

# University of Georgia

Cotton and weed response to A13886 and Envoke.

Trial ID: C18-03 Study Dir.: Stanley Culpepper  
Location: Attapulgus Investigator: Stanley Culpepper

## GENERAL TRIAL INFORMATION

**Study Director:** Stanley Culpepper **Title:** Ext. Agronomist  
**Affiliation:** University of Georgia **Postal Code:** 31794  
**Investigator:** Stanley Culpepper **Title:** Ext. Agronomist  
**Affiliation:** University of Georgia **Postal Code:** 31794

**Trial Status:** completed **Initiation Date:** May-28-03 **Country:** USA  
**City:** Attapulgus **State/Prov.:** GA  
**Conducted Under GLP (Y/N):** N **Conducted Under GEP (Y/N):** N

## CROP AND PEST DESCRIPTION

**Weed 1.**AMAPA Palmer amaranth **2.**PANTE Texas panicum  
**Weed 3.**IPOLA entireleaf/pitted mg **4.**IAQTA smallflower morningglory  
**Weed 5.**CASOB sicklepod **6.**DEDTO Florida beggarweed

**Crop 1:**GOSHI cotton **Variety:** DP 451 B/RR **Planting Date:** May-28-03  
**Planting Method:** strip till **Rate:** 3 seed/foot **Depth:** 0.5 in  
**Row Spacing:** 36 inch **Seed Bed:** flat  
**Soil Temperature:** 84 F **Soil Moisture:** moist **Emergence Date:** Jun-02-03

**Plot Width, Unit:** 12 FT **Plot Length, Unit:** 25 FT **Reps:** 3  
**Site Type:** research station  
**Tillage Type:** strip till **Study Design:** RANDOMIZED COMPLETE BLOCK

## SOIL DESCRIPTION

**Texture:** loamy sand **% OM:** 1.25 **% Sand:** 84 **% Silt:** 14 **% Clay:** 2  
**pH:** 5.9 **Soil Name:** . **Fertility Level:** .

**Overall Moisture Conditions:** wet

## APPLICATION DESCRIPTION

	A	B	C	D	E	F
<b>Application Date:</b>	May-28-03	Jun-05-03	Jun-10-03	Jun-20-03	Jun-30-03	Jul-11-03
<b>Time of Day:</b>	1:30pm	10:00am	9:00am	9:00am	8:00am	10 am
<b>Application Method:</b>	broadcast	broadcast	broadcast	broadcast	broadcast	broadcast
<b>Application Timing:</b>	PRE	POST1	POST2	POST3	POST 4	PDIR1
<b>Applic. Placement:</b>	on soil	overtop	overtop	overtop	overtop	directed
<b>Air Temp., Unit:</b>	83 F	82 F	80 F	78 F	83 F	85 F
<b>% Relative Humidity:</b>	40	49	78	80	69	63
<b>Wind Velocity, Unit:</b>	2 mph	3 mph	2 mph	3 mph	2 mph	3 mph
<b>Dew Presence (Y/N):</b>	N	N	Y	N	N	N
<b>Soil Temp., Unit:</b>	81 F	82 F	77 F	75 F	83 F	85 F
<b>Soil Moisture:</b>	moist	moist	wet	wet	wet	moist
<b>% Cloud Cover:</b>	0	0	0	100	100	30

## CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F
<b>Crop 1 GOSHI Stage:</b>	PRE	POST1	POST2	POST3	POST4	PDIR
<b>Stage Scale:</b>	.	V1	V1-V2	V4-V5	V6-V7	V11
<b>Height, Unit:</b>	0. .	1.5 inch	2 inch	4 inch	8 inch	15 inch

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WEED STAGE AT EACH APPLICATION						
	A	B	C	D	E	F
<b>Weed 1 AMAPA Stage:</b>	PRE	POST1	POST2	POST3	POST4	PDIR
<b>Stage Scale:</b>	.	<0.5 inch	<2 inch	<2 inch	<4 inch	<4" (comme
<b>Density, Unit:</b>	. .	. .	25 ydsq	. .	. .	. .
<b>Weed 2 PANTE Stage:</b>	PRE	POST1	POST2	POST3	POST4	PDIR
<b>Stage Scale:</b>	.	<0.5 inch	<2 inch	3" 3T	<4 inch	<5" (comm
<b>Density, Unit:</b>	. .	. .	12 ydsq	. .	. .	. .
<b>Weed 3 IPOLA Stage:</b>	PRE	POST1	POST2	POST3	POST4	PDIR
<b>Stage Scale:</b>	.	<0.5 inch	<2 inch	<3 inch	<4 inch	<5 inch
<b>Density, Unit:</b>	. .	. .	2 ydsq	. .	. .	. .
<b>Weed 4 IAQTA Stage:</b>	PRE	POST1	POST2	POST3	POST4	PDIR
<b>Stage Scale:</b>	.	<0.5 inch	<2 inch	<3 inch	<3 inch	<5 inch
<b>Density, Unit:</b>	. .	. .	4 ydsq	. .	. .	. .
<b>Weed 5 CASOB Stage:</b>	PRE	POST1	POST2	POST3	POST4	PDIR
<b>Stage Scale:</b>	.	<0.5 inch	<2 inch	<3 inch	<4 inch	<5 inch
<b>Density, Unit:</b>	. .	. .	4 ydsq	. .	. .	. .
<b>Weed 6 DEDTO Stage:</b>	PRE	POST1	POST2	POST3	POST4	PDIR
<b>Stage Scale:</b>	.	<0.5"	<2 inch	<2 inch	<4 inch	<5 inch
<b>Density, Unit:</b>	. .	. .	2 ydsq	. .	. .	. .

APPLICATION EQUIPMENT						
	A	B	C	D	E	F
<b>Appl. Equipment:</b>	backpack	backpack	backpack	backpack	backpack	backpack
<b>Operating Pressure:</b>	22	22	22	22	22	17
<b>Nozzle Type:</b>	flat fan	flat fan	flat fan	flat fan	flat fan	flat fan
<b>Nozzle Size:</b>	11002	11002	11002	11002	11002	11002
<b>Nozzle Spacing, Unit:</b>	18 in	18 in	18 in	18 in	18 in	12 in
<b>Nozzles/Row:</b>	2	2	2	2	2	3
<b>Boom Length, Unit:</b>	4.5 feet	4.5 feet	4.5 feet	4.5 feet	4.5 feet	2 feet
<b>Boom Height, Unit:</b>	15 inch	15 inch	15 inch	15 inch	15 inch	12 inch
<b>Ground Speed, Unit:</b>	3 mph	3 mph	3 mph	3 mph	3 mph	3 mph
<b>Carrier:</b>	water	water	water	water	water	water
<b>Spray Volume, Unit:</b>	14.8 GPA	14.8 GPA	14.8 GPA	14.8 GPA	14.8 GPA	14.8 GPA
<b>Propellant:</b>	CO2	CO2	CO2	CO2	CO2	CO2
<b>Tank Mix (Y/N) :</b>	Y	Y	Y	Y	Y	Y

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Cotton and weed response to A13886 and Envoke.

Trial ID: C18-03  
 Location: Attapulcus

Study Dir.: Stanley Culpepper  
 Investigator: Stanley Culpepper

Weed Code	COTTON	COTTON	COTTON	COTTON	AMAPA	AMAPA	AMAPA	AMAPA
Crop Code	specklin	INJURY	stunt	INJURY				
Rating Data Type	PERCENT	PERCENT	PERCENT	PERCENT	control	control	control	control
Rating Unit					percent	percent	percent	percent
Rating Date	Jun-18-03	Jun-30-03	Jul-11-03	Jul-25-03	Jun-30-03	Jul-11-03	Jul-25-03	Oct-02-03
Trt-Eval Interval	21 DA-A	44 DA-A	44 DA-A	44 DA-A				
PRM Data Type								
# Subsamples, Dec.								
Trt No.	Treatment Name	Rate	Rate	Rate	Rate	Rate	Rate	Rate
		Unit	Unit	Unit	Unit	Unit	Unit	Unit
1	Untreated							
2	A 13886	2.67 pt/a						
	Envoke	0.1 oz/a						
	Surfac 820	0.25 % v/v						
	A 12474	1.26 lb/a						
	Surfac 820	0.25 % v/v						
3	A 13886	2.67 pt/a						
	Envoke	0.15 oz/a						
	Surfac 820	0.25 % v/v						
	A 12474	1.26 lb/a						
	Surfac 820	0.25 % v/v						
4	A 13886	2.67 pt/a						
	Envoke	0.1 oz/a						
	Surfac 820	0.25 % v/v						
	A 12474	1.26 lb/a						
	MSMA 6.6	2.4 pt/a						
	Surfac 820	0.25 % v/v						
5	A 13886	2.67 pt/a						
	Envoke	0.15 oz/a						
	Surfac 820	0.25 % v/v						
	A 12474	1.26 lb/a						
	MSMA 6.6	2.4 pt/a						
	Surfac 820	0.25 % v/v						
6	A 13886	2.67 pt/a						
	Envoke	0.1 oz/a						
	Surfac 820	0.25 % v/v						
	Envoke	0.15 oz/a						
	Surfac 820	0.25 % v/v						
7	A13013	23 fl oz/a						
	A13013	23 fl oz/a						
	A 12474	1.26 lb/a						
	Surfac 820	0.25 % v/v						
8	Touchdown	32 fl oz/a						
	Envoke	0.1 oz/a						
	Surfac 820	0.25 % v/v						
	A 12474	1.26 lb/a						
	Surfac 820	0.25 % v/v						
9	Touchdown	24 fl oz/a						
	Touchdown	32 fl oz/a						
	Caparol	2 pt/a						
	MSMA 6.6	2.4 pt/a						
	Surfac 820	0.25 % v/v						
10	Touchdown	32 fl oz/a						
	Envoke	0.1 oz/a						
	Surfac 820	0.25 % v/v						
	A 12474	1.26 lb/a						
	MSMA 6.6	2.4 pt/a						
	Surfac 820	0.25 % v/v						

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Weed Code	COTTON	COTTON	COTTON	COTTON	AMAPA	AMAPA	AMAPA	AMAPA			
Crop Code	specklin	INJURY	stunt	INJURY							
Rating Data Type	PERCENT	PERCENT	PERCENT	PERCENT	control	control	control	control			
Rating Unit					percent	percent	percent	percent			
Rating Date	Jun-18-03	Jun-30-03	Jul-11-03	Jul-25-03	Jun-30-03	Jul-11-03	Jul-25-03	Oct-02-03			
Trt-Eval Interval	21 DA-A	44 DA-A	44 DA-A	44 DA-A							
PRM Data Type											
# Subsamples, Dec.											
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7	8
11	A 13886	2.67	pt/a	9.3	0.0	0.0	0.0	97.0	93.0	99.0	99.0
	A 12474	1.26	lb/a								
	MSMA 6.6	2.4	pt/a								
	Surfac 820	0.25	% v/v								
12	Touchdown	32	fl oz/a	0.0	0.0	0.0	0.0	79.0	70.0	77.7	81.7
	A 12474	1.26	lb/a								
	MSMA 6.6	2.4	pt/a								
	Surfac 820	0.25	% v/v								
13	Touchdown	32	fl oz/a	0.0	0.0	10.0	0.0	80.0	96.7	99.0	99.0
	Envoke	0.1	oz/a								
	Surfac 820	0.25	% v/v								
	Caparol	2	pt/a								
	MSMA 6.6	2.4	pt/a								
	Surfac 820	0.25	% v/v								
14	Touchdown	24	fl oz/a	1.0	0.0	0.0	0.0	98.3	81.0	93.0	94.0
	Touchdown	32	fl oz/a								
	A 12474	1.26	lb/a								
	MSMA 6.6	2.4	pt/a								
	Surfac 820	0.25	% v/v								
15	Prowl	1.8	pt/a	8.0	0.0	0.0	0.0	97.7	92.0	99.0	99.0
	A 13886	2.67	pt/a								
	Touchdown	24	fl oz/a								
	Caparol	1.5	pt/a								
LSD (P=.05)				2.59	0.00	2.52	0.00	3.18	4.57	3.65	5.74
Standard Deviation				1.55	0.00	1.51	0.00	1.90	2.73	2.18	3.43
CV				37.14	0.0	23.43	0.0	2.19	3.19	2.41	3.79
Bartlett's X2				1.6	0.0	1.944	0.0	5.239	24.94	0.626	1.2
P(Bartlett's X2)				0.953	.	0.925	.	0.631	0.015*	0.429	0.549

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



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Weed Code		PANTE	PANTE	PANTE	PANTE	IPOZZ	IPOZZ	IPOZZ	IPOZZ	IAQTA		
Crop Code												
Rating Data Type		control	control	control	control	control	control	control	control	control		
Rating Unit		percent	percent	percent	percent	percent	percent	percent	percent	percent		
Rating Date		Jun-30-03	Jul-11-03	Jul-25-03	Oct-02-03	Jun-30-03	Jul-11-03	Jul-25-03	Oct-02-03	Jun-30-03		
Trt-Eval Interval												
PRM Data Type												
# Subsamples, Dec.												
Trt No.	Treatment Name	Rate	Unit	9	10	11	12	13	14	15	16	17
12	Touchdown	32	fl oz/a	89.0	78.3	80.0	84.7	95.0	80.0	96.3	99.0	86.3
	A 12474	1.26	lb/a									
	MSMA 6.6	2.4	pt/a									
	Surfac 820	0.25	% v/v									
13	Touchdown	32	fl oz/a	88.3	88.3	91.0	94.0	93.0	96.3	99.0	99.0	87.7
	Envoke	0.1	oz/a									
	Surfac 820	0.25	% v/v									
	Caparol	2	pt/a									
	MSMA 6.6	2.4	pt/a									
	Surfac 820	0.25	% v/v									
14	Touchdown	24	fl oz/a	99.0	94.0	97.7	99.0	97.0	92.3	99.0	99.0	96.7
	Touchdown	32	fl oz/a									
	A 12474	1.26	lb/a									
	MSMA 6.6	2.4	pt/a									
	Surfac 820	0.25	% v/v									
15	Prowl	1.8	pt/a	99.0	94.7	99.0	99.0	92.7	87.3	99.0	99.0	84.7
	A 13886	2.67	pt/a									
	Touchdown	24	fl oz/a									
	Caparol	1.5	pt/a									
LSD (P=.05)				1.25	6.27	4.35	3.82	6.35	7.99	1.00	0.00	6.90
Standard Deviation				0.75	3.75	2.60	2.29	3.80	4.78	0.60	0.00	4.12
CV				0.83	4.33	2.88	2.51	4.22	5.51	0.65	0.0	4.93
Bartlett's X2				4.616	14.388	6.696	2.454	8.59	27.923	0.0	0.0	11.919
P(Bartlett's X2)				0.465	0.347	0.035*	0.117	0.283	0.006*	.	.	0.452

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



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Weed Code	IAQTA	IAQTA	IAQTA	CASOB	CASOB	CASOB	CASOB	DEDTO	DEDTO			
Crop Code												
Rating Data Type	control	control	control	control	control	control	control	control	control			
Rating Unit	percent	percent	percent	percent	percent	percent	percent	percent	percent			
Rating Date	Jul-11-03	Jul-25-03	Oct-02-03	Jun-30-03	Jul-11-03	Jul-25-03	Oct-02-03	Jun-30-03	Jul-11-03			
Trt-Eval Interval												
PRM Data Type												
# Subsamples, Dec.												
Trt No.	Treatment Name	Rate	Rate Unit	18	19	20	21	22	23	24	25	26
12	Touchdown	32	fl oz/a	78.3	96.3	99.0	83.7	78.3	94.7	99.0	91.7	78.3
	A 12474	1.26	lb/a									
	MSMA 6.6	2.4	pt/a									
	Surfac 820	0.25	% v/v									
13	Touchdown	32	fl oz/a	94.7	97.7	99.0	83.7	96.3	99.0	99.0	93.3	96.3
	Envoke	0.1	oz/a									
	Surfac 820	0.25	% v/v									
	Caparol	2	pt/a									
	MSMA 6.6	2.4	pt/a									
	Surfac 820	0.25	% v/v									
14	Touchdown	24	fl oz/a	92.3	99.0	99.0	98.3	92.3	99.0	99.0	99.0	92.3
	Touchdown	32	fl oz/a									
	A 12474	1.26	lb/a									
	MSMA 6.6	2.4	pt/a									
	Surfac 820	0.25	% v/v									
15	Prowl	1.8	pt/a	81.7	99.0	99.0	81.3	79.7	99.0	99.0	97.7	96.0
	A 13886	2.67	pt/a									
	Touchdown	24	fl oz/a									
	Caparol	1.5	pt/a									
LSD (P=.05)				6.90	1.44	0.00	4.36	6.39	1.95	0.00	5.20	4.40
Standard Deviation				4.12	0.86	0.00	2.61	3.82	1.16	0.00	3.11	2.63
CV				4.84	0.93	0.0	3.24	4.44	1.26	0.0	3.49	2.99
Bartlett's X2				21.418	1.016	0.0	18.878	27.126	0.0	0.0	7.223	10.74
P(Bartlett's X2)				0.065	0.602	.	0.127	0.012*	.	.	0.781	0.633

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



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Weed Code	DEDTO	DEDTO	GOSHI	GOSHI			
Crop Code	control	control	seed yld	seed yld			
Rating Data Type	percent	percent	lb/plot	lb/A			
Rating Unit	Jul-25-03	Oct-02-03	Nov-17-03	Nov-17-03			
Rating Date							
Trt-Eval Interval							
PRM Data Type				TY1			
# Subsamples, Dec.				1			
Trt No.	Treatment Name	Rate	Unit	27	28	29	30
1	Untreated			0.0	0.0	0.0	0.0
2	A 13886	2.67	pt/a	99.0	99.0	9.8	2849.8
	Envoke	0.1	oz/a				
	Surfac 820	0.25	% v/v				
	A 12474	1.26	lb/a				
	Surfac 820	0.25	% v/v				
3	A 13886	2.67	pt/a	99.0	99.0	10.5	3051.1
	Envoke	0.15	oz/a				
	Surfac 820	0.25	% v/v				
	A 12474	1.26	lb/a				
	Surfac 820	0.25	% v/v				
4	A 13886	2.67	pt/a	99.0	99.0	10.4	3010.5
	Envoke	0.1	oz/a				
	Surfac 820	0.25	% v/v				
	A 12474	1.26	lb/a				
	MSMA 6.6	2.4	pt/a				
	Surfac 820	0.25	% v/v				
5	A 13886	2.67	pt/a	99.0	99.0	10.2	2958.2
	Envoke	0.15	oz/a				
	Surfac 820	0.25	% v/v				
	A 12474	1.26	lb/a				
	MSMA 6.6	2.4	pt/a				
	Surfac 820	0.25	% v/v				
6	A 13886	2.67	pt/a	99.0	99.0	11.2	3250.5
	Envoke	0.1	oz/a				
	Surfac 820	0.25	% v/v				
	Envoke	0.15	oz/a				
	Surfac 820	0.25	% v/v				
7	A13013	23	fl oz/a	99.0	99.0	11.4	3324.1
	A13013	23	fl oz/a				
	A 12474	1.26	lb/a				
	Surfac 820	0.25	% v/v				
8	Touchdown	32	fl oz/a	99.0	99.0	9.8	2851.7
	Envoke	0.1	oz/a				
	Surfac 820	0.25	% v/v				
	A 12474	1.26	lb/a				
	Surfac 820	0.25	% v/v				
9	Touchdown	24	fl oz/a	99.0	99.0	10.2	2956.3
	Touchdown	32	fl oz/a				
	Caparol	2	pt/a				
	MSMA 6.6	2.4	pt/a				
	Surfac 820	0.25	% v/v				
10	Touchdown	32	fl oz/a	99.0	99.0	9.8	2857.5
	Envoke	0.1	oz/a				
	Surfac 820	0.25	% v/v				
	A 12474	1.26	lb/a				
	MSMA 6.6	2.4	pt/a				
	Surfac 820	0.25	% v/v				
11	A 13886	2.67	pt/a	99.0	99.0	9.9	2880.8
	A 12474	1.26	lb/a				
	MSMA 6.6	2.4	pt/a				
	Surfac 820	0.25	% v/v				

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Weed Code	DEDTO	DEDTO	GOSHI	GOSHI
Crop Code	control	control	seed yld	seed yld
Rating Data Type	percent	percent	lb/plot	lb/A
Rating Unit	Jul-25-03	Oct-02-03	Nov-17-03	Nov-17-03
Rating Date				
Trt-Eval Interval				
PRM Data Type				TY1
# Subsamples, Dec.				1
Trt Treatment	Rate	Rate	Rate	Rate
No. Name	Rate	Unit	27	28
12 Touchdown	32 fl oz/a		99.0	99.0
A 12474	1.26 lb/a			9.2
MSMA 6.6	2.4 pt/a			2664.9
Surfac 820	0.25 % v/v			
13 Touchdown	32 fl oz/a		99.0	99.0
Envoke	0.1 oz/a			8.2
Surfac 820	0.25 % v/v			2379.3
Caparol	2 pt/a			
MSMA 6.6	2.4 pt/a			
Surfac 820	0.25 % v/v			
14 Touchdown	24 fl oz/a		99.0	99.0
Touchdown	32 fl oz/a			11.0
A 12474	1.26 lb/a			3192.5
MSMA 6.6	2.4 pt/a			
Surfac 820	0.25 % v/v			
15 Prowl	1.8 pt/a		99.0	99.0
A 13886	2.67 pt/a			11.2
Touchdown	24 fl oz/a			3248.6
Caparol	1.5 pt/a			
LSD (P=.05)	0.00	0.00	2.71	788.03
Standard Deviation	0.00	0.00	1.62	471.26
CV	0.0	0.0	17.04	17.04
Bartlett's X2	0.0	0.0	12.302	12.302
P(Bartlett's X2)	.	.	0.503	0.503

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

Column 30: TY1 = 290.4\*[29]

## Trial Comments

**OBJECTIVE:** Determine crop and weed response to herbicide systems utilizing Envoke.

### Cotton Tolerance:

- 1) A13886 caused leaf speckling. Visual injury ranged from 6 to 11 percent at 8 DAT. No injury was detectable at 20 DAT.
- 2) Envoke caused plant stunting at 11 DAT. Envoke at 0.1 oz/A stunted cotton 9 to 12%. Greater injury was noted with 0.15 oz (17-18%). No stunting was visually detected at 25 DAT.
- 3) Suprend caused no visual injury. It was applied precisely

### Weed control:

#### Palmer:

- 1) All systems containing metolachlor or sequential POST applications provided near complete control at mid-season.
- 2) The system with metolachlor mixed with glyphosate and applied at POST 2 improved control 21% compared to the same system without metolachlor mixed with glyphosate applied POST.
- 3) Touchdown POST 2 followed by Envoke POST 4 fb by Suprend PDIR (3 applications) was not as effective as glyphosate + Dual POST 2 fb Suprend PDIR (2 applications).
- 4) Late-season control was excellent except when a single glyphosate application POST was followed by Suprend at layby.

#### Texas panicum:

- 1) Excellent early season control was noted except when total POST glyphosate applications were made.
- 2) Metolachlor mixed with glyphosate and applied at POST 2 followed by Suprend provided complete mid-season control. The same system without metolachlor provided only 80% control.
- 3) Touchdown POST 2 followed by Envoke POST 4 fb by Suprend PDIR (3 applications) was not as effective as glyphosate + Dual POST 2 fb Suprend PDIR (2 applications).
- 4) Late-season control was excellent except when a single glyphosate application POST was followed by Suprend at layby.

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## Entireleaf/Pitted MG:

- 1) Excellent control was noted with all systems.
- 2) The least effective system at mid-season was noted with Touchdown was the only POST treatment in the systems approach.
- 3) Late-season control was excellent with all systems.

## Smallflower MG:

- 1) Excellent control was noted with all systems.
- 2) The least effective mid-season system was noted with Touchdown was the only POST treatment in the systems approach.
- 3) Excellent late-season control was noted with all systems.

## Sicklepod:

- 1) Excellent control was noted with all systems.
- 2) The least effective system at mid-season was noted with Touchdown was the only POST treatment in the systems approach.
- 3) Late-season control was excellent with all systems.

## Florida beggarweed:

- 1) Prior to layby, the least effective system was noted with Touchdown was the only POST treatment in the systems approach.
- 2) After layby and at mid-season control was excellent with all treatments.
- 3) Late-season control was excellent with all systems.

## Seed Cotton Yield:

- 1) Few differences were noted among treatments.

GENERAL COMMENTS: At time of PDIR, weeds were less than five inches except in treatment 12 where some weeds were up to 20 inches tall.