



## **Result Demonstration/Applied Research Report**

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### **Dryland Cotton Variety Evaluation**

Britt Mikeska Farm, 2005

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#### **Summary:**

Eight cotton varieties were compared under similar growing conditions to determine which cotton varieties consistently have higher yields and favorable fiber qualities. FiberMax 800 B2R, FiberMax 960 B2R and Stoneville ST 6636 BR topped this test in gross returns of \$425.18 per acre, \$377.46 per acre and \$366.02 per acre, respectively. Due to the late maturity of the crop, fiber quality had a detrimental effect on a number of cotton varieties in this test. Producers should keep in mind that these results can change under different field conditions, soil fertility and irrigation practices, so it is suggested that you look at the better cultivars on your farm for several seasons.

#### **Objective:**

Commercial cotton varieties require testing each year for determinations of consistency of yield and fiber quality measurements. Through the use of a field test, a comparison is made of new varieties of cotton with varieties that have proven to be successful, long term yielders. Testing of said varieties within a geographic area of production is important to provide local producers with the latest information on old and new varieties.

### **Materials and Methods:**

Eight cotton varieties were planted using an eight row John Deere planter in a strip test fashion using 3 planted row plots in the Wingate farming community. Each variety consisted of 6 planted rows. The following is a list of materials and methods used in this test.

Planting Date:	June 15, 2005
Seeding Rate:	7 lbs. per acre
Planting Pattern:	2 planted 1 out
Soil Type:	Rowena Tabosa
Previous Crop:	Wheat
Herbicides:	Treflan 2 pts./acre pre-plant, 1 over the top Round Up® application
Fertilizer:	30-40-0, 10S banded into side of bed pre-plant
Insecticides:	None
Harvest Date:	December 02, 2005

### **Results and Discussion:**

Table 1 contains the yield and fiber quality information for each of the eight cotton varieties evaluated in this test. FiberMax 800 B2R, FiberMax 960 B2R and Stoneville ST6636 BR topped this test in gross returns of \$425.18 per acre, \$377.46 per acre and \$366.02 per acre, respectively. Also doing quite well were FiberMax 960 RR and Deltapine 434 R with gross returns of \$363.78 per acre and \$351.34 per acre, respectively. FiberMax 960 R has been one of the most consistent top yielders in the past four years. Due to the lateness of the crop, the fiber quality of many of the cotton varieties had a negative impact on gross returns.

All cotton varieties were planted in a two planted one out row pattern across the field and were hand-harvested on December 2, 2005. Fiber quality analysis was determined by the Texas Tech Textile Center in Lubbock.

**Table 1. Agronomic Data from Britt Mikeska's Dryland Cotton Variety Test (Runnels County, 2005)**

Variety	Yield Per Acre				Fiber Quality						CCC Loan Value	Lint Gross Return (\$/acre)	Seed Gross Return (\$/acre)	Total Gross Return (\$/acre)
	In Pounds		% Turnout		Color- Leaf	Fiber		Strength (gram/tex)	Uniformity					
	Lint	Seed	Lint	Seed		Length (staple)	Mic							
FiberMax 800 B2R	668	1221	28.5	52.0	211	37	3.0	30.1	80.9	54.50	364.15	61.03	425.18	
FiberMax 960 B2R	597	1211	23.2	47.1	211	34	4.4	22.6	80.3	53.05	316.91	60.56	377.46	
Stoneville ST 6636 BR	572	1067	24.0	44.9	212	37	3.1	32.0	82.0	54.70	312.66	53.36	366.02	
FiberMax 960 RR	576	1013	26.4	46.5	212	36	3.0	30.2	80.2	54.35	313.13	50.65	363.78	
Deltapine 434 R	588	1069	26.2	47.6	112	35	2.8	31.9	80.3	50.65	297.90	53.44	351.34	
Deltapine 494 R	455	959	23.2	48.9	212	35	4.0	24.7	79.6	55.85	254.17	47.97	302.14	
Deltapine 488 BR	493	1044	23.4	49.6	211	34	2.9	27.5	76.5	47.60	234.54	52.20	286.75	
Stoneville ST 3969 R	503	921	25.2	46.1	312	34	2.8	26.0	79.9	47.55	239.26	46.04	285.30	

Seed income calculated using a price of \$100 per ton.

**Acknowledgments:**

Sincere appreciation is expressed to Britt Mikeska for establishing and managing this test. Also a word of thanks to the seed companies that provided cottonseed, they include:

Delta and Pine Land Company who provided Deltapine 434 R, Deltapine 494 R and Deltapine 488 BR.

Bayer CropScience who provided the FiberMax 800 B2R, FiberMax 960 B2R and FiberMax 960 RR.

Stoneville Southwest Inc. who provided Stoneville ST 6636 BR and Stoneville ST 3969 R.

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