



Irrigated Cotton Variety Test

John & Doug Wilde's Farm, 2012 Rick Minzenmayer, Extension Agent-IPM Steve Sturtz, County Extension Agent-Agriculture and Dr. David Drake, Extension Agronomist Tom Green County

Summary:

Twenty cotton varieties were compared under similar growing conditions to determine which cotton varieties consistently have higher yields and favorable fiber qualities. Deltapine 1359 B2RF, NexGen 1511 B2RF, and Deltapine 1219 B2RF topped this test in Total Gross Returns (\$/acre), of \$1,198.94 per acre, \$1,187.81 per acre, and \$1,111.85 per acre, respectively. Producers should keep in mind that these results can change under different field conditions, soil fertility and irrigation practices, it is suggested that you look at the better cultivars on your farm to determine if they are compatible with your management style.

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 view varieties.

Materials and Methods:

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

Planting Date: May 30, 2012 Seeding Rate: 48,000 Seeds/Acre

Row Width: 40" Centers

Rows Planted: 16 rows-except for DG 2570 B2RF with twenty rows

Planting Pattern: Every Row
Last Year's Crop: Cotton
Irrigated: SSI

Soil Moisture: Adequate

Fertilizer: 15 gal 10-34-0 pre-plant; 120 units of Nitrogen during growing

season applied through SSI

Insecticide: 5 lbs. Temik @ planting

Harvest Date: October 23, 2012

Variety	Plant Stand Avg. #/10 ft. 3 rd True Leaf Stage	Plant Stand Avg. #/10 ft. 5 th True Leaf Stage			
All-Tex Nitro 44 B2RF	32	33			
All-Tex 65207 B2RF	32	34			
All-Tex Dinero B2RF	26	31			
Deltapine 0935 B2RF	34	32			
Deltapine 1032 B2RF	29	28			
Deltapine 1359 B2RF	28	33			
Deltapine 1219 B2RF	29	34			
Phytogen 367 WRF	35	32			
Phytogen 375 WRF	29	22			
Phytogen 499 WRF	31	31			
Americot 1550 B2RF	28	30			
NexGen 1511 B2RF	27	27			
NGX 0012 B2RF	17	20			
FiberMax 1944 GLB2	33	32			
FiberMax 1740 B2F	32	28			
FiberMax 2989 GLB2	30	29			
FiberMax 2484 B2F	32	31			
Stoneville 5458 B2RF	25	30			
DynaGro 2595 B2RF	28	28			
DynaGro 2570 B2RF	30	31			

Average plant populations were determined from three different locations within each plot at each growth stage.

Results and Discussion:

Table 1 contains the yield and fiber quality information for each of the twenty cotton varieties evaluated in this test. Deltapine 1359 B2RF, NexGen 1511 B2RF, and Deltapine 1219 B2RF topped this test in Total Gross Return (\$/acre) of \$1,198.94 per acre, \$1,187.81 per acre, and \$1,111.85 per acre, respectively. Yields were down this year due to extreme drought conditions throughout the growing season.

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 weigh wagon. Fiber quality analysis were determined by the Fiber & Biopolymer Research Institute in Lubbock.

Table 1. Agronomic Data from John and Doug Wilde's Irrigated Cotton Variety Test (Tom Green County, 2012)

							Fiber Qu	ality					
	Yield Per Acre										Lint	Seed	Total
	In Po	unds	% Turnout		Fiber					CCC	Gross	Gross	Gross
					Color-	Length		Strength		Loan	Return	Return	Return
Variety	Lint	Seed	Lint	Seed	Leaf	(staple)	Mic	,	Uniformity	Value	(\$/acre)	(\$/acre)	(\$/acre)
DP 1359 B2RF	1469	2352	32.0	51.2	312	1.21	4.2	33.4	83.5	.5760	\$846.14	\$352.80	\$1,198.94
NG 1511 B2RF	1523	2375	32.2	50.2	413	1.16	4.4	33.5	83.3	.5460	\$831.56	\$356.25	\$1,187.81
DP 1219 B2RF	1384	2107	32.6	49.6	312	1.21	4.1	35.3	82.3	.5750	\$795.80	\$316.05	\$1,111.85
DP 0935 B2RF	1323	2192	33.0	54.7	313	1.14	4.1	31.9	82.4	.5675	\$750.80	\$328.95	\$1,079.75
PHY 499 WRF	1315	2433	29.1	53.8	414	1.19	4.5	35.3	84.9	.5405	\$710.76	\$364.95	\$1,075.71
NGX 0012 B2RF	1362	1920	35.7	50.3	312	1.19	4.5	31.9	84.6	.5750	\$783.15	\$288.00	\$1,071.15
DP 1032 B2RF	1359	2022	33.9	50.4	314	1.21	4.2	34.1	82.9	.5540	\$752.89	\$303.30	\$1,056.19
DG 2570 B2RF	1311	2417	30.5	56.3	423	1.13	3.9	33.4	83.0	.5245	\$687.62	\$362.55	\$1,050.17
ST 5458 B2RF	1240	2333	27.3	51.3	413	1.15	4.0	32.7	81.7	.5450	\$675.80	\$349.95	\$1,025.75
AM 1550 B2RF	1219	2139	29.6	51.9	313	1.12	4.2	30.6	82.0	.5665	\$690.56	\$320.85	\$1,011.41
All Tx Nitro 44 B2RF	1314	2369	29.0	52.3	515	1.21	4.0	35.7	83.3	.4970	\$653.06	\$355.35	\$1,008.41
All Tx Dinero B2RF	1237	2201	29.8	53.0	414	1.14	4.1	30.7	82.4	.5380	\$665.51	\$330.15	\$995.66
PHY 375 WRF	1223	2119	29.8	51.6	413	1.18	4.1	31.8	83.5	.5470	\$668.98	\$317.85	\$986.83
FM 2989 GLB2	1101	2111	28.1	53.9	313	1.18	4.2	33.4	83.3	.5705	\$628.12	\$316.65	\$944.77
FM 2484 B2F	1175	2203	26.1	49.0	415	1.24	3.8	35.1	84.1	.5195	\$610.41	\$330.45	\$940.86
PHY 367 WRF	1135	2073	27.6	50.4	414	1.19	4.1	33.4	83.3	.5410	\$614.04	\$310.95	\$924.99
DG 2595 B2RF	1206	2185	27.2	49.2	417	1.16	4.2	33.9	82.3	.4725	\$569.84	\$327.75	\$897.59
FM 1740 B2F	1055	1871	31.2	55.3	313	1.13	4.3	32.3	82.7	.5660	\$597.13	\$280.65	\$877.78
All Tx 65207 B2RF	1149	2045	28.8	51.2	425	1.11	4.2	30.7	83.6	.4960	\$569.90	\$306.75	\$876.65
FM 1944 GLB2	942	1912	25.5	51.7	314	1.22	4.1	33.9	82.9	.5540	\$521.87	\$286.80	\$808.67

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Delta and Pine Land Company who provided Deltapine 0935 B2RF, Deltapine 1032 B2RF, Deltapine 1219 B2RF and Deltapine 1359 B2RF

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