Mar-03-06 (VEG44-05) Spray/Seeding Plan Page 1 of 6

### **University of Georgia**

Irrigation Timing Impact on nutsedge response to fumigants.

Trial ID: Veg44-05 Study Dir.: Stanley Culpepper Location: Ponder farm (5160) Investigator: Stanley Culpepper

Reps: 3 Plots: 6 by 65 feet

Spray vol: 14.8 gal/ac Mix size: 2 liters (min 1.5048)

	ay von i no ganao	MIN OILO: L INOTO (ITIIIT	/					
	Treatment Name	Form Form Conc Type Rate			Plot N 1	lo. By 2	Rep 3	
1	DMDS Start Irrigate Day 0				101	206	305	
2	DMDS Start Irrigate Day 5				102	207	304	
3	DMDS Start Irrigate Day 10				103	202	303	
4	Non-treated				104	201	306	
5	T2(6G)+Vap(75G)+Pic(75 Start Irrigate Day 0	5lb)			105	204	302	
6	T2(6G)+Vap(75G)+Pic(75 Start Irrigate Day 5	5lb)			106	203	307	
7	T2(6G)+Vap(75G)+Pic(75 Start Irrigate Day 10	5lb)			107	205	301	

Sort Order: Treatment

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

### Amount\* | Unit | Treatment Name | Lot Code

- \* 'Per area' calculations based on spray volume= 14.8 gal/ac, mix size= 2 liters (mix size basis).
- \* Product amount calculations increased 25 % for overage adjustment.

#### **Trial Comments**

OBJECTIVE: Determine when growers should start drip irrigation with DMDS mixtures or T2/Pic/Vapam sequential applications when applied under LDPE mulch.

### DMDS:

- 1. At 29 days after fumigating, visual control noted 31% less control when irrigation was initiated on day 0 as compared to day 10.
- 2. Visual estimates also noted a definite trend, especially early, on greater control with irrigation initiation on day 10 as compared to day 5.
- 3. Nutsedge counts were taken 6 times through the season. This data also noted the most effective control was when irrigation was initiated at Day 10 as compared to other treatments.

#### T2/PIC/Vapam:

- 1. This treatment was far less sensitive to when irrigation began.
- 2. There was a slight trend in late season nutsedge counts for greater control when irrigation was initiated on Day 5 or 10 to be better than Day 0.

### DRIP IRRIGATION SCHEDULE:

- 1. Day 0 was irrigated 12 to 14 hours after laying plastic for 2:45 hr applying 3 gallons per minute. On the next day, irrigation occurred for 1:15 hr applying 3 gallons per minute and this time schedule was used for the next three weeks.
- 2. Day 5 and 10 treatments began irrigation on the respective days with 1:15 hours of irrigation each day once the cycle began.

### GENERAL COMMENTS:

1. PIC and DMDS 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 apart. Telone II was injected 10-12 inches deep with a Yetter applicator.

Irrigation Timing Impact on nutsedge response to fumigants.

Trial ID: Veg44-05 Study Dir.: Stanley Culpepper Location: Ponder farm (5160) Investigator: Stanley Culpepper

Weed Code	CYPRO						
Rating Data Type	control	control			ct	ct	ct
Rating Unit	percent	percent	percent	#/30ft	#/30ft	#/30ft	#/30ft
Rating Date	Jul-27-05	Aug-05-05	Aug-17-05	Jul-27-05	Aug-02-05	Aug-08-05	Aug-15-05
Trt-Eval Interval	14 DA-A	23 DA-A	29 DA-A	14 DA-A	20 DA-A	26 DA-A	33 DA-A
Trt Treatment Rate							
No. Name Rate Unit	1	2	3	4	5	6	7
1 DMDS	83	30	42	77	91	165	223
Start Irrigate Day 0							
2 DMDS	91	64	66	30	60	70	116
Start Irrigate Day 5							
3 DMDS	99	73	73	14	51	67	128
Start Irrigate Day 10							
4 Non-treated	0	0	0	202	404	342	425
5 T2(6G)+Vap(75G)+Pic(75lb)	89	84	84	34	69	75	106
Start Irrigate Day 0							
6 T2(6G)+Vap(75G)+Pic(75lb)	95	85	87	32	61	59	99
Start Irrigate Day 5							
7 T2(6G)+Vap(75G)+Pic(75lb)	94	83	85	31	52	62	98
Start Irrigate Day 10							
LSD (P=.05)	8.2	7.7	7.8	52.0	67.9	98.7	100.2
Standard Deviation	4.6	4.3	4.3	28.9	37.8	54.9	55.8
CV	5.82	7.21	6.95		33.58	45.72	32.65

Means followed by same letter do not significantly differ (P=.05, LSD)

PRO CYPRO ct ct
ct ct
30ft #/30ft
2-05 Aug-30-05
A-A 48 DA-A
9
06 345
90 202
75 152
22 433
16 141
14 88
24 91
84.9
17.3 47.0
2.38 22.66

Means followed by same letter do not significantly differ (P=.05, LSD)

Mar-03-06 (VEG44-05) Site Description Page 4 of 6

## **University of Georgia**

Irı	rigation Timing Impa	act on nutsedge response to	fumigants.	
Trial ID: Veg44-05	Stud	y Dir.: Stanley Culpepper		
		igator: Stanley Culpepper		
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	GENERAL TRIAL INFO		~ '	
Study Director: Stanley		Title: Ext. Weed	Science	
Affiliation: Univ. of	Georgia			
Postal Code: 31794				
			_	
<b>Investigator:</b> Stanley		Title: Ext. Weed	Science	
<b>Affiliation:</b> Univ. of	Georgia			
Postal Code: 31794				
	TRIAL LOCAT			
City: TyTy		Trial Status:	completed	
State/Prov.: GA		Trial Reliability:	excellent	
Postal Code: 31794			Jul-13-05	
Country: USA		Planned Completion Date:		_
E-Longitude of LL Corner	o:	N-Latitude of LL Corner °:		
		_ Angle y-axis to North $\circ$ :		
Directions:				
	COOPERATOR/LAND	DOWNER		
Cooperator:		Country:		
Org:		Phone No:		
Address 1:		Fax No:		
Address 2:				
City:				
State/Prov:				
Postal Code:				
Conducted Under GLP (Y/N	): N Cond	ducted Under GEP (Y/N): N		
Guidelines:	Guideline Descript:	ion:		
Objective:				
Conclusions:				
	CROP AND WEED DESC	CRIPTION		
Weed Code Com	mon Name	Scientific Nam	e	
1. CYPRO				
I. CIIRO		I		
Gran 1. none no gwan		Vaniates		
Crop 1: none no crop	Dlantin	Variety: g Method:		
Planting Date:				
		Perennial Age:		
		v: Seed Bed:		
Soil Temperature:	_ Soil Moisture: _	Emergence Date:	·	
	<b></b>			
	SITE AND DESI			
		Unit: 65 FT Reps:	3	
Site Type: research st				
Tillage Type: plasticultu	ıre <b>Study I</b>	Design: RANDOMIZED COMPLETE	BLOCK	
Trial Initiation Comments	3 <b>:</b>			
Previous Crops	Pre	vious Pesticides	Year	
1				

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

SOIL DESCRIPTION

Sand: 94 Som: 1.1 Texture: sand
Silt: 2 pH: 6.4 Soil Name: Tifto
Clay: 4 CEC: \_\_\_\_\_ Fert. Level: Soil Name: Tifton sandy loam

### ADDITIONAL MEASURED ELEMENTS

Element	Quantity	Unit

#### MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Туре	Interval	Unit
1.							

Overall Moisture Conditions: Closest Weather Station: \_\_\_\_\_ Distance: \_\_\_\_ Unit: \_\_

### APPLICATION DESCRIPTION

	A
Application Date:	Jul-13-05
Time of Day:	1 pm
Application Method:	broadcast
Application Timing:	PRE
Applic. Placement:	un mulch
Air Temp., Unit:	92 F
% Relative Humidity:	54
Wind Velocity, Unit:	2 mph
Dew Presence (Y/N):	n
Water Hardness:	
Soil Temp., Unit:	90 F
Soil Moisture:	moist
% Cloud Cover:	70

### CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	none
Stage Scale:	
Height, Unit:	

### WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	CYPRO preplant
Stage Scale:	not up
Density, Unit:	see data

### APPLICATION EQUIPMENT

	A
Appl. Equipment:	see
Operating Pressure:	comment
Nozzle Type:	section
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