	1	Nutsec	lge re	spons	se to	fumi	gants	applied	throu	ghou	t th	ne sj	ring.	
Tri	al ID: Veg-02-05(t	iming	)		St	udy D	Dir.:	Stanley	Culpe	per				
Loc	ation: Ponder farm	(514)	0)		Inve	estiga	ator:	Stanley	Culpe	per				
Rep	s: 3 Pl	ots: 3 b	oy 45 fe	eet		>								
Spra	ay vol: 46 gal/ac	Mix	size: 2	liters (	min 1.	.619)								
Trt	Treatment	Form	Form	_	Rate	Grow	Appl	Amt Prod	uct Plo	t No. E	By R	ер		
No.	Name	Conc	Туре	Rate	Unit	Stg	Code	to Measu	re 1	2	3	3		
1	Mid Jan None								10	01 20	)7	301		
2	Mid Jan MeBr 266 lb/A of 67:33								1(	2 20	)4	311		
3	Mid Jan Pic Plus 127.5 lb/A								1(	3 20	)9	305		
4	Mid Jan Vapam 46 GPA								1(	95 2 <sup>-</sup>	10	309		
5	Mid Feb None								1(	94 20	06	302		
6	Mid Feb MeBr 266 lb/A of 67:33								1(	6 20	)5	312		
7	Mid Feb Pic Plus 127.5 lb/A								1(	)7 2 <sup>.</sup>	11	303		
8	Mid Feb Vapam 46 GPA								1(	8 20	)3	307		
9	March None								1(	9 2 <sup>.</sup>	12	308		
10	March MeBr 266 lb/A of 67:33								11	0 20	)1	310		
11	March Pic Plus 127.5 lb/A								11	1 20	08	306		
12	March Vapam 46 GPA								11	2 20	)2	304		

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= 46 gal/ac, mix size= 2 liters (mix size basis).
\* Product amount calculations increased 25 % for overage adjustment.

**Trial Comments** 

OBJECTIVE: Determine effect of application timing on fumigant nutsedge activity.

RESULTS:

Application date had essentially no impact on fumigant activity. Soil temperatures at time of application ranged from 54 to 65 degrees at 5 inches.
 Methyl bromide was more effective than chloropicrin which was more effective than Vapam or the non-treated control. Low fumigant use rates were used as a means to focus on application timings more than fumigant activity.

GENERAL COMMENTS:

Bromide and chloropicrin applied with super bedder plastic layer injecting fumigant 6 to 8 inches deep with 3 knives in a 32 inch bed top.
 Vapam applied broadcast with knives 4 inches apart placing fumigant 4 inches deep. After application, land was hipped followed by the supper bedder plastic layer.

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## **University of Georgia**

Nutsedge response to fumigants applied throughout the spring.										
Trial ID: Veg-02-05(timing)	5	Study Dir	.: Stanle	y Culpepp	er					
Location: Ponder farm (5140)	Inv	vestigato	r: Stanle	y Culpepp	er					
Weed Code	CYPRO									
Crop Code				through	through	through	through	through		
Rating Data Type	control	control	control	mulch	mulch	mulch	mulch	mulch		
Rating Unit	percent	percent	percent	#/plot	#/plot	#/plot	#/plot	#/plot		
Rating Date	Apr-05-05	Apr-28-05	May-24-05	Mar-14-05	Mar-24-05	Apr-15-05	May-03-05	May-28-05		
Trt-Eval Interval	83 DA-A	106 DA-A	132 DA-A	61 DA-A	71 DA-A	93 DA-A	111 DA-A	136 DA-A		
Trt Treatment Rate										
No. Name Rate Unit	1	2	3	4	5	6	7	8		
1 Mid Jan None	0	0	0	127	159	78	184	271		
2 Mid Jan MeBr 266 lb/A of 67:33	99	97	92	1	0	1	7	26		
3 Mid Jan Pic Plus 127.5 lb/A	50	47	28	32	42	67	101	90		
4 Mid Jan Vapam 46 GPA	25	22	10	14	36	126	208	299		
5 Mid Feb None	0	0	0	133	187	181	227	310		
6 Mid Feb MeBr 266 lb/A of 67:33	100	97	91	0	0	1	5	28		
7 Mid Feb Pic Plus 127.5 lb/A	54	47	10	22	35	71	134	194		
8 Mid Feb Vapam 46 GPA	63	49	27	2	7	64	144	230		
9 March None	15	17	0	38	195	196	275	292		
10 March MeBr 266 lb/A of 67:33	100	97	93	0	0	3	9	23		
11 March Pic Plus 127.5 lb/A	67	42	25	0	15	61	120	180		
12 March Vapam 46 GPA	89	40	12	0	0	68	161	203		
LSD (P=.05)	12.1	18.5	12.3	83.9	150.0	47.4	113.2	122.7		
Standard Deviation	7.2	11.0	7.3	49.5	88.6	28.0	66.9	72.4		
CV	12.97	23.77	22.45	161.97	157.37	36.6	50.93	40.53		

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

	Nutsedge respo	nse to fumigants applied throughout	the spring.							
Trial ID: Veg-02	2-05(timing)	Study Dir.: Stanley Culpepper								
Location: Ponder	r farm (5140)	Investigator: Stanley Culpepper								
	GENERAI. TRIAI. INFORMATION									
Study Director: Stanley Culpepper Title: Ext. Weed Science										
Affiliation:	Univ. of Georgia									
Postal Code:	31794									
Investigator:	Stanley Culpepper	Title: Ext. Weed	l Science							
Affiliation:	Univ. of Georgia									
Postal Code:	31794									
	TRI	AL LOCATION								
City: Ty:	Гу	Trial Status:	completed							
State/Prov.: GA		Trial Reliability:	good							
Postal Code: 31	794	Initiation Date:	Jan-12-05							
Country: US	A	Planned Completion Date:								
E-Longitude of 1	LL Corner °:	N-Latitude of LL Corner °:								
Altitude of LL (	Corner: Uni	t: Angle y-axis to North °:	·							
Directions:										
	COOPER	ATOR/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:										

			C	ROP AND W	EED DESC	RIPTIO	N		
Weed	Code	Commor	n Name		Scier	ntific	Name		
1.	CYPRO	purple r	nutsedge						
Crop	1: no	ne nc	o crop				v	ariety:	none
Plant	ing Da	te:		1	Planting	Metho	d: .		
Rate:	0.	•		Depth: 0			Pere	nnial Ag	<b>je:</b> 0.
Row S	pacing	: 0.	. s	pacing Wit	thin Row	: 0.		Seed	l Bed: .
Soil	Temper	ature: 0	)	Soil Moist	ture: .			Emerger	nce Date:
				SITE 2	AND DESI	GN			
Plot	Width,	Unit: 3	FT	Plot	Length,	Unit:	45	FT	Reps:
Site	Type:	resea	urch stat	ion					-
Tilla	ge Typ	e: plast	iculture	2	Study D	esign:	FACT	ORIAL	
		-			-	-			

Trial Initiation Comments:

	Previous Crops	Previous Pesticides	Year
1.			

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

				S	OIL DESCRIPTION	N
%	Sand:	94	% OM:	1.2	Texture:	sand
%	silt:	2	pH:	6.4	Soil Name:	Tifton sandy loam
%	Clay:	4	CEC:		Fert. Level:	

ADDITIONAL N	IEASURED ELEMEN	TS
Element	Quantity	Unit

#### MOISTURE CONDITIONS

	Date	Time	Amount	Unit	Туре	Interval	Unit
1.							

### Overall Moisture Conditions:

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

		APPLI	CATI	ON DES	CRIP	LION
		A		В		C
Application Date:	Jan-	12-05	Feb-	15-05	Mar-	03-05
Time of Day:	9 am	L	9 am		9 am	
Application Method:	broa	dcast	broa	dcast	broa	dcast
Application Timing:	Mid	Jan	Mid	Feb	Earl	y Mar
Applic. Placement:	8"in	jecti	8"in	jecti	8"in	jecti
Air Temp., Unit:	70	F	64	F	59	F
% Relative Humidity:	42		45		40	
Wind Velocity, Unit:	3	mph	3	mph	2	mph
Dew Presence (Y/N):	n		n		n	
Water Hardness:						
Soil Temp., Unit:	65	F	58	F	54	F
Soil Moisture:	moist		moist		moist	
% Cloud Cover:	100		100		100	

#### CROP STAGE AT EACH APPLICATION

	A	В	С		
Crop 1 Code, Stage:	none Mid Jan	none Mid Feb	none Ear. Marc		
Stage Scale:	preplant	preplant	preplant		
Height, Unit:	0 in	0 in	0 in		

### WEED STAGE AT EACH APPLICATION

	A	В	С
Weed 1 Code, Stage:	CYPRO Mid Jan	CYPRO Mid Feb	CYPRO Mar
Stage Scale:	not up	not up	not up
Density, Unit:	• •		

	APPLICATION EQUIPMENT					
		A		в		С
Appl. Equipment:	see	comme	see	comme	see	comme
Operating Pressure:						
Nozzle Type:						
Nozzle Size:						
Nozzle Spacing, Unit:	0.	•	0.	•	0.	•
Nozzles/Row:	3		3		3	
Band Width, Unit:	0.	•	0.	•	0.	•
Boom Length, Unit:	0.	•	0.	•	0.	•
Boom Height, Unit:	0.	•	0.	•	0.	•
Ground Speed, Unit:	3	mph	3	mph	3	mph
Incorporation Equip.:						
Hours to Incorp.:	0.		0.		0.	
Incorp. Depth, Unit:	0.	•	0.	•	0.	•
Carrier:	none	5	none	e	none	2
Spray Volume, Unit:	0.		0.		0.	
Spray pH:	0.		0.		0.	
Propellant:	Ν		Ν		Ν	
Tank Mix (Y/N):	Ν		Ν		N	

Trt No

Treatment Application Comment