

University of Georgia

Cotton response to Aim or ET751 applied at defoliation.

Trial ID: def2-03
Location: Ponder farm

Study Dir.: Stanley Culpepper
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: TyTy **Trial Status:** completed
State/Prov.: GA **Trial Reliability:** good
Postal Code: 31794 **Initiation Date:** Sep-09-03
Country: USA

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	.		

Crop 1: GOSHI cotton **Variety:** BXN 47
Planting Date: Sep-09-03 **Planting Method:** strip tillage
Rate: 3 seed/ft **Depth:** 0.5 in
Row Spacing: 36 inch **Spacing Within Row:** 3 seed **Seed Bed:** bedded
Soil Temperature: 0. **Soil Moisture:** moist **Emergence Date:** May-06-03

SITE AND DESIGN

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

SOIL DESCRIPTION

% Sand: 94 **% OM:** 1.3 **Texture:** sand
% Silt: 2 **pH:** 5.7 **Soil Name:** Tifton sandy loam
% Clay: 4

Overall Moisture Conditions: .

APPLICATION DESCRIPTION

	A
Application Date:	Sep-09-03
Time of Day:	10:30 am
Application Method:	broadcast
Application Timing:	defoliati
Applic. Placement:	overtop
Air Temp., Unit:	80 F
% Relative Humidity:	64
Wind Velocity, Unit:	3 mph
Dew Presence (Y/N):	n
Soil Temp., Unit:	86 F
Soil Moisture:	moist
% Cloud Cover:	20

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	GOSHI defoliati
Stage Scale:	65-75%ope
Height, Unit:	60 inch

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WEED STAGE AT EACH APPLICATION

	A
	.
Stage Scale:	.
Density, Unit:	. .

APPLICATION EQUIPMENT

	A
Appl. Equipment:	spider
Operating Pressure:	40 psi
Nozzle Type:	flat fan
Nozzle Size:	11002
Nozzle Spacing, Unit:	18 inch
Nozzles/Row:	2
Boom Length, Unit:	4.5 feet
Boom Height, Unit:	18 inch
Ground Speed, Unit:	3 mph
Carrier:	water
Spray Volume, Unit:	14.8 GPA
Propellant:	CO2
Tank Mix (Y/N):	Y

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Crop Code			GOSHI	GOSHI	GOSHI	GOSHI	GOSHI	
Rating Data Type			defoliation	defoliation	defoliation	regrowth	regrowth	
Rating Unit			percent	percent	percent	percent	percent	
Rating Date			Sep-12-03	Sep-19-03	Sep-26-03	Sep-19-03	Sep-26-03	
Trt-Eval Interval			3 DA-A	10 DA-A	17 DA-A	10 DA-A	17 DA-A	
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5
1	Aim	0.016	lb ai/a	59.3	78.3	78.7	1.7	33.3
	COC	1	% v/v					
2	Aim	0.025	lb ai/a	58.3	73.3	84.3	1.0	33.3
	COC	1	% v/v					
3	ET751	1	oz/a	65.0	71.7	86.0	4.3	33.3
	COC	1	% v/v					
4	ET751	2	oz/a	66.3	76.7	88.3	1.0	30.0
	COC	1	% v/v					
LSD (P=.05)				9.23	12.01	8.39	2.13	9.99
Standard Deviation				4.62	6.01	4.20	1.07	5.00
CV				7.42	8.01	4.98	53.36	15.38
Bartlett's X2				0.141	1.43	3.838	1.48	0.0
P(Bartlett's X2)				0.932	0.699	0.279	0.687	0.001*

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

Trial Comments

OBJECTIVE: Compare Aim and ET751 for cotton defoliation.

RESULTS:

- 1) At 3 d after defoliation, no differences in defoliation were noted with 58 to 66% leaf drop.
- 2) By 10 d after defoliation, leaf drop ranged from 79 to 88% with no differences among rates or products.
- 3) Regrowth began about 10 days after application and was severe by 30 DAT, but similar among all treatments.

CONCLUSIONS:

- 1) No differences in defoliation were noted among products or rates in this trial.