



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

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### **2005 HOWARD COUNTY ROUNDUP READY COTTON VARIETY TEST**

**Cooperators: Steve and Stan Blagrave**

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#### **SUMMARY**

Fifteen cotton varieties were planted to compare fiber yield and quality characteristic under similar dryland production conditions. Deltapine 5690 RR and FiberMax 800 RR were the highest yielding varieties in this test. Associated Farmers Delinting 3602 RR had the highest loan value at 58.20 cents per pound. This is only one years result and continued testing is recommended before making a significant switch to a new variety.

#### **PROBLEMS**

Several new varieties of cotton become available each year and when combined with the varieties already available makes planting seed selection increasingly difficult. Producers need local data to help in selecting adapted high yielding varieties with desirable fiber quality traits. Higher strength and longer staple are the primary fiber quality characteristics they are looking for.

#### **OBJECTIVE**

With improved varieties being introduced each season, testing is a necessary part of any farming operation. This field test was established to compare new and traditional varieties. The main focus will be to find those varieties that provide high lint yield with desirable fiber traits. Since some varieties have a limited success within a narrow range of production conditions, local testing is necessary and justified. This test will allow area producers to determine if new varieties being introduced are more productive than what they currently planting. Also, it will provide area producers with the opportunity to examine the differences in plant development between the old and new varieties.

## MATERIALS AND METHODS

Cooperator: Steve and Stan Blagrove

County Precinct: 1

Planting Date: May 30, 2005

Row Width: 40 inches

Previous Crop: Cotton

Irrigation: None

Fertilizer: 150 pounds of 28-5-5 applied during the growing season

Herbicide: Applied one pint of Treflan prior to planting. And applied one quart of Roundup twice during the growing season

Insecticide: Sprayed once for spider mites and once for bollworm control

Soil Type: Sandy Clay Loam

Acres of Each Variety Planted: 16.16 (20 rows, 2640 feet long)

The test plots were stripper harvested to determine the yield per acre. A two pound sample was taken and ginned at the Texas Agricultural Experiment Station in Lubbock to determine the percent turnout of lint and seed. A sample of the ginned cotton was taken to the International Textile Center in Lubbock to have fiber properties determined using a HVI classing machine.

## RESULTS, DISCUSSION AND ECONOMIC ANALYSIS

As seen in Table 1, the yields in this plot ranged from 937 pounds per acre to 1536 pounds per acre. Deltapine 5690 RR and FiberMax 800 RR were the highest yielding varieties in this test. Associated Farmers Delinting 3602 RR had the highest loan value at 58.20 cents per pound.

Table 1. Data from Steve and Stan Blagrove's 2005 Dryland Roundup Ready Cotton Variety Test (Howard County)

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)	Strength (gram/tex)						
Deltapine 5690 R	1536	2374	28.3	43.8	211	36	3.0	28.8	81.5	54.10	831.03	118.70	949.72
FiberMax 800 R	1439	2445	25.2	42.9	311	37	3.4	30.7	82.0	55.65	800.73	122.23	922.97
FiberMax 960 R	1466	2345	26.2	42.0	212	36	3.1	30.0	79.6	54.35	796.51	117.24	913.75
Phytogen 410 R	1327	2311	24.1	42.0	312	34	3.7	25.9	82.7	54.55	723.67	115.54	839.22
Deltapine 434 R	1381	1800	25.3	32.9	312	36	3.1	26.0	80.6	53.30	736.18	89.99	826.17
Phytogen 310 R	1385	2005	26.7	38.7	311	33	3.7	25.4	80.0	50.95	705.47	100.27	805.74
AFD 3602 R	1153	2085	23.5	42.5	211	36	3.7	28.2	82.5	58.20	671.16	104.27	775.43
BCG 24 R	1214	2168	24.1	43.1	311	34	3.8	27.3	81.5	54.30	659.17	108.39	767.56
Americot 821 R	1260	2347	24.3	45.2	312	33	3.5	26.5	78.6	51.40	647.55	117.35	764.89
Deltapine 432 R	1218	1993	24.4	39.9	312	34	3.0	27.4	81.7	50.45	614.30	99.63	713.93
FiberMax 989 R	1131	1788	25.1	39.6	211	34	3.2	29.1	80.8	51.10	577.99	89.41	667.40
Deltapine 494 R	984	1735	24.1	42.5	211	36	3.3	29.6	80.9	56.05	551.34	86.73	638.07
Stoneville ST 4686 R	1091	1711	24.2	37.9	312	34	3.2	27.4	79.5	50.45	550.44	85.54	635.98
Stoneville NG 3969 R	1090	1836	23.9	40.3	311	35	2.8	28.1	80.0	49.60	540.66	91.81	632.47
AFD 3511 R	937	1963	22.3	46.8	312	34	3.4	27.7	80.6	52.15	488.77	98.16	586.93
Deltapine 454 BR	1069	1561	23.5	34.3	413	34	2.9	25.5	79.3	45.60	487.34	78.03	565.38

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