



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

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### **Dryland Cotton Variety Evaluation**

Dennis Minzenmayer Farm, 2005

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#### **Summary:**

Thirteen 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 RR and Deltapine 488 BR topped this test in gross returns of \$648.40 per acre, \$645.88 per acre and \$631.64 per acre, respectively. 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. 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:

Thirteen cotton varieties were planted using an eight row John Deere Maxi-Merge planter in a strip test fashion using 12 planted row plots in the Rowena farming community. The following is a list of materials and methods used in this test.

Planting Date: May 24, 2005  
Seeding Rate: 3.06 seeds/foot, 39,300 seeds/ row acre  
Planting Pattern: 2 planted 1 out  
Soil Type: Rowena Tabosa  
Previous Crop: Grain Sorghum  
Herbicides: 2 over the top applications of Round Up®, 1 hooded sprayer application of Round Up®  
Fertilizer: 200 lbs. Of 16-17-0,6.5S, banded at planting  
Insecticides: None  
Harvest Date: October 24, 2005

Variety	Plant Stand Avg. # per ten feet
ST 6848	28
ST 6848 R	25
ST 6636 BR	28
PHY 310 R	27
FM 800 B2R	24
DP 494 RR	28
PHY 410 R	29
PHY 470 WR	26
ST 5599 BR	27
FM 800 RR	25
FM 960 B2R	22
FM 960 RR	27
DP 434 RR	25

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**Results and Discussion:**

Table 1 contains the yield and fiber quality information for each of the thirteen cotton varieties evaluated in this test. FiberMax 800 B2R, FiberMax 960 RR and Deltapine 488 BR topped this test in gross returns of \$648.40 per acre, \$645.88 per acre and \$631.64 per acre, respectively.

All cotton varieties were planted in a two planted one out row pattern across the field and stripper-harvested using a John Deere eight row cotton stripper. Each cotton variety consisted of 12 planted rows. Weights were determined using a boll buggy. Fiber quality analysis was determined by the Texas Tech Textile Center in Lubbock.

**Table 1. Agronomic Data from Dennis Minzenmayer'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			Uniformity				
	Lint	Seed	Lint	Seed		Length (staple)	Mic	Strength (gram/tex)					
FiberMax 800 B2R	999	1469	30.9	45.5	311	37	4.5	30.6	81.9	57.55	574.94	73.46	648.40
FiberMax 960 RR	997	1432	34.9	50.2	312	36	4.2	30.9	81.8	57.60	574.28	71.59	645.88
Deltapine 488 BR	981	1421	34.2	49.6	312	36	4.7	28.8	82.7	57.15	560.57	71.07	631.64
FiberMax 800 RR	954	1412	32.7	48.4	312	36	4.5	31.2	82.6	57.60	549.71	70.60	620.31
Deltapine 494 RR	913	1289	36.5	51.6	311	36	4.8	29.8	83.5	57.50	525.25	64.45	589.70
FiberMax 960 B2R	901	1300	30.9	44.7	311	37	4.7	31.2	81.6	57.55	518.25	64.99	583.24
Stoneville ST 6636 BR	897	1394	31.7	49.2	312	36	5.0	29.5	83.7	53.85	482.92	69.71	552.63
Stoneville ST 6848 R	886	1375	30.4	47.1	411	36	5.1	29.7	84.0	51.35	455.20	68.76	523.95
Phytogen 410 R	834	1255	34.2	51.4	412	36	4.6	28.0	83.1	54.65	455.53	62.73	518.26
Deltapine 434 RR	835	1196	33.4	47.9	412	36	4.4	27.8	82.3	54.40	454.02	59.82	513.84
Stoneville ST 5599 BR	833	1207	30.4	44.0	413	35	4.8	28.6	80.9	53.80	448.01	60.35	508.36
Phytogen 470 WR	738	1101	30.2	45.1	413	35	4.6	27.8	84.1	54.15	399.88	55.06	454.95
Phytogen 310 R	777	1248	30.4	48.9	412	33	5.0	26.7	82.6	47.15	366.42	62.40	428.81

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

**Acknowledgments:**

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

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

Dow Agrosciences who provided Phytogen 410 R, Phytogen 470 WR and Phytogen 310 R.

Stoneville Southwest, Inc. who provided Stoneville ST 6636 BR, Stoneville ST 6848 R and Stoneville ST 5599 BR.

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