 a	98 a	93 abc	58 cd	36 f	17 f	20 a
14	3-WAY LDPE Mulch	10 f	100 a	100 a	100 a	100 a	98 a	99 a	19 a
15	Non-treated Blockade Mulch	0 f	79 c	52 b	86 c	50 d	3 g	0 g	19 a
LSD (P=.05)		212.6	1.9	10.8	6.5	21.1	22.4	12.2	3.9
Standard Deviation		127.2	1.1	6.4	3.9	12.6	13.4	7.3	2.4
CV		25.28	1.14	6.77	4.01	16.02	23.21	13.91	12.67
Bartlett's X2		32.864	19.968	69.641	42.92	36.595	31.134	9.128	10.188
P(Bartlett's X2)		0.002*	0.006*	0.001*	0.001*	0.001*	0.005*	0.61	0.599

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

Column 2 Footnote:

Column 3 Footnote:

Column 4 Footnote:

Column 5 Footnote:

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Weed Code	plant 2	plant 3	plant 4	plant 5	plant 6	plant 7	plant 8	plant 9	
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	
Part Rated	left	left	left	left	left	left	left	left	
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht	
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm	
Rating Date	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	
Footnote Number									
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	
ARM Action Codes									
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit	Unit	Unit	Unit	Unit	Unit	Unit	
		11	12	13	14	15	16	17	
1	DMDS 79:21 60 GPA LDPE mulch	20 ab	20 a	21 a	20 a	21 a	20 a	17 a	20 abc
2	DMDS 79:21 60 GPA Blockade Mulch	20 ab	18 a	16 b	19 a	16 b	18 a	18 a	18 c
3	DMDS 79:21 50 GPA Blockade Mulch	22 a	18 a	21 a	20 a	20 a	19 a	17 a	19 abc
4	DMDS 79:21 40 GPA Blockade Mulch	17 b	20 a	21 a	19 a	21 a	20 a	20 a	18 c
5	DMDS 79:21 30 GPA Blockade Mulch	21 ab	19 a	21 a	20 a	18 ab	19 a	20 a	20 abc
6	DMDS 90:10 60 GPA Blockade Mulch	20 ab	19 a	18 ab	19 a	20 a	20 a	19 a	20 abc
7	DMDS 90:10 50 GPA Blockade Mulch	19 ab	20 a	18 ab	18 a	20 ab	19 a	19 a	20 abc
8	DMDS 90:10 40 GPA Blockade Mulch	19 ab	19 a	19 ab	19 a	20 ab	19 a	19 a	20 abc
9	DMDS 90:10 30 GPA Blockade Mulch	21 ab	21 a	18 ab	20 a	20 a	20 a	20 a	22 a
10	DMDS 100% @ 60 GPA Blockade Mulch	17 b	17 a	16 b	18 a	19 ab	20 a	20 a	20 abc
11	DMDS 100% @ 50 GPA Blockade Mulch	20 ab	19 a	21 a	20 a	20 a	20 a	19 a	20 abc
12	DMDS 100% @ 40 GPA Blockade Mulch	19 ab	21 a	21 a	21 a	20 a	21 a	21 a	21 ab
13	DMDS 100% @ 30 GPA Blockade Mulch	19 ab	18 a	21 a	20 a	21 a	21 a	17 a	20 abc
14	3-WAY LDPE Mulch	19 ab	19 a	19 ab	18 a	19 ab	18 a	19 a	19 bc
15	Non-treated Blockade Mulch	20 ab	19 a	19 ab	19 a	21 a	20 a	19 a	20 abc
LSD (P=.05)		3.5	4.2	3.7	3.2	3.0	3.4	3.7	2.6
Standard Deviation		2.1	2.5	2.2	1.9	1.8	2.0	2.2	1.5
CV		10.85	13.26	11.37	9.93	9.19	10.26	11.66	7.82
Bartlett's X2		2.79	5.274	14.255	6.547	10.163	16.834	16.28	16.158
P(Bartlett's X2)		0.999	0.969	0.431	0.951	0.75	0.265	0.234	0.241

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

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Weed Code	plant 10 CPSAN	plant av CPSAN	plant 1 CPSAN	plant 2 CPSAN	plant 3 CPSAN	plant 4 CPSAN	plant 5 CPSAN	plant 6 CPSAN	
Crop Code									
Part Rated	left	left	right	right	right	right	right	right	
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	ht	
Rating Unit	cm	cm	cm	cm	cm	cm	cm	cm	
Rating Date	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	
Footnote Number									
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	
ARM Action Codes		T1							
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate	
		Unit							
1	DMDS 79:21 60 GPA LDPE mulch	19 bc	20 a	19 abc	20 ab	19 ab	19 abc	21 ab	18 a
2	DMDS 79:21 60 GPA Blockade Mulch	16 c	18 b	18 abc	16 de	16 b	17 abc	20 ab	21 a
3	DMDS 79:21 50 GPA Blockade Mulch	22 ab	20 ab	19 abc	16 e	18 ab	19 abc	21 a	20 a
4	DMDS 79:21 40 GPA Blockade Mulch	19 bc	19 ab	17 bc	19 abc	18 ab	18 abc	19 ab	19 a
5	DMDS 79:21 30 GPA Blockade Mulch	19 bc	20 ab	16 c	22 a	21 ab	22 a	21 ab	20 a
6	DMDS 90:10 60 GPA Blockade Mulch	20 abc	19 ab	18 abc	20 abc	17 ab	16 c	17 ab	19 a
7	DMDS 90:10 50 GPA Blockade Mulch	20 abc	19 ab	19 abc	21 ab	21 a	16 bc	21 ab	19 a
8	DMDS 90:10 40 GPA Blockade Mulch	19 bc	19 ab	21 ab	19 abc	22 a	19 abc	19 ab	20 a
9	DMDS 90:10 30 GPA Blockade Mulch	21 ab	20 a	21 a	21 ab	19 ab	21 ab	20 ab	20 a
10	DMDS 100% @ 60 GPA Blockade Mulch	18 bc	19 ab	19 abc	18 cde	18 ab	20 abc	16 b	20 a
11	DMDS 100% @ 50 GPA Blockade Mulch	21 ab	20 a	19 abc	22 a	21 ab	21 abc	20 ab	21 a
12	DMDS 100% @ 40 GPA Blockade Mulch	24 a	21 a	21 ab	21 ab	21 a	21 abc	19 ab	19 a
13	DMDS 100% @ 30 GPA Blockade Mulch	21 ab	20 a	20 abc	21 ab	20 ab	21 ab	20 ab	21 a
14	3-WAY LDPE Mulch	19 abc	19 ab	20 abc	19 bcd	18 ab	18 abc	18 ab	18 a
15	Non-treated Blockade Mulch	19 abc	20 ab	20 abc	22 a	19 ab	20 abc	21 ab	19 a
LSD (P=.05)		3.8	1.8	3.9	2.3	4.3	4.4	4.4	3.7
Standard Deviation		2.2	1.1	2.3	1.4	2.6	2.6	2.6	2.2
CV		11.29	5.68	12.32	7.0	13.51	13.55	13.52	11.22
Bartlett's X2		20.587	18.161	19.921	8.017	13.288	11.561	8.374	9.844
P(Bartlett's X2)		0.082	0.20	0.133	0.888	0.426	0.641	0.818	0.773

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

Column 18: T1 = @AVG([C10].[C19])

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Weed Code	plant 7 CPSAN	plant 8 CPSAN	plant 9 CPSAN	plant 10 CPSAN	plant av CPSAN	AVG20PLA CPSAN	plant 1 CPSAN	plant 2 CPSAN	
Crop Code	right	right	right	right	right		left	left	
Part Rated	ht	ht	ht	ht	ht	ht	ht	ht	
Rating Data Type	cm	cm	cm	cm	cm	cm	cm	cm	
Rating Unit	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	Apr-17-08	May-07-08	May-07-08	
Rating Date	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	50 DA-A	70 DA-A	70 DA-A	
Footnote Number									
Trt-Eval Interval									
ARM Action Codes					T2	T5			
Trt Treatment	Rate								
No. Name	Rate Unit	27	28	29	30	31	32	34	35
1 DMDS 79:21 60 GPA LDPE mulch		19 ab	19 a	20 abc	19 abc	19 ab	20 a-d	34 ab	36 a
2 DMDS 79:21 60 GPA Blockade Mulch		17 b	20 a	17 c	21 ab	18 b	18 d	33 ab	34 a
3 DMDS 79:21 50 GPA Blockade Mulch		19 ab	20 a	18 bc	18 c	19 ab	19 a-d	31 ab	33 a
4 DMDS 79:21 40 GPA Blockade Mulch		20 ab	18 a	18 bc	19 abc	19 b	19 bcd	29 b	33 a
5 DMDS 79:21 30 GPA Blockade Mulch		22 a	19 a	19 abc	22 a	20 ab	20 abc	35 ab	35 a
6 DMDS 90:10 60 GPA Blockade Mulch		20 ab	19 a	19 abc	18 c	18 b	19 bcd	35 ab	33 a
7 DMDS 90:10 50 GPA Blockade Mulch		20 ab	19 a	17 c	21 abc	19 ab	19 a-d	34 ab	34 a
8 DMDS 90:10 40 GPA Blockade Mulch		20 ab	21 a	21 abc	21 abc	20 ab	20 a-d	36 ab	33 a
9 DMDS 90:10 30 GPA Blockade Mulch		21 ab	21 a	20 abc	20 abc	20 ab	20 ab	36 ab	37 a
10 DMDS 100% @ 60 GPA Blockade Mulch		17 b	19 a	20 abc	18 bc	18 b	18 cd	37 a	39 a
11 DMDS 100% @ 50 GPA Blockade Mulch		20 ab	20 a	23 ab	18 c	20 ab	20 abc	35 ab	34 a
12 DMDS 100% @ 40 GPA Blockade Mulch		21 ab	22 a	24 a	22 a	21 a	21 a	35 ab	33 a
13 DMDS 100% @ 30 GPA Blockade Mulch		21 ab	21 a	20 abc	21 abc	21 ab	20 abc	35 ab	35 a
14 3-WAY LDPE Mulch		20 ab	19 a	19 abc	18 c	19 b	19 cd	35 ab	36 a
15 Non-treated Blockade Mulch		20 ab	19 a	21 abc	20 abc	20 ab	20 abc	38 a	37 a
LSD (P=.05)		3.4	3.2	4.3	3.0	2.0	1.5	5.9	6.7
Standard Deviation		2.0	1.9	2.6	1.8	1.2	0.9	3.5	4.0
CV		10.27	9.61	13.05	9.12	6.03	4.58	10.29	11.46
Bartlett's X2		11.899	12.108	13.765	11.381	13.606	12.219	8.508	10.962
P(Bartlett's X2)		0.614	0.598	0.467	0.656	0.479	0.589	0.861	0.689

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

Column 29: T2 = @AVG([C21].[C30])

Column 30: T5 = ([C20]+[C31])/2

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Weed Code	plant 3	plant 4	plant 5	plant 6	plant 7	plant 8	plant 9	
Crop Code	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	CPSAN	
Part Rated	left	left	left	left	left	left	left	
Rating Data Type	ht	ht	ht	ht	ht	ht	ht	
Rating Unit	cm	cm	cm	cm	cm	cm	cm	
Rating Date	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08	
Footnote Number								
Trt-Eval Interval	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A	
ARM Action Codes								
Trt Treatment	Rate							
No. Name	Rate Unit	36	37	38	39	40	41	42
1 DMDS 79:21 60 GPA LDPE mulch		36 a	38 a	38 a	38 a	37 ab	35 a	37 a
2 DMDS 79:21 60 GPA Blockade Mulch		35 a	34 a	36 a	33 a	31 b	35 a	35 a
3 DMDS 79:21 50 GPA Blockade Mulch		33 a	35 a	38 a	34 a	33 ab	33 a	38 a
4 DMDS 79:21 40 GPA Blockade Mulch		33 a	36 a	36 a	34 a	37 ab	37 a	35 a
5 DMDS 79:21 30 GPA Blockade Mulch		35 a	35 a	37 a	35 a	35 ab	33 a	36 a
6 DMDS 90:10 60 GPA Blockade Mulch		33 a	36 a	37 a	36 a	34 ab	36 a	34 a
7 DMDS 90:10 50 GPA Blockade Mulch		36 a	36 a	34 a	34 a	37 ab	35 a	37 a
8 DMDS 90:10 40 GPA Blockade Mulch		35 a	36 a	38 a	39 a	37 ab	34 a	36 a
9 DMDS 90:10 30 GPA Blockade Mulch		39 a	39 a	37 a	34 a	36 ab	33 a	36 a
10 DMDS 100% @ 60 GPA Blockade Mulch		33 a	33 a	33 a	34 a	32 b	37 a	37 a
11 DMDS 100% @ 50 GPA Blockade Mulch		37 a	38 a	39 a	37 a	36 ab	34 a	35 a
12 DMDS 100% @ 40 GPA Blockade Mulch		36 a	37 a	37 a	36 a	37 ab	39 a	36 a
13 DMDS 100% @ 30 GPA Blockade Mulch		33 a	35 a	36 a	38 a	37 ab	36 a	36 a
14 3-WAY LDPE Mulch		32 a	36 a	35 a	35 a	35 ab	36 a	33 a
15 Non-treated Blockade Mulch		37 a	37 a	38 a	39 a	40 a	35 a	39 a
LSD (P=.05)		5.4	6.4	5.9	7.0	6.0	5.5	5.3
Standard Deviation		3.2	3.8	3.5	4.2	3.6	3.3	3.2
CV		9.24	10.63	9.59	11.76	9.98	9.23	8.78
Bartlett's X2		15.575	10.913	8.79	14.555	15.657	9.939	17.596
P(Bartlett's X2)		0.34	0.693	0.789	0.409	0.335	0.699	0.226

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

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Weed Code	plant 10 CPSAN	plant av CPSAN	plant 1 CPSAN	plant 2 CPSAN	plant 3 CPSAN	plant 4 CPSAN	plant 5 CPSAN
Crop Code	left	left	right	right	right	right	right
Part Rated	ht	ht	ht	ht	ht	ht	ht
Rating Data Type	cm	cm	cm	cm	cm	cm	cm
Rating Unit	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08
Rating Date							
Footnote Number							
Trt-Eval Interval	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A
ARM Action Codes		T3					
Trt Treatment	Rate						
No. Name	Rate Unit						
1 DMDS 79:21 60 GPA LDPE mulch	43	44	45	46	47	48	49
2 DMDS 79:21 60 GPA Blockade Mulch	38 ab	37 ab	35 a	35 a	37 ab	34 abc	38 ab
3 DMDS 79:21 50 GPA Blockade Mulch	32 ab	34 b	35 a	34 a	34 ab	33 abc	34 b
4 DMDS 79:21 40 GPA Blockade Mulch	36 ab	35 ab	32 a	38 a	33 b	36 abc	39 ab
5 DMDS 79:21 30 GPA Blockade Mulch	32 ab	34 ab	38 a	32 a	35 ab	34 abc	34 ab
6 DMDS 79:21 30 GPA Blockade Mulch	34 ab	35 ab	37 a	32 a	39 ab	40 a	38 ab
7 DMDS 90:10 60 GPA Blockade Mulch	37 ab	35 ab	34 a	36 a	36 ab	32 bc	33 b
8 DMDS 90:10 50 GPA Blockade Mulch	38 ab	36 ab	34 a	35 a	38 ab	37 abc	33 b
9 DMDS 90:10 40 GPA Blockade Mulch	35 ab	36 ab	35 a	35 a	34 ab	40 a	37 ab
10 DMDS 90:10 30 GPA Blockade Mulch	29 b	36 ab	33 a	35 a	37 ab	35 abc	37 ab
11 DMDS 100% @ 60 GPA Blockade Mulch	37 ab	35 ab	37 a	37 a	34 ab	31 c	33 b
12 DMDS 100% @ 50 GPA Blockade Mulch	37 ab	36 ab	37 a	36 a	37 ab	39 ab	38 ab
13 DMDS 100% @ 40 GPA Blockade Mulch	37 ab	36 ab	39 a	37 a	38 ab	37 abc	38 ab
14 DMDS 100% @ 30 GPA Blockade Mulch	36 ab	36 ab	37 a	38 a	36 ab	40 a	40 a
15 3-WAY LDPE Mulch	36 ab	35 ab	33 a	38 a	40 a	35 abc	34 ab
15 Non-treated Blockade Mulch	38 a	38 a	38 a	38 a	39 ab	38 abc	38 ab
LSD (P=.05)	7.8	3.1	6.6	6.6	5.2	6.2	5.2
Standard Deviation	4.7	1.9	3.9	3.9	3.1	3.7	3.1
CV	13.11	5.29	11.07	11.0	8.46	10.21	8.54
Bartlett's X2	30.899	12.106	28.237	20.206	10.235	10.53	11.357
P(Bartlett's X2)	0.006*	0.598	0.013*	0.124	0.745	0.723	0.658

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

Column 41: T3 = @AVG([C34].[C43])

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Weed Code	plant 6 CPSAN	plant 7 CPSAN	plant 8 CPSAN	plant 9 CPSAN	plant 10 CPSAN	plant av CPSAN	AVG20PLA CPSAN
Crop Code	right	right	right	right	right	right	
Part Rated	ht	ht	ht	ht	ht	ht	ht
Rating Data Type	cm	cm	cm	cm	cm	cm	cm
Rating Unit	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08	May-07-08
Rating Date							
Footnote Number							
Trt-Eval Interval	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A	70 DA-A
ARM Action Codes						T4	T6
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate
		Unit					
1	DMDS 79:21 60 GPA LDPE mulch	37 ab	34 a	37 a	35 ab	37 a	36 abc
2	DMDS 79:21 60 GPA Blockade Mulch	34 ab	34 a	35 a	36 ab	34 a	34 b
3	DMDS 79:21 50 GPA Blockade Mulch	37 ab	37 a	32 a	37 ab	34 a	36 ab
4	DMDS 79:21 40 GPA Blockade Mulch	35 ab	35 a	39 a	36 ab	35 a	35 ab
5	DMDS 79:21 30 GPA Blockade Mulch	38 ab	36 a	39 a	36 ab	37 a	37 ab
6	DMDS 90:10 60 GPA Blockade Mulch	37 ab	37 a	39 a	37 ab	35 a	36 ab
7	DMDS 90:10 50 GPA Blockade Mulch	36 ab	35 a	36 a	37 ab	35 a	36 ab
8	DMDS 90:10 40 GPA Blockade Mulch	35 ab	36 a	38 a	39 ab	37 a	37 ab
9	DMDS 90:10 30 GPA Blockade Mulch	40 a	35 a	36 a	37 ab	36 a	36 ab
10	DMDS 100% @ 60 GPA Blockade Mulch	32 b	36 a	35 a	34 b	35 a	34 b
11	DMDS 100% @ 50 GPA Blockade Mulch	38 ab	37 a	37 a	37 ab	38 a	37 ab
12	DMDS 100% @ 40 GPA Blockade Mulch	39 ab	37 a	40 a	40 a	40 a	38 a
13	DMDS 100% @ 30 GPA Blockade Mulch	36 ab	37 a	37 a	37 ab	39 a	38 ab
14	3-WAY LDPE Mulch	35 ab	34 a	35 a	36 ab	34 a	35 ab
15	Non-treated Blockade Mulch	40 a	36 a	38 a	38 ab	39 a	38 a
LSD (P=.05)		6.1	5.9	6.3	4.4	5.6	2.9
Standard Deviation		3.7	3.5	3.8	2.7	3.4	1.8
CV		10.04	9.94	10.18	7.23	9.25	4.85
Bartlett's X2		8.554	10.361	13.634	8.844	6.239	18.781
P(Bartlett's X2)		0.859	0.735	0.477	0.785	0.96	0.173

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

Column 52: T4 = @AVG([C45].[C53])

Column 53: T6 = ([C44]+[C55])/2

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Weed Code	harv 1 CPSAN	harv 1 CPSAN	harv 2 CPSAN	harv 2 CPSAN	harv 3 CPSAN	harv 3 CPSAN	harv 4 CPSAN	harv 4 CPSAN	
Crop Code									
Part Rated									
Rating Data Type	#	wt/lb	#	wt/lb	#	wt/lb	#	wt/lb	
Rating Unit	per plot	per plot	per plot	per plot	per plot	per plot	per plot	per plot	
Rating Date	Jun-02-08	Jun-02-08	Jun-10-08	Jun-10-08	Jun-17-08	Jun-17-08	Jul-01-08	Jul-01-08	
Footnote Number									
Trt-Eval Interval	96 DA-A	96 DA-A	104 DA-A	104 DA-A	111 DA-A	111 DA-A	125 DA-A	125 DA-A	
ARM Action Codes									
Trt Treatment	Rate								
No. Name	Rate Unit	58	59	60	61	62	63	64	65
1 DMDS 79:21 60 GPA LDPE mulch		3 a	1 a	14 e	5 e	64 a	22 a	15 d	4 e
2 DMDS 79:21 60 GPA Blockade Mulch		7 a	3 a	70 abc	25 abc	82 a	28 a	41 abc	12 abc
3 DMDS 79:21 50 GPA Blockade Mulch		5 a	2 a	84 ab	29 ab	105 a	37 a	50 ab	15 ab
4 DMDS 79:21 40 GPA Blockade Mulch		4 a	1 a	67 abc	24 abc	111 a	37 a	55 a	17 a
5 DMDS 79:21 30 GPA Blockade Mulch		6 a	2 a	37 cde	13 cde	102 a	34 a	17 d	5 de
6 DMDS 90:10 60 GPA Blockade Mulch		11 a	4 a	50 b-e	17 b-e	114 a	40 a	34 a-d	10 b-e
7 DMDS 90:10 50 GPA Blockade Mulch		7 a	3 a	61 bc	20 bcd	75 a	26 a	34 a-d	10 b-e
8 DMDS 90:10 40 GPA Blockade Mulch		7 a	3 a	58 bcd	21 bcd	79 a	27 a	33 bcd	9 cde
9 DMDS 90:10 30 GPA Blockade Mulch		5 a	2 a	74 abc	25 abc	50 a	17 a	31 bcd	9 cde
10 DMDS 100% @ 60 GPA Blockade Mulch		4 a	2 a	67 abc	23 abc	105 a	35 a	24 cd	7 cde
11 DMDS 100% @ 50 GPA Blockade Mulch		5 a	2 a	53 bcd	18 bcd	73 a	26 a	39 abc	11 a-d
12 DMDS 100% @ 40 GPA Blockade Mulch		11 a	3 a	54 bcd	19 bcd	80 a	26 a	22 cd	6 cde
13 DMDS 100% @ 30 GPA Blockade Mulch		7 a	2 a	37 cde	13 cde	79 a	26 a	39 abc	11 a-e
14 3-WAY LDPE Mulch		15 a	5 a	99 a	34 a	109 a	39 a	47 ab	16 ab
15 Non-treated Blockade Mulch		6 a	3 a	22 de	8 de	69 a	23 a	23 cd	6 cde
LSD (P=.05)		12.3	4.0	32.9	11.2	60.7	19.4	18.3	5.5
Standard Deviation		7.3	2.4	19.7	6.7	36.3	11.6	11.0	3.3
CV		107.55	100.88	34.82	34.24	41.95	39.26	32.6	32.95
Bartlett's X2		15.844	13.204	20.952	15.261	6.072	6.131	22.483	26.108
P(Bartlett's X2)		0.323	0.511	0.103	0.361	0.965	0.963	0.069	0.025*

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

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Weed Code	harv1-4	harv1-4	
Crop Code	CPSAN	CPSAN	
Part Rated			
Rating Data Type	#	wt/lb	
Rating Unit	per plot	per plot	
Rating Date	Jul-01-08	Jul-01-08	
Footnote Number			
Trt-Eval Interval	125 DA-A	125 DA-A	
ARM Action Codes			
Trt No.	Treatment Name	Rate	
		Unit	
66		67	
1	DMDS 79:21 60 GPA LDPE mulch	96 d	33 e
2	DMDS 79:21 60 GPA Blockade Mulch	200 abc	68 a-d
3	DMDS 79:21 50 GPA Blockade Mulch	244 ab	84 ab
4	DMDS 79:21 40 GPA Blockade Mulch	237 ab	79 abc
5	DMDS 79:21 30 GPA Blockade Mulch	162 bcd	54 cde
6	DMDS 90:10 60 GPA Blockade Mulch	209 abc	70 abc
7	DMDS 90:10 50 GPA Blockade Mulch	177 bcd	59 b-e
8	DMDS 90:10 40 GPA Blockade Mulch	178 bcd	59 b-e
9	DMDS 90:10 30 GPA Blockade Mulch	160 bcd	53 cde
10	DMDS 100% @ 60 GPA Blockade Mulch	200 abc	67 a-d
11	DMDS 100% @ 50 GPA Blockade Mulch	169 bcd	56 b-e
12	DMDS 100% @ 40 GPA Blockade Mulch	168 bcd	54 cde
13	DMDS 100% @ 30 GPA Blockade Mulch	163 bcd	51 cde
14	3-WAY LDPE Mulch	270 a	95 a
15	Non-treated Blockade Mulch	120 cd	40 de
LSD (P=.05)		76.9	24.7
Standard Deviation		46.0	14.7
CV		25.07	24.01
Bartlett's X2		9.016	8.702
P(Bartlett's X2)		0.83	0.85

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

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MAINTENANCE

Field Prep./Maintenance:

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

SOIL DESCRIPTION

% Sand: 90	% OM: 1.3	Texture: sandy loam
% Silt: 6	pH: 5.4	Soil Name: Tifton sandy loam
% Clay: 4	CEC: _____	Fert. Level: _____

ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Type	Interval	Unit
1.							

Overall Moisture Conditions: drip irrigation

Closest Weather Station: _____ Distance: _____ Unit: ____

APPLICATION DESCRIPTION

	A
Application Date:	Feb-27-08
Time of Day:	10 am
Application Method:	band
Application Timing:	preplant
Applic. Placement:	8"deep
Air Temp., Unit:	65 F
% Relative Humidity:	40
Wind Velocity, Unit:	5 mph
Dew Presence (Y/N):	n
Water Hardness:	
Soil Temp., Unit:	55 F
Soil Moisture:	moist
% Cloud Cover:	25

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	CPSAN A
Stage Scale:	not trans
Height, Unit:	0 inch

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	DIGSA A
Stage Scale:	preplant
Density, Unit:	see data
Weed 2 Code, Stage:	CYPRO A
Stage Scale:	preplant
Density, Unit:	see data

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APPLICATION EQUIPMENT

	A
Appl. Equipment:	super bed
Operating Pressure:	
Nozzle Type:	
Nozzle Size:	
Nozzle Spacing, Unit:	11 inch
Nozzles/Row:	3
Band Width, Unit:	
Boom Length, Unit:	
Boom Height, Unit:	
Ground Speed, Unit:	3 mph
Incorporation Equip.:	
Hours to Incorp.:	
Incorp. Depth, Unit:	
Carrier:	
Spray Volume, Unit:	
Spray pH:	
Propellant:	nitrogen
Tank Mix (Y/N):	

Trt No	Treatment Application Comment