Result Demonstration/Applied Research Report

2003 Cotton Variety Test

Cooperator: Terry Scherwitz
Fisher County

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Summary

Four varieties of cotton were planted June 12, 2003 by Terry Scherwitz on his farm 13 miles southwest of Roby. All varieties in the test were conventional varieties. This test was established to monitor any yield and turnout differences between new conventional varieties.

Objective

Due to the increased interest in genetically modified cotton, primarily for the control of problem weeds, conventional varieties are becoming less popular. Farmers in Fisher County have planted conventional varieties for many years and have great knowledge of production levels. As more genetically modified varieties appear on the market, conventional cotton appears to be moving to the wayside, although there are many new varieties developed every year. A field test established in Fisher County would allow producers the opportunity of observing yields of some newer conventional varieties, possibly proving that money can be saved by reverting back to these varieties. Taking the plots to harvest would provide producers information on yield and fiber quality.

A field test was established in southwestern Fisher County with four conventional varieties that have recently been placed on the market.

Materials and Methods

Cooperators: Terry Scherwitz
Plot Location: Busby area 13 miles southwest of Roby

Crop Production Information:

Planting Date:	June 12, 2002
Planting Rate:	12 pounds per acre
Planting Pattern:	2 X 1, 40" spacing
Herbicide Applied:	Prowl, at the rate of 1 pt/acre was applied during planting
Insecticides Applied:	None
Fertilizer Applied:	None

Results and Discussion

The cotton variety test established by Terry Scherwitz provided very useful information to producers. The desired cotton emergence was achieved in seven days after planting. Weed competition was kept to a minimum by the herbicide program used by the producer.

Table 1. Agronomic Data from Terry Scherwitz's Cotton Variety Test (Fisher County, 2003)

	Yield Per Acre				Fiber Quality								
	In Pounds		% Turnout								Lint	Seed	Total
						Fiber				CCC	Gross	Gross	Gross
					Color-	Length		Strength		Loan	Return	Return	Return
Variety	Lint	Seed	Lint	Seed	Leaf	(staple)	Mic	(gram/tex)	Uniformity	Value	($/acre)	($/acre)	($/acre)
FiberMax 958	1037	1450	34.5	48.3	311	38	4.1	29.5	81.5	56.15	582.47	90.62	673.10
FiberMax 832	990	1786	31.3	56.5	311	40	3.6	33.2	83.4	56.60	560.41	111.64	672.06
FiberMax 989	927	1652	28.8	51.4	311	39	3.4	30.4	82.8	54.15	501.98	103.27	605.24
Deltapine 491	781	1471	25.7	48.4	312	39	4.1	31.6	83.4	56.65	442.36	91.95	534.31

N0TE: 1) Yield was determined by hand sampling three areas in each variety
2) Gross return per acre for cottonseed was based on a sale price of $125 per ton

Economic Analysis

Let me stress that looking at the total gross return can be deceiving is selecting varieties from one test. Year to year variation and differences in plots and production practices make a difference. The variability between the samples collected showed significant difference in yield only between the top and bottom variety. It is recommended that producers look at tests conducted in the region for the last 2 to 3 years and from ten or more field tests and find a variety that is in the upper third. Those selected varieties can then be tested on your farm under your production practices to determined if increased acreage of that variety is justified. Most of the varieties in this test have a fiber quality that is desired by the buyers with high strength, length, and uniformity.

Acknowledgements:

I want to take this opportunity to thank Terry Scherwitz for establishing and managing this cotton variety test.

A word of appreciation is extended to the following seed companies for providing seed for this plot they include:

- Delta and Pineland Company
- Bayer CropScience