



## Applied Research Report

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### Cotton Seed Treatment Evaluation

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### Summary

A trial was conducted with the purpose of evaluating cotton seed treatments for control of thrips and the resulting effects on lint yield. No differences were found in thrips numbers at any of the three dates insect counts were made. The thrips population was relatively low in this trial.

### Objectives

The objective of this project was to evaluate cotton seed treatments for control of thrips and the resulting effect on lint yield.

### Materials and Methods

A trial was planted on 6 April 2006 with the purpose of. The cotton was planted at a rate of 5.7 seed per foot on 38 inch rows. Plots were 6 rows wide, the length of the field. Dual applications were made in a 20 inch band at planting.

Treatments were as follows:

- 1) Untreated
- 2) Avicta
- 3) Gaucho Grande 0.375 mg a.i./seed
- 4) Cruiser 0.3 mg a.i./seed
- 5) Cruiser 0.3 mg a.i./seed  
Dynasty 3.9 oz /cwt

The trial was set up as a randomized complete block with three replications. Visual insect counts were made at 14 and 22 days after planting (DAP). Insect counts made 29 DAP were made by clipping plants and placing them in alcohol, then counting

thrips after filtering. Harvest was made by hand picking ten feet of row from each plot.

## Results and Discussion

The thrips population was relatively low in this field. No differences were found in thrips numbers at any of the three dates insect counts were made (Table 1).

Lint yield for the Cruiser and Cruiser + Dynasty treatments was significantly lower than that of the other treatments. While this difference is statistically significant, it is not consistent with other studies and cannot be explained.

**Table 1.** Number of thrips per plant and 14, 22 and 29 days after planting and lint yield (lbs/A).

Trt No.	Treatment Name	Rate	Unit	Thrips (# / plant)			Lint Yield (lbs/A)
				4/20/2006 14 DAP	4/28/2006 22 DAP	5/5/2006 29 DAP	8/31/2006 147 DA-A
1	Untreated			0.30 a	3.70 a	38.47 a	1585.86 a
2	Avicta			0.07 a	2.03 a	21.27 a	1504.26 a
3	Gaucho Grande	0.375	mg ai/seed	0.10 a	3.00 a	21.67 a	1528.70 a
4	Cruiser	0.3	mg ai/seed	0.03 a	3.03 a	13.80 a	1336.21 b
5	Cruiser Dynasty	0.3 3.9	mg ai/seed oz/cwt	0.03 a	2.23 a	24.00 a	1233.71 b
LSD (P=.05)				0.209	2.258	24.002	144.909
Standard Deviation				0.111	1.199	12.748	76.963
CV				104.11	42.83	53.47	5.35
Replicate F				0.054	0.227	0.33	4.473
Replicate Prob(F)				0.9477	0.8022	0.7283	0.0497
Treatment F				3.027	0.945	1.505	10.962
Treatment Prob(F)				0.0854	0.4855	0.2881	0.0025

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