



### **Tom Green County Irrigated Stacked Cotton Variety Test**

John and Doug Wilde Farm, 2006

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#### **Summary:**

Six cotton varieties were compared under similar growing conditions to determine which cotton varieties consistently have higher yields and favorable fiber qualities. Deltapine 143 B2RF, FiberMax 1880 B2F and FiberMax 9063 B2F topped this test with gross returns of \$1,155.37 per acre, \$1,155.10 per acre and \$1,062.80 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:

Six cotton varieties were planted in the Wall farming community using an eight row John Deere Maxi-Merge planter. The strip test consisted of 16 planted row plots of each variety. The following is a list of materials and methods used in this test.

Planting Date:	May 31, 2006
Seeding Rate:	50,820 seeds per acre
Planting Pattern:	40 inch rows planted every row
Soil Type:	Angelo Clay Loam with a pH of 8.1
Irrigation Method:	Sub-surface Drip received 0.20 inch per day
Previous Crop:	Cotton
Herbicides:	1 over the top application of Round Up® applied at the fifth leaf stage
Fertilizer:	20 tons of manure applied prior to planting; N was applied through the drip tape (approximately 150 lbs. N during growing season)
Insecticides:	Intruder was applied at a 0.6 ounce rate per acre at the matchhead square stage.
Plant Growth Regulator:	Three applications - 1) Two ounces of Stance was applied at the one-third grown square stage. 2) Two ounces of Stance was applied at first bloom. 3) Two ounces of Stance was applied the third week of bloom.
Harvest Date:	October 20, 2006

Variety	Plant Stand Avg. # per foot Cotyledon Stage	Plant Stand Avg. # per foot 2 <sup>nd</sup> True Leaf Stage	Plant Stand Avg. # per foot 4 <sup>th</sup> True Leaf Stage
FiberMax 9063 B2F	3.0	3.1	2.8
Deltapine 143 B2RF	3.6	3.7	3.4
Deltapine 164 B2RF	3.6	3.9	3.9
FiberMax 989 B2R	3.4	3.4	3.3
Stoneville 6611 B2RF	3.5	3.7	4.1
FiberMax 1880 B2F	3.9	3.7	3.6

Average plant populations were determined by taking three different plant stand counts within each variety at each listed growth stage

## Results and Discussion:

Table 1 contains the yield and fiber quality information for each of the six cotton varieties evaluated in this test. Deltapine 143 B2RF, FiberMax 1880 B2F and FiberMax 9063 B2F topped this test with gross returns of \$1,155.37 per acre, \$1,155.10 per acre and \$1,062.80 per acre, respectively.

FiberMax 1880 B2F is an experimental mid to full season picker variety from Australia. Growth habits of this cotton variety was similar to Deltapine 143 B2RF and FiberMax 989 B2R. The FiberMax 9063 B2F is a more detergent cotton variety that would work well in a re-plant situation or June planting date.

All cotton varieties were planted on 40 inch centers across the field and stripper-harvested using a John Deere four row cotton stripper. Each cotton variety consisted of 16 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 John and Doug Wilde's Irrigated Cotton Variety Test (Tom Green County, 2006)**

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)						
Deltapine 143 B2RF	1688	2396	33.9	48.2	312	38	4.7	27.6	82.2	58.15	981.68	173.69	1155.37	
FiberMax 1880 B2F	1682	2387	34.0	48.3	312	39	4.8	31.2	83.1	58.40	982.04	173.07	1155.10	
FiberMax 9063 B2F	1507	2538	30.6	51.5	312	36	4.5	29.2	83.7	58.30	878.77	184.02	1062.80	
FiberMax 989 B2R	1505	2426	31.7	51.1	312	38	4.4	32.4	84.4	58.50	880.60	175.88	1056.48	
Stoneville 6611 B2RF	1475	2455	30.9	51.4	312	37	4.9	30.4	84.1	58.50	863.03	177.99	1041.02	
Deltapine 164 B2RF	1430	2228	31.7	49.3	312	38	4.5	29.9	84.2	58.50	836.68	161.55	998.23	

Seed income calculated using a price of \$145 per ton.

## Acknowledgments:

Sincere appreciation is expressed to John and Doug Wilde 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 143 B2RF and Deltapine 164 B2RF

Bayer CropScience who provided the FiberMax 1880 B2F, FiberMax 9063 B2RF and FiberMax 989 B2R

Stoneville Pedigreed Seed owned by Monsanto who provided Stoneville 6611 B2RF

Trade names of commercial products used in this report are included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.