Texas Cooperative EXTENSION
The Texas A&M University System

Result Demonstration/Applied Research Report

Tom Green County Dryland Cotton Variety Test

John and Doug Wilde Farm, 2005
Rick Minzenmayer, Steve Sturtz and Dr. Billy Warrick
Extension Agent-IPM, County Extension Agent Agriculture
and Extension Agronomist, respectively
Tom Green County

Summary:

Six cotton varieties were compared under similar growing conditions to determine which cotton varieties consistently have higher yields and favorable fiber qualities. FiberMax 960 RR, FiberMax 989 RR and FiberMax 989 B2R topped this test in gross returns of $574.11 per acre, $448.78 per acre and $447.18 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 using an eight row John Deere Maxi-Merge planter in a strip test fashion using 12 planted row plots in the Wall farming community. The following is a list of materials and methods used in this test.

Planting Date:	May 21, 2005
Seeding Rate:	39,204 seeds/ row acre
Planting Pattern:	2 planted 1 out
Soil Type:	Angelo Clay Loam
Previous Crop:	Cotton
Herbicides:	1 over the top application of Round Up®
Fertilizer:	Approx. 60lbs. Nitrogen per acre
Insecticides:	All planting seed were treated with Cruiser®
Harvest Date:	November 1, 2005

Variety	Plant Stand Avg. # per foot
FM 989 RR	2.4
PHY 410 R	2.5
PHY 310 R	2.5
FM 960 RR	3.1
DP 494	2.4

Results and Discussion:

Table 1 contains the yield and fiber quality information for each of the eight cotton varieties evaluated in this test. FiberMax 960 R, FiberMax 989 R and FiberMax 989 B2R topped this test in gross returns of $574.11 per acre, $448.78 per acre and $447.18 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 four 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 John and Doug Wilde's Dryland Cotton Variety Test (Tom Green County, 2005)

	Yield Per Acre				Fiber Quality								
	In Pounds		% Turnout								Lint	Seed	Total
						Fiber				CCC	Gross	Gross	Gross
					Color-	Length		Strength		Loan	Return	Return	Return
Variety	Lint	Seed	Lint	Seed	Leaf	(staple)	Mic	(gram/tex)	Uniformity	Value	($/acre)	($/acre)	($/acre)
FiberMax 960 R	955	1506	30.8	48.5	412	35	3.3	30.2	80.3	52.25	498.83	75.28	574.11
FiberMax 989 R	717	1207	26.5	44.6	412	35	3.5	29.8	80.8	54.15	388.43	60.35	448.78
FiberMax 989 B2R	731	1217	26.1	43.4	412	34	3.9	28.7	80.0	52.85	386.34	60.85	447.18
Deltapine 494	703	1173	27.1	45.1	412	34	3.7	28.5	81.7	52.85	371.66	58.63	430.29
Phytogen 310 R	609	1025	25.9	43.6	412	34	3.5	25.9	80.4	52.60	320.31	51.24	371.55
Phytogen 410 R	588	1020	25.0	43.4	411	33	3.7	25.9	79.3	50.40	296.28	50.99	347.27

Seed income calculated using a price of $100 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 494.

Bayer CropScience who provided the FiberMax 960 R, FiberMax 989 R and FiberMax 989 B2R.

Dow Agrosciences who provided Phytogen 310 R and Phytogen 410 R.