



Result Demonstration/Applied Research Report

Dryland Cotton Variety Comparison

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Summary

A field demonstration was conducted to compare nine cotton varieties in dryland production in Mitchell County. The lack of replication causes uncertainty in the data collected, thus, strong conclusions cannot be obtained from these results. However, while this trial cannot help determine which of these varieties was the best for lint production, it can be useful in assisting a grower in choosing a variety that may have better fiber characteristics.

Objective

New cotton varieties continue to be developed by seed companies and these varieties must be compared to help cotton growers determine the appropriate varieties to plant on their farms. The purpose of this trial was to evaluate and compare nine cotton varieties in a dryland production system.

Materials and Methods

Nine cotton varieties were planted in a field Southeast of Colorado City in Mitchell County, Texas (Table 1). The trial was set up as a strip test the length of the field without replications. The following is a list of the materials and methods used in this test.

Planting Date:	23 June 2003
Seeding Rate:	14 pounds per acre
Planting Pattern:	Solid on 40" centers

The plots were harvested by hand and ginned at the Lubbock Research and Extension Center. Fiber quality analysis was determined at the Texas Tech Textile Center.

Results and Discussion

The data was obtained from a single 20 foot sample from each variety (Table 1). Thus, it is difficult to obtain defined results pertaining to the quality of the varieties demonstrated. In addition, this data represents data from only one year and cannot be used to make recommendations.

Recommendations from this and other similar demonstrations suggest that each grower should examine a variety of interest on their own farm in limited amounts prior to investing large amounts of land in an untested variety.

Table 1. Agronomic Data from David Stubblefields's Dryland Cotton Variety Test (Mitchell County, 2003)

Variety	Yield Per Acre		% Turnout		Fiber Quality					CCC	Lint	Seed	Total
	In Pounds				Color- Leaf	Fiber Length (staple)	Mic	Strength (gram/tex)	Uniformity	Loan Value	Gross	Gross	Gross
	Lint	Seed	Lint	Seed							Return (\$/acre)	Return (\$/acre)	Return (\$/acre)
FiberMax 989 RR	693	1077	27.5	42.7	211	36	4.2	30.1	81.6	56.50	391.78	67.28	459.06
Deltapine 5690	668	1144	25.4	43.5	311	36	4.6	31.4	81.7	56.00	373.96	71.51	445.47
FiberMax 966	590	919	27.7	43.1	311	36	4.5	31.3	82.3	56.00	330.44	57.44	387.88
FiberMax 832	567	998	24.8	43.7	311	37	4.0	30.2	83.2	56.40	319.98	62.39	382.37
Concho 257	563	998	24.9	44.1	311	35	4.9	30.1	81.1	55.30	311.35	62.39	373.74
Concho 287	649	1152	24.9	44.1	312	31	5.3	29.5	79.0	44.65	289.82	72.00	361.81
FiberMax 958	561	891	26.7	42.5	311	37	5.0	31.2	83.0	52.80	296.36	55.70	352.06
Paymaster 2266 RR	522	1028	23.3	45.9	311	34	4.8	30	81.8	53.85	281.17	64.22	345.40
Western 180	384	782	22.8	46.5	321	32	5.2	26.5	80.4	44.55	171.06	48.90	219.96

Acknowledgments:

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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.