



Result Demonstration/Applied Research Report

2006 Howard County Conventional Cotton Variety Demonstration

Cooperator: Moates Joint Adventure

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SUMMARY

Nine cotton varieties were planted to compare fiber yield and quality characteristic under similar dryland production conditions. Concho 257 and Deltapine 491 were the highest yielding varieties in this test. FiberMax 958 had the highest loan value at 58.25 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: Moates Joint Venture
 County Precinct: 4
 Planting Date: June 9 and 10, 2006
 Planting Rate: 7 pounds per acre
 Planting Pattern: 60% planted
 Row Width: 40 inches
 Previous Crop: Cotton
 Irrigation: Dryland production
 Fertilizer: None
 Herbicide: None
 Insecticide: None
 Soil Type: Loam

The test plots were stripper harvested to determine the yield per acre. The samples were ginned by Big Spring Gin Company and lint quality was determined by the U.S.D.A. Classing Office.

RESULTS, DISCUSSION AND ECONOMIC ANALYSIS

As seen in Table 1, the yields in this plot ranged from 362 pounds per acre to 732 pounds per acre. Concho 257 and Deltapine 491 were the highest yielding varieties in this test. FiberMax 958 had the highest loan value at 58.25 cents per pound.

Table 1. Data from Moates 2006 Conventional Cotton Variety Test (Howard County)

Variety	Row Acres of Each Variety Harvested	Yield Per Acre		Fiber Quality					Lint CCC Loan Value	Seed Gross Return (\$/acre)	Total Gross Return (\$/acre)	
		In Pounds		Color- Leaf	Fiber Length (staple)	Mic	Strength (gram/tex)	Uniformity				
		Lint	Seed									
Concho 257	7.32	961	1727	213	35	4.5	29.1	81.6	56.75	545.17	125.19	670.36
Deltapine 491	5.46	837	1245	213	36	4.2	29.4	81.3	58.05	485.98	90.29	576.28
FiberMax 958	8.1	657	1059	213	37	4.5	30.2	82.3	58.25	382.80	76.80	459.59
Deltapine 565	6.2	570	1113	213	36	4.3	28.3	81.7	57.85	329.84	80.69	410.52
FiberMax 832	8.7	612	1092	323	38	4.0	30.8	82.4	53.95	330.34	79.17	409.50
Concho 257 XL	8.7	568	959	213	36	4.5	29.8	82.0	58.10	330.10	69.50	399.60
Concho 287	14.2	537	999	313	35	4.7	29.5	81.9	56.60	303.81	72.42	376.23
Western 180	18.2	406	744	213	35	4.6	27.7	80.7	56.75	230.65	53.94	284.59
Deltapine 393	12.5	362	502	213	37	4.6	29.3	82.3	58.00	209.73	36.42	246.15

NOTE: 1) Gross return per acre for cottonseed was based on a sale price of \$145 per ton

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Von Roeder Seed Farms who provided Concho 257, Concho 257 XL, Concho 287 and Western 180

Delta and Pineland Company who provided Deltapine 491, Deltapine 565, and Deltapine 393

Bayer CropScience who provided the FiberMax 958 and FiberMax 832

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