



# Current Report

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## Cotton Variety Tests, Oklahoma – 2005<sup>1</sup>

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Many cotton producers in Oklahoma could increase their lint yield, fiber quality, or both by using varieties better adapted to their locations and growing conditions. With the same inputs of capital and labor, some cotton varieties provide a much greater return on the producer's investment than do others. The primary objectives of the Oklahoma cotton variety testing program are to determine the relative performance of commercially available varieties when grown under Oklahoma climatic conditions and to distribute that information to cotton producers in the state. Results from this research should help producers, researchers, and extension personnel in selecting better varieties.

### Materials and Methods

In 2005, irrigated cotton variety trials were planted on research stations near Chickasha and Altus. However, not enough water was available during the growing season to irrigate the Chickasha experiment. Dryland tests were grown on research stations near Chickasha, Tipton, and Perkins. The test at Tipton was replanted due to poor stands caused by wind-driven rains, hail, and seedling disease. Soil types, planting dates, harvest dates, and cultural treatments for those tests are provided in Table 1. All varieties (whether conventional or transgenic) within a test were treated the same with respect to production inputs including weed and insect control. Table 2 includes weather information extracted from Oklahoma Mesonet data for the locations where the tests were conducted (<http://www.mesonet.org/public/summary.html>). Degree-day 60 (DD60) data for specified time periods at those locations was determined using the cotton

degree-day calculator available at <http://agweather.mesonet.org/crops/default.html>.

This year, the experiments included varieties grown commercially throughout the Cotton Belt as well as a large number of advanced strains from various breeding programs. Because these tests are conducted on a fee basis, some varieties currently on the market were not tested as the companies who own or market them chose not to participate. Some of the varieties and/or strains tested this year may not yet be commercially available, but possibly will become available in the next year or two. The trials were conducted using randomized complete-block experimental designs. Tests at Altus and Tipton included four replications while five were used at Chickasha and Perkins. One replication in the Chickasha dryland test was discarded due to late maturity and poor boll

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set across varieties. Each plot consisted of four rows 30 feet long with 40 inches between rows, except at Perkins where plots were single rows 35 feet long. The two center rows in each multiple-row plot were machine harvested to determine lint yield. Boll samples were taken from the outside rows of those plots prior to harvest to measure lint percentages and fiber properties. In the Perkins test, boll samples were taken from the single-row plots prior to harvest; and plots were then hand harvested. Lint samples from all tests were sent to the International Textile Center at Texas Tech University in Lubbock to obtain High Volume Instrument (HVI) fiber quality measurements using the Uster 900A system.

## Results and Discussion

Results from the test locations used in 2005 are presented in Tables 3 through 8. Some of the varieties grown in a particular experiment in 2005 were also included in the experiments at that location in the previous year or years. Tables 9 through 20 present average data for varieties included in those trials for two years (2004 and 2005) or three years (2003 through 2005).

Producers should use the data from the variety test (or tests) which most nearly corresponds to the characteristics of their farm(s) to select varieties better adapted to their locations and growing conditions. They should consider location in the state, whether the test was irrigated or dryland, as well as how the varieties in that test performed **relative** to one another. Producers are cautioned that differences in lint yield and fiber coarseness (micronaire) should be compared over years (Tables 9 through 20). Those two traits are environmentally sensitive, and results from a single experiment can be misleading. Measurements for the other traits are more consistent over environments; therefore, data from only a year or two at a location should accurately predict their relative performance. If the producer's cotton acreages are substantial, they should probably grow more than one variety to reduce losses, if and when they occur.

### Lint Yield

Lint yield is the most important factor that producers should consider when deciding which varieties to grow. Lint yields in this publication are reported in pounds per acre. Statistical analyses of yield are represented by "protected" LSD (least significant difference) values given in the footnotes below each data table. If the difference between the yields of any two varieties exceeds the LSD (0.05) value given for that table, the chances are approximately 95 out of 100 that this apparent difference in yield was real. Likewise, if the difference exceeds the LSD (0.01) value, the chances are about 99 out of 100 that the difference was real.

### Lint Percentages

Lint percentage (sometimes called "gin turnout") influences ginning costs. Lint percentages are reported on both a picked and a pulled basis. Picked lint percentage was calculated as the percent lint in a sample of seed cotton, while pulled lint percentage was calculated as the percent lint in a sample of "snapped" cotton. Producers who harvest with mechanical pickers should examine picked lint percentages, while those

who harvest with strippers should compare pulled lint percentages. As the price received for cottonseed increases, the importance of a high lint percentage decreases. In addition, a variety with high lint yield per acre (but with a moderate lint percentage) often gives higher net returns per acre than does a lower yielding variety with a higher lint percentage. Differences in lint yield are considerably more important to net returns than are differences in lint percentage.

### Fiber Properties

Fiber length, coarseness, and strength are the fiber properties reported here which partially determine the price per pound for lint. While uniformity and elongation are important in the manufacturing process, at present, little or no price incentives are received by producers for either. Fiber length was measured as the upper half mean (in inches). Those measurements were also converted into 32's. Uniformity ratios were obtained by dividing mean length (also measured in inches) by the upper half mean length and expressing the result as a percentage. Fiber coarseness was measured in standard micronaire units. Fiber strength was measured in grams-force per tex. Elongation of fiber prior to breaking was estimated as a percentage of its length.

Higher values for lint yield, the lint percentages, fiber length, uniformity ratio, fiber strength, and elongation are generally more desirable than lower ones. Fiber coarseness is acceptable anywhere within the micronaire "base" range of 3.5 to 4.9 inclusive. The "premium" range is between 3.7 and 4.2 inclusive. If fiber coarseness falls in the "discount" range (below 3.5 or above 4.9), the price per pound of lint is reduced. Penalties tend to be more severe for micronaires below 3.5 (especially below 3.0) than for those above 4.9. Therefore, producers should probably choose varieties with micronaires toward the upper half of the range, rather than the lower.

In recent years, demand from international markets for cotton with high fiber quality has forced producers to pay more attention to the quality of fiber they produce. Approximately 90 percent of Oklahoma's cotton crop is exported. Therefore, fiber quality must become increasingly important to Oklahoma producers. While there is not yet a uniform opinion as to what the international market demands, the general recommendations include "31 color or better; 3 leaf grade or better; 35 staple (1.08-1.10 inches) or better; length uniformity of 81% or higher; 26 grams/tex or stronger and mid-range micronaire of 4.1 to 4.6."<sup>2</sup>

## Recommendations

Based on their relative performance over the past two to three years, the better **yielding** cotton varieties (in alphabetical order) for South Central and Southwestern Oklahoma appear to be:

<sup>2</sup> U.S. Fiber Advantages, Cotton Grower Plus, November 2004, p. 17-18, 20; see also Estur, G. 2004. Quality Requirements on Export Markets for U.S. Cotton. In Proc. Beltwide Cotton Conf., San Antonio, TX. 5-9 Jan. 2004. Natl. Cotton Counc. Am., Memphis, TN. (Also available at [http://www.icac.org/cotton\\_info/speeches/estur/2004/quality\\_reqs\\_us\\_exp.pdf](http://www.icac.org/cotton_info/speeches/estur/2004/quality_reqs_us_exp.pdf).)

<i>For Dryland Production</i>	<i>For Irrigated Production</i>
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All-Tex Atlas RR	DP 455 BG/RR
BCG 24R	DP 488 BG/RR
DP 494 RR	FM 960 BR
FM 958	FM 960 B2R
NG 1553 R	FM 989 BR
PM 2167 RR	ST 4575 BR
PM 2266 RR	ST 4892 BR
PM 2326 RR	ST 5242 BR
ST 4686 R	ST 5599 BR
ST 4892 BR	
ST 5599 BR	

Those producers in North Central Oklahoma should refer to Tables 19 and 20.

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### Note:

Codes used in varietal names in the tables are as follows:

AFD = Bayer CropScience	B or BG = Bollgard
BCG or BW = Beltwide Cotton Genetics	B2 or BGII or D = Bollgard II
CG = Croplan Genetics	LL = LibertyLink/Ignite
DG = Dyna-Gro	R or RR = Roundup Ready
DP or DPL = Deltapine	RF or F = Roundup Ready Flex
FM = FiberMax	W = WideStrike
NG = NexGen	
PHY = PhytoGen	"X" or "x" = strain (subject to change)
PM = Paymaster	
ST = Stoneville	

**Table 1. Locations, Soil Types, Planting Dates, Harvest Dates, and Cultural Treatments for the Cotton Variety Tests in Oklahoma, 2005.**

<i>Table Number</i>	<i>Nearest Town</i>	<i>Soil Type</i>	<i>Date Planted<sup>1</sup></i>	<i>Date Harvested<sup>1</sup></i>	<i>Cultural Treatments<sup>1,2</sup></i>
3	Chickasha	Reinach silt loam <sup>3</sup>	June 9	November 30	150 lbs./A 34-0-0 No irrigations <sup>7</sup> No insecticide applications No harvest aid treatments
4	Altus	Hollister clay loam <sup>4</sup>	May 19	November 3 & 4	280 lbs./A 40-10-0 4 irrigations 2 insecticide applications 1 plant growth regulator 2 defoliant + boll opener + nonionic surfactant
5	Altus (Picker Test)	Hollister clay loam <sup>4</sup>	May 19	November 8	280 lbs./A 40-10-0 4 irrigations 2 insecticide applications 1 plant growth regulator 2 defoliant + boll opener + nonionic surfactant
6	Chickasha	Reinach silt loam <sup>3</sup>	June 9	November 29	150 lbs./A 34-0-0 No irrigations No insecticide applications No harvest aid treatments
7	Tipton	Tipton silt loam <sup>5</sup>	May 17 June 8 (replant)	November 1	150 lbs./A 40-10-0 No irrigations 1 insecticide application 2 defoliant + boll opener + nonionic surfactant
8	Perkins	Teller loam <sup>6</sup>	June 3	December 22	130 lbs./A 46-0-0 No irrigations No insecticide applications No harvest aid treatments

<sup>1</sup> This information for Tables 9 through 20 for 2003 and 2004 may be found in the previous variety test reports CR-2094 (0204) and CR-2094 (0305), respectively.

<sup>2</sup> All experiments received preplant incorporated (PPI) herbicides. Experiments at Altus and Tipton also received preemergence (PRE) herbicides. The experiment at Tipton received a postemergence (POST) herbicide as well.

<sup>3</sup> Coarse-silty, mixed, superactive, thermic Pachic Haplustoll.

<sup>4</sup> Fine, smectitic, thermic Typic Haplustert.

<sup>5</sup> Fine-loamy, mixed, superactive, thermic Pachic Argiustoll.

<sup>6</sup> Fine-loamy, mixed, active, thermic Udic Argiustoll.

<sup>7</sup> Not enough water was available during the growing season to irrigate this experiment.

**Table 2. Weather Summaries for Growing Seasons at Each Location, 2005.<sup>1</sup>**

<i>Month</i>	<i>Average Maximum Temp. (°F)</i>	<i>Average Minimum Temp. (°F)</i>	<i>Average 4-inch Bare Soil Temp. (°F)</i>	<i>Number of Days Where Max. Temp. &gt;100°F</i>	<i>Number of Days Where Min. Temp. &lt;60°F</i>	<i>Number of Days Where Min. Temp. &gt;85°F</i>	<i>DD60</i>	<i>Rain (in.)</i>
<b>Altus</b>								
May	82	59	70	3	16	0	358	4.31
June	94	67	81	1	0	0	621	1.98
July	94	69	85	1	2	0	662	2.39
August	91	69	85	0	0	0	626	3.26
September	90	64	80	0	4	0	499	3.58
October	76	51	66	0	26	0	180	3.00
TOTAL				5	48	0	2,946	18.52
<b>Chickasha</b>								
May	79	57	72	0	16	0	295	2.38
June	91	65	82	0	1	0	538	5.15
July	94	68	88	3	3	0	646	1.65
August	92	69	84	1	0	0	634	6.30
September	91	63	83	0	8	0	500	1.70
October	76	49	67	0	27	0	164	1.26
TOTAL				4	55	0	2,777	18.44
<b>Perkins</b>								
May	80	58	73	0	14	0	329	2.85
June	90	67	81	0	0	0	551	5.31
July	93	69	88	2	2	0	644	2.14
August	92	70	84	1	0	0	650	8.85
September	89	65	80	0	7	0	500	3.68
October	74	51	65	0	25	0	169	1.64
TOTAL				3	48	0	2,843	24.47
<b>Tipton</b>								
May	81	59	71	0	15	0	355	3.42
June	93	68	82	0	0	0	623	3.42
July	95	70	85	3	2	0	686	2.47
August	94	70	83	1	0	0	677	2.70
September	92	64	79	0	4	0	538	2.72
October	77	52	63	0	25	0	193	2.15
TOTAL				4	46	0	3,072	16.88

<sup>1</sup> Information in this table was extracted from Oklahoma Mesonet data available at <http://www.mesonet.org/public/summary.html>. Degree-day 60 (DD60) data were calculated using the cotton degree-day calculator at <http://agweather.mesonet.org/crops/default.html>.

## Irrigated Test Results in 2005

**Table 3. Dryland<sup>1</sup> Cotton Variety Test Results near Chickasha, 2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	Uniformity			Fiber	
		Picked	Pulled		32's	Ratio	Micronaire	Strength	Elongation
NG 2448 R	823*	39.9	30.9	1.10	35	84.3	4.5	31.5	5.3
FM 960 BR	778	40.3	29.8	1.07	34	82.3	4.0	31.7	3.3
FM 989 B2R	773	39.1	29.6	1.14	37	83.5	4.0	32.0	4.1
PHY 480 WR	743	38.6	29.1	1.10	35	81.9	4.3	28.7	6.6
PHY 470 WR	683	41.0	30.0	1.06	34	82.3	3.8	28.0	6.6
FM 960 B2R	639	38.3	27.2	1.14	37	83.0	3.4	29.1	3.2
FM 989 BR	637	42.1	29.2	1.09	35	82.5	3.6	30.2	3.8
FM 958	629	41.1	31.1	1.13	36	84.3	4.6	30.1	3.9
ST 4892 BR	618	41.7	31.1	1.09	35	82.8	4.4	27.2	5.0
PHY 370 WR	618	42.5	30.8	1.04	33	83.2	3.9	29.5	4.9
PM 2326 BG/RR	604	39.4	29.3	1.05	34	83.2	4.6	27.1	6.0
PM 2167 RR	505	39.7	30.2	0.96	31	83.4	4.6	26.0	5.1
PM 2266 RR	475	38.1	28.6	1.06	34	82.7	4.7	29.9	5.5
FM 958 LL	419	38.5	28.1	1.12	36	85.0	4.0	33.8	4.4
DP 555 BG/RR	405	41.9	29.2	1.05	34	80.5	3.2	28.5	3.4
PHY 310 R	353	43.0	31.5	1.09	35	83.2	4.8	28.6	5.2
FM 5044 RR	328	37.8	27.9	1.12	36	85.0	3.6	30.7	6.7
All-Tex Atlas RR	317	37.5	27.3	1.02	33	81.9	4.4	29.0	4.8
AFD 3511 RR	304	37.4	27.7	1.06	34	81.9	4.3	26.7	4.9
All-Tex Magnum RR	295	40.1	29.1	1.05	34	81.6	4.3	28.6	5.0
BCG 24R	293	40.5	29.3	1.06	34	81.9	3.9	28.8	5.3
All-Tex Excess RR	293	34.5	22.5	1.04	33	83.4	3.5	35.4	5.8
PHY 410 R	271	40.6	28.0	1.07	34	83.1	3.5	27.8	5.5
PM 2326 RR	245	36.9	24.7	1.04	33	83.6	3.5	35.3	5.1
All-Tex AT 317 RR	244	37.3	24.2	1.07	34	82.4	3.6	33.3	4.9
AFD 3602 RR	234	37.0	26.0	1.06	34	82.7	3.7	30.3	4.0
PHY 72	217	40.6	29.3	1.16	37	82.8	4.4	36.4	5.2
All-Tex Patriot RR	150	37.3	27.1	1.11	36	82.0	3.8	26.7	5.5
Experimental Average	460	39.4	28.5	1.08	35	82.9	4.0	30.0	5.0

\* LSD (0.05) = 154 lbs.; LSD (0.01) = 204 lbs.

<sup>1</sup> This experiment was supposed to be irrigated, but not enough water was available during the growing season to irrigate it.

**Table 4. Irrigated Cotton Variety Test Results near Altus, 2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
ST 5599 BR	2192*	44.3	35.7	1.09	35	82.5	5.1	28.1	4.4
DP 454 BG/RR	2106	46.8	35.9	1.05	34	82.8	4.2	27.1	5.6
ST 4892 BR	2101	46.0	34.3	1.03	33	83.3	5.1	26.9	6.6
DP 515 BG/RR	2100	45.8	34.4	1.10	35	83.7	4.9	27.1	4.8
DP 455 BG/RR	2094	47.1	37.1	1.10	35	82.3	4.5	28.2	5.8
FM 960 B2R	2093	43.2	33.1	1.11	36	82.8	4.6	30.0	3.7
ST 5242 BR	2091	44.2	34.7	1.07	34	83.2	4.8	26.0	5.9
DP 117 B2RF	2084	45.1	34.1	1.06	34	81.5	4.8	30.2	5.3
FM 960 BR	2072	44.1	33.3	1.06	34	82.6	5.1	28.2	3.8
PHY 475 WRF	2031	44.4	32.4	1.07	34	83.1	4.9	27.5	7.2
DP 488 BG/RR	2022	43.7	33.5	1.11	36	82.9	4.6	36.2	6.0
DG 2242 B2RF	2020	42.3	30.7	1.18	38	83.7	4.5	25.2	6.1
CG 4020 B2RF	1998	44.6	32.5	1.09	35	82.3	4.7	25.7	6.8
ST 4575 BR	1993	43.8	34.6	1.11	36	83.7	5.1	25.5	9.6
PHY 485 WRF	1986	43.4	31.6	1.08	35	83.9	4.9	28.0	8.2
DP 113 B2RF	1985	43.7	33.4	1.11	36	82.3	4.6	29.9	4.3
CG 3020 B2RF	1983	42.2	32.7	1.10	35	82.9	4.6	24.6	6.5
DG 2215 B2RF	1976	42.7	32.7	1.09	35	82.3	4.8	23.7	6.8
DP 444 BG/RR	1976	44.9	33.7	1.03	33	81.6	4.4	26.5	6.3
ST 4554 B2RF	1967	42.7	32.5	1.06	34	82.1	4.9	27.1	9.0
FM 989 BR	1965	40.6	31.6	1.15	37	83.1	4.9	29.8	4.9
DP 555 BG/RR	1964	46.1	35.3	1.09	35	82.6	4.6	28.2	4.9
DP 445 BG/RR	1953	43.6	33.0	1.10	35	83.8	4.7	28.7	8.6
DG 2520 B2RF	1944	41.4	30.5	1.07	34	81.2	4.7	23.4	7.5
DP 143 B2RF	1934	43.1	32.8	1.15	37	82.2	4.4	26.7	5.9
PHY 310 R	1927	44.8	34.9	1.06	34	83.3	5.0	26.9	6.9
STX 0414 B2RF	1915	42.5	32.2	1.13	36	83.9	4.7	27.5	5.4
DP 543 BGII/RR	1906	43.9	33.8	1.09	35	82.3	4.7	27.6	4.9
DP 494 RR	1902	44.9	34.6	1.15	37	82.8	4.9	31.3	6.1
CG 3520 B2RF	1901	41.1	31.1	1.17	37	84.5	4.7	26.5	7.7
ST 4686 R	1901	43.9	33.9	1.08	35	82.0	5.1	27.9	9.0
STX 0416 B2R	1892	41.9	32.3	1.07	34	82.0	4.8	26.5	6.0
All-Tex Magnum RR	1889	43.0	33.5	1.10	35	84.8	5.2	26.3	6.9
DG 2100 B2RF	1887	40.7	30.7	1.10	35	84.4	4.3	26.8	6.9
PHY 370 WR	1875	44.0	32.6	1.16	37	84.5	4.5	31.9	6.1
All-Tex 55033 B2/RF	1876	41.7	30.2	1.09	35	80.6	4.3	26.1	5.8
PHY 415 RF	1867	43.3	31.8	1.04	33	82.7	5.3	26.6	7.4
All-Tex 55066 B2/RF	1866	40.7	30.2	1.08	35	83.2	4.3	25.5	7.5
DP 156 B2RF	1864	43.5	32.7	1.12	36	82.3	4.2	29.4	5.1
DPLX 03X179 R	1861	46.4	35.8	1.12	36	84.9	5.2	29.0	6.8
DPLX 05X648 DR	1855	46.0	35.2	1.14	37	82.2	4.8	27.7	4.6
FM 958 LL	1844	42.6	32.9	1.13	36	83.7	5.1	31.4	5.1
FM 989 B2R	1842	40.0	30.5	1.16	37	84.3	4.4	34.6	5.0
STX 5885 B2RF	1826	38.8	29.7	1.17	37	84.1	4.8	29.1	6.5
ST 4357 B2RF	1826	41.8	30.4	1.15	37	83.0	4.1	24.6	6.4
DP 432 RR	1820	43.2	33.1	1.12	36	84.5	5.0	28.4	8.5
DP 164 B2RF	1813	41.5	30.7	1.15	37	82.1	4.6	27.8	5.0
ST 6636 BR	1798	40.9	31.0	1.12	36	82.8	4.7	28.4	5.0
DPLX 04H205 DF	1764	42.5	32.3	1.11	36	82.6	4.5	28.1	5.0
DP 152 RF	1748	42.4	32.0	1.12	36	82.7	4.6	27.8	5.1
ST 6611 B2RF	1747	41.6	31.3	1.11	36	84.1	4.7	29.1	5.2
FM 958	1745	40.4	31.3	1.20	38	85.4	4.8	31.8	4.2
DP 167 RF	1739	42.3	32.1	1.18	38	82.9	4.6	28.8	5.4
ST 4664 RF	1728	43.5	33.0	1.11	36	85.2	4.8	26.9	8.3
DP 108 RF	1715	44.5	32.7	1.08	35	81.5	4.5	29.2	5.2
PM 2326 BG/RR	1704	41.2	31.9	1.02	33	82.5	5.2	26.2	6.9
DP 147 RF	1678	44.4	33.9	1.16	37	83.7	4.6	29.9	4.8

**Table 4. (continued)**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
All-Tex 45039 B2/RF	1616	39.9	30.7	1.13	36	79.5	4.8	25.1	5.3
DP 110 RF	1610	44.5	32.1	1.13	36	84.9	4.8	36.0	7.5
ST 6622 RF	1603	43.2	31.6	1.09	35	83.4	5.0	28.9	4.6
PM 2167 RR	1603	41.7	32.4	1.01	32	82.4	5.2	26.4	6.4
BCG 24R	1587	41.7	31.5	1.08	35	83.8	4.8	27.2	7.7
NG 3969 R	1575	40.0	31.0	1.16	37	85.9	4.1	30.4	6.8
ST 3664 R	1575	41.1	31.4	1.12	36	82.7	4.8	25.8	6.0
NG 3550 RF	1574	40.6	30.8	1.16	37	83.8	4.8	30.3	6.7
PM 2266 RR	1568	38.2	30.2	1.10	35	85.4	5.1	30.7	6.9
All-Tex 55055 B2/RF	1567	38.6	27.5	1.17	37	82.7	4.2	27.5	6.7
FM 5044 RR	1567	38.7	29.9	1.13	36	82.7	4.9	23.6	8.3
NG 1553 R	1566	39.5	30.8	1.17	37	83.7	4.5	28.4	6.6
All-Tex Warrior RR	1561	40.4	31.5	1.13	36	82.6	4.7	27.4	5.7
All-Tex Excess RR	1546	38.8	28.7	1.13	36	83.5	4.7	31.2	6.4
ST 5007 B2RF	1541	38.2	27.7	1.16	37	83.2	4.2	25.7	6.3
ST 6848 R	1530	41.8	31.4	1.11	36	83.6	5.0	29.7	5.7
AFD 3602 RR	1517	39.6	31.3	1.13	36	81.3	5.1	28.9	5.8
PHY 125 RF	1491	38.7	28.7	1.08	35	83.8	4.8	29.1	6.6
AFD 3511 RR	1446	37.8	29.2	1.08	35	83.2	5.2	27.6	6.2
NG 2448 R	1442	40.9	30.9	1.07	34	83.8	4.9	31.5	5.8
All-Tex Atlas RR	1423	38.2	29.4	1.08	35	81.7	5.0	28.5	6.4
PHY 72	1395	41.6	30.6	1.15	37	83.3	4.7	32.9	6.7
PM 2326 RR	1340	41.7	31.8	1.06	34	83.7	5.7	27.8	7.1
Experimental Average	1805	42.4	32.1	1.11	36	83.1	4.8	28.2	6.2

\* LSD (0.05) = 133 lbs.; LSD (0.01) = 175 lbs.

**Table 5. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
BW-9124 B2F	2039*	44.7	33.7	1.13	36	83.1	4.7	27.5	7.7
DP 454 BG/RR	2016	47.0	37.8	1.06	34	83.7	4.7	27.6	6.1
ST 4554 B2RF	1969	45.0	35.1	1.07	34	83.0	5.2	28.2	8.6
DPLX 05X648 DR	1952	46.9	36.2	1.11	36	83.2	5.1	27.8	4.7
BW-4630 B2F	1947	41.2	30.4	1.15	37	81.9	4.3	26.0	6.9
ST 5599 BR	1941	43.4	34.6	1.10	35	82.2	5.2	26.8	4.5
ST 4575 BR	1933	44.9	34.4	1.08	35	83.9	5.1	26.5	7.9
DG 2242 B2RF	1920	42.8	32.2	1.19	38	83.1	4.2	26.4	7.6
FM 960 B2R	1913	42.6	33.1	1.12	36	81.3	4.6	30.8	3.7
PHY 485 WRF	1907	44.6	33.8	1.07	34	85.2	5.3	27.9	8.7
All-Tex 55033 B2/RF	1882	43.5	31.9	1.13	36	83.5	4.3	25.3	6.8
PHY 475 WRF	1873	43.4	32.7	1.09	35	84.5	4.8	28.3	8.1
DG 2520 B2RF	1870	41.7	31.9	1.15	37	85.5	4.8	24.9	7.4
All-Tex 55066 B2/RF	1870	42.6	32.6	1.13	36	82.6	4.7	25.0	7.1
BW-2038 B2F	1855	40.9	31.0	1.18	38	83.3	4.0	25.9	8.0
DP 117 B2RF	1855	44.5	34.0	1.13	36	83.7	5.0	29.2	7.2
CG 3520 B2RF	1852	42.8	32.0	1.19	38	85.1	4.7	26.7	8.1
FM 960 BR	1851	43.9	33.9	1.04	33	81.6	5.0	27.5	3.9
DG 2100 B2RF	1850	43.1	33.5	1.11	36	85.1	4.7	25.9	7.7
CG 4020 B2RF	1847	43.5	32.3	1.14	37	80.9	4.3	25.4	7.4
DP 488 BG/RR	1840	44.3	35.0	1.17	37	84.9	5.0	27.6	6.4
DP 543 BGII/RR	1834	43.6	33.3	1.12	36	83.3	4.6	29.9	4.6
FM 989 BR	1833	42.2	32.3	1.10	35	81.6	4.7	31.1	5.0
DG 2215 B2RF	1832	43.8	33.5	1.09	35	83.0	4.4	24.7	7.1

(Table 5. continued on next page)



Table 5. (continued)

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
DP 515 BG/RR	1828	44.8	34.9	1.05	34	82.3	5.0	28.8	5.1
CG 3020 B2RF	1824	42.8	32.9	1.11	36	84.6	4.8	25.8	7.5
DP 113 B2RF	1819	43.6	33.7	1.13	36	83.4	4.7	30.2	5.2
FMX 9166 LLB2	1808	43.2	32.1	1.12	36	83.5	5.1	28.9	4.7
DP 444 BG/RR	1806	44.0	33.6	1.11	36	83.4	4.5	26.9	6.3
STX 0416 B2R	1786	42.9	32.6	1.10	35	83.6	4.4	30.1	5.1
BW-3255 B2F	1782	42.5	32.9	1.09	35	83.7	4.9	25.1	7.3
DP 143 B2RF	1780	42.7	32.3	1.20	38	82.8	4.4	28.6	6.8
PHY 370 WR	1775	43.8	33.1	1.09	35	81.9	4.9	29.8	7.7
ST 5242 BR	1774	44.0	34.9	1.05	34	83.4	4.9	26.3	6.0
DP 164 B2RF	1773	42.1	32.1	1.16	37	83.0	4.3	30.3	5.1
FM 989 B2R	1756	40.7	31.0	1.10	35	84.2	4.4	30.4	5.1
DP 455 BG/RR	1754	45.5	35.8	1.11	36	82.3	4.7	30.6	5.4
PHY 415 RF	1748	44.7	33.3	1.07	34	84.5	5.2	26.3	7.8
DP 445 BG/RR	1738	44.5	33.5	1.11	36	85.5	5.2	28.1	8.7
BW-9775 B2F	1733	39.4	28.7	1.20	38	84.6	4.4	28.2	7.0
DP 156 B2RF	1730	42.5	32.2	1.09	35	83.2	4.6	27.3	5.6
ST 4357 B2RF	1729	41.6	30.6	1.14	37	81.7	4.3	26.2	6.5
STX 5885 B2RF	1727	40.6	30.1	1.13	36	81.7	4.5	31.2	6.3
STX 0414 B2RF	1712	42.6	31.8	1.19	38	85.3	4.7	33.0	5.0
ST 6636 BR	1693	42.1	32.5	1.14	37	83.8	5.0	29.5	5.0
ST 6611 B2RF	1692	41.6	31.3	1.09	35	83.0	4.6	27.6	5.3
DPLX 03X179 R	1665	47.7	36.6	1.16	37	86.1	5.5	30.4	6.4
xBCG-4021	1664	39.7	29.4	1.17	37	82.7	3.6	26.2	7.5
DPLX 04H205 DF	1647	42.3	32.9	1.14	37	82.8	4.7	29.0	5.2
FM 958 LL	1610	42.7	32.6	1.11	36	84.7	5.1	33.2	4.8
All-Tex Top-Pick	1609	40.6	30.4	1.19	38	84.5	4.7	28.3	6.9
DP 494 RR	1600	44.7	35.3	1.17	37	86.0	4.9	32.4	6.2
ST 5007 B2RF	1574	40.4	28.3	1.20	38	84.3	4.3	28.0	6.5
PM 2326 BG/RR	1572	40.9	31.7	1.05	34	81.8	5.1	29.1	7.0
All-Tex 55055 B2/RF	1568	39.6	27.9	1.19	38	84.4	4.2	28.5	6.5
DP 167 RF	1542	42.6	33.1	1.15	37	83.6	4.9	28.3	5.3
DP 152 RF	1508	42.3	32.2	1.14	37	82.4	4.5	29.2	5.0
DP 432 RR	1507	44.5	33.1	1.07	34	83.6	5.2	27.0	8.8
PHY 310 R	1500	44.4	33.4	1.05	34	84.3	5.2	25.9	7.2
DP 147 RF	1437	44.3	33.3	1.19	38	83.9	4.6	28.9	5.1
All-Tex AT 317 RR	1398	40.4	30.9	1.13	36	84.8	4.8	27.4	7.3
DP 110 RF	1356	44.6	33.2	1.14	37	85.1	4.8	32.7	6.9
DP 108 RF	1351	45.4	34.3	1.10	35	84.4	5.2	27.4	5.8
PHY 125 RF	1168	37.8	28.7	1.09	35	84.5	4.9	30.5	7.0
Experimental Average	1742	43.0	32.7	1.12	36	83.6	4.7	28.2	6.4

\* LSD (0.05) = 151 lbs.; LSD (0.01) = 200 lbs.

## Dryland Test Results in 2005

**Table 6. Dryland Cotton Variety Test Results near Chickasha, 2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
All-Tex Excess	705*	39.4	29.9	0.99	32	82.0	4.4	27.5	4.3
NG 2448 R	704	39.5	29.2	1.02	33	81.2	3.8	31.0	4.6
PM 2167 RR	671	40.7	31.8	1.03	33	83.8	4.8	27.6	5.0
FM 958	647	41.2	31.4	1.14	37	82.8	4.3	29.5	3.7
PHY 370 WR	638	42.5	31.1	1.06	34	82.1	4.0	28.0	5.1
FM 960 B2R	596	40.9	29.8	1.13	36	81.0	3.7	29.4	2.9
PHY 480 WR	593	39.8	29.0	1.09	35	81.7	3.6	31.2	6.4
ST 4892 BR	581	42.6	31.8	1.04	33	81.2	4.3	26.4	4.7
FM 989 RR	580	40.6	31.3	1.10	35	83.7	3.9	32.1	4.2
AFD 3511 RR	580	38.9	29.1	1.05	34	79.2	3.9	26.6	4.2
FM 960 RR	558	41.8	31.5	1.10	35	81.5	3.9	28.9	3.9
All-Tex Atlas	555	38.7	28.5	1.02	33	81.9	4.5	24.8	5.7
All-Tex Excess RR	553	37.4	28.7	1.06	34	81.8	4.5	29.8	5.1
All-Tex Atlas RR	516	39.1	29.0	1.03	33	82.4	4.0	27.1	5.2
PM 2326 RR	505	38.7	28.6	1.07	34	81.7	4.3	27.3	4.5
PHY 310 R	483	41.9	31.9	1.07	34	81.9	4.3	27.3	5.3
PM 2266 RR	448	38.5	28.2	1.07	34	83.6	4.2	32.1	5.2
PHY 470 WR	423	40.3	29.3	1.08	35	82.7	3.6	29.1	6.6
FM 5044 RR	413	38.2	28.9	1.12	36	84.1	4.1	26.5	5.9
AFD 3602 RR	372	38.2	29.6	1.07	34	83.2	4.2	30.4	4.5
PHY 410 R	354	41.5	29.7	1.09	35	82.0	4.1	28.6	5.3
BCG 24R	342	41.1	31.4	1.09	35	83.5	4.5	27.9	4.8
DP 555 BG/RR	295	41.9	31.5	1.09	35	79.5	3.9	29.4	3.4
PHY 72	235	38.6	28.4	1.15	37	83.0	4.0	31.0	5.3
Experimental Average	514	40.1	30.0	1.07	34	82.1	4.1	28.7	4.8

\* LSD (0.05) = 178 lbs.; LSD (0.01) = 236 lbs.

**Table 7. Dryland Cotton Variety Test Results near Tipton, 2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
DG 2520 B2RF	884*	41.0	30.8	1.06	34	82.5	4.4	23.6	5.5
DPLX 03X179 R	845	44.4	34.1	1.09	35	83.0	4.8	32.0	5.0
ST 4575 BR	833	44.2	34.5	1.00	32	81.0	4.9	29.8	6.7
DG 2100 B2RF	823	40.9	30.4	1.01	32	82.2	4.1	26.7	5.8
FM 960 RR	805	42.2	32.3	1.02	33	81.4	4.3	29.6	3.5
All-Tex 55033 B2/RF	797	43.2	32.0	1.00	32	78.2	4.3	23.4	6.5
CG 3520 B2RF	793	40.4	29.7	1.10	35	82.9	4.2	26.3	5.9
CG 3020 B2RF	788	41.4	30.7	1.03	33	80.9	4.1	23.4	5.6
BCG 24R	780	41.7	31.6	1.01	32	83.2	4.9	30.4	5.7
PHY 310 R	768	44.6	34.2	0.98	31	80.8	5.0	30.4	5.5
PHY 370 WR	767	45.4	34.9	0.99	32	79.9	5.0	26.6	5.1
ST 4892 BR	765	45.2	33.6	1.01	32	82.1	5.1	28.4	4.6
PM 2266 RR	764	39.4	29.5	1.00	32	82.0	4.7	29.9	5.2
ST 5599 BR	760	40.7	31.8	0.97	31	80.5	4.3	25.8	4.6
CG 4020 B2RF	759	41.4	30.4	1.04	33	79.6	4.1	24.3	5.8
PM 2326 BG/RR	759	37.3	28.5	0.99	32	82.6	4.8	27.5	5.8
All-Tex 55066 B2/RF	754	40.1	29.3	1.05	34	81.5	4.0	27.0	6.1
AFD 3511 RR	754	41.3	31.5	0.97	31	80.3	4.8	28.8	4.5

(Table 7. continued on next page)

Table 7. (continued)

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
DP 445 BG/RR	749	41.9	31.3	1.09	35	84.0	4.7	30.9	6.9
FM 958	745	42.3	31.4	1.06	34	82.2	4.6	27.0	2.9
DP 494 RR	744	45.0	34.3	1.06	34	83.3	5.2	30.2	4.6
ST 4686 R	742	43.3	33.4	1.01	32	81.2	4.6	29.1	6.6
PM 2167 RR	739	39.6	30.6	0.95	30	80.6	4.7	25.5	5.2
PHY 475 WRF	738	44.3	32.7	0.98	31	82.9	4.8	27.4	6.4
DG 2215 B2RF	737	38.9	28.8	1.04	33	79.8	3.8	26.0	5.2
DP 444 BG/RR	737	42.9	32.1	1.03	33	81.1	4.4	26.7	4.6
DG 2242 B2RF	731	38.3	28.2	1.05	34	80.3	3.2	26.4	5.8
DP 108 RF	730	41.0	30.4	1.06	34	84.3	4.5	30.5	4.4
NG 3550 RF	727	38.0	29.3	1.09	35	81.4	4.3	28.0	5.3
FM 960 B2R	725	41.0	31.0	1.05	34	82.3	4.5	26.9	3.4
AFD 3602 RR	721	38.9	29.9	1.05	34	81.5	4.6	29.4	4.9
FM 5044 RR	720	39.4	29.7	1.03	33	82.3	4.4	28.0	6.3
DP 143 B2RF	718	41.2	31.6	1.10	35	81.2	4.5	28.2	4.5
NG 2448 R	714	38.1	29.1	1.07	34	82.6	4.2	32.5	5.6
DP 488 BG/RR	712	41.3	31.3	1.12	36	81.2	4.7	27.8	4.6
All-Tex 55055 B2/RF	711	39.6	29.1	1.11	36	82.2	4.1	26.6	5.5
DP 110 RF	710	40.7	30.6	1.06	34	83.0	4.7	34.6	6.4
DPLX 04H205 DF	706	38.8	29.1	1.03	33	79.8	4.1	24.0	5.0
DP 515 BG/RR	705	44.4	34.4	1.03	33	81.7	5.1	26.4	4.3
DP 117 B2RF	705	42.7	32.8	1.03	33	81.3	4.6	29.6	4.5
All-Tex 45039 B2/RF	703	38.6	28.8	0.99	32	79.5	4.3	28.9	4.9
PM 2326 RR	698	39.3	29.6	0.99	32	84.0	5.1	30.6	4.8
DP 147 RF	695	41.6	31.4	1.09	35	81.4	4.2	29.6	4.0
ST 3664 R	695	39.6	30.1	1.00	32	82.1	4.4	27.9	5.4
DPLX 05X648 DR	694	45.1	35.3	1.01	32	81.4	5.2	24.6	3.7
PHY 485 WRF	691	41.2	31.0	1.05	34	84.1	5.2	30.3	7.0
ST 4664 RF	688	40.1	30.0	0.99	32	81.4	4.4	28.8	7.5
DP 454 BG/RR	685	47.9	37.0	0.98	31	81.1	4.9	24.1	4.7
DP 113 B2RF	684	41.0	30.6	1.07	34	81.3	4.4	28.3	3.6
DP 455 BG/RR	683	42.4	32.7	1.06	34	83.9	4.4	27.5	4.8
DP 555 BG/RR	683	44.0	34.2	1.02	33	80.0	5.2	24.8	4.0
All-Tex Atlas RR	682	36.3	27.8	1.03	33	84.0	4.6	30.4	5.6
DP 152 RF	676	41.5	31.6	1.07	34	80.5	4.6	30.6	4.3
FM 989 RR	676	39.1	30.3	1.03	33	82.9	4.5	33.5	4.4
NG 1553 R	675	34.5	27.0	1.10	35	82.0	3.2	32.0	6.1
DP 156 B2RF	663	39.1	30.0	1.08	35	83.0	4.5	28.3	4.9
All-Tex Excess RR	663	36.4	27.1	1.06	34	82.5	4.0	33.8	6.0
DP 164 B2RF	654	42.1	31.9	1.03	33	81.7	4.6	25.2	4.0
DP 432 RR	652	40.4	30.1	1.09	35	84.2	4.8	29.8	6.4
DP 167 RF	644	39.3	29.4	1.07	34	81.5	4.2	28.6	3.7
PHY 125 RF	638	35.8	26.6	1.05	34	81.4	4.5	32.5	5.4
NG 3969 R	634	39.3	28.8	1.05	34	85.4	4.3	33.1	6.1
ST 5303 R	627	38.8	29.1	1.03	33	81.6	5.0	31.3	4.0
DP 543 BGII/RR	621	42.5	32.9	1.01	32	80.3	5.1	26.9	3.5
PHY 415 RF	611	41.4	30.7	1.03	33	82.8	4.9	28.9	6.3
ST 6622 RF	573	41.6	31.8	1.09	35	81.6	5.3	28.4	4.2
PHY 72	532	41.4	29.6	1.10	35	83.6	4.2	34.9	5.8
ST 6848 R	499	41.0	31.5	1.08	35	83.5	4.9	32.5	4.3
Experimental Average	713	41.0	31.0	1.04	33	81.9	4.5	28.6	5.1

\* LSD (0.05) = 73 lbs.; LSD (0.01) = 96 lbs.

**Table 8. Dryland Cotton Variety Test Results near Perkins, 2005.**

<i>Variety</i>	<i>Lint Yield</i> (lbs./A)	<i>Lint Percentage</i>		<i>Fiber</i> <i>Length</i>	<i>Uniformity</i>			<i>Fiber</i>	
		<i>Picked</i>	<i>Pulled</i>		<i>32's</i>	<i>Ratio</i>	<i>Micronaire</i>	<i>Strength</i>	<i>Elongation</i>
PM 2266 RR	409*	37.9	28.8	1.07	34	84.0	5.0	29.4	6.5
PM 2167 RR	387	39.3	29.9	1.00	32	82.2	4.7	28.9	6.1
PM 2326 BG/RR	359	38.2	29.3	1.03	33	84.4	5.1	28.5	7.4
BCG 28R	325	39.4	30.6	1.19	38	86.7	4.8	29.1	5.4
All-Tex Atlas RR	325	38.4	29.4	1.04	33	82.6	5.0	30.0	6.8
Tamcot Luxor	299	40.8	29.6	1.04	33	84.2	5.0	26.8	6.0
FM 5013	273	38.7	28.2	1.07	34	84.1	4.7	28.7	6.7
ST 4892 BR	257	40.8	30.8	1.11	36	84.0	4.3	28.3	5.9
PM 2326 RR	222	38.7	28.3	1.06	34	83.8	4.6	28.3	6.6
DP 458 B/RR	113	37.6	28.1	1.13	36	83.0	4.6	27.3	5.6
Experimental Average	297	39.0	29.3	1.07	34	83.9	4.8	28.5	6.3

\* LSD (0.05) = 98 lbs.; LSD (0.01) = 131 lbs.

## Irrigated Test Results over Years

**Table 9. Dryland<sup>1</sup> Cotton Variety Test Results near Chickasha, 2004-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
FM 960 BR	789*	41.8	32.2	1.05	34	82.2	3.9	30.0	4.0
FM 989 BR	737	41.0	30.8	1.13	36	82.7	3.7	30.8	3.7
ST 4892 BR	727	43.2	33.3	1.06	34	82.9	4.7	27.4	5.2
PM 2326 BG/RR	711	39.4	30.1	1.06	34	84.0	4.3	28.4	6.5
FM 958	689	42.2	31.9	1.11	36	83.2	4.3	30.0	3.8
PM 2167 RR	659	39.8	30.8	1.01	32	84.2	4.4	27.9	5.4
PM 2266 RR	611	38.4	29.2	1.08	35	83.0	4.5	30.1	5.3
FM 958 LL	597	40.5	30.7	1.14	37	84.5	4.2	31.7	4.1
BCG 24R	560	41.1	31.2	1.07	34	83.4	4.2	29.1	6.1
All-Tex Atlas RR	557	38.6	29.8	1.04	33	83.1	4.2	29.5	5.1
PHY 410 R	526	41.4	30.7	1.07	34	83.8	3.9	28.3	6.4
PM 2326 RR	519	38.0	27.7	1.06	34	83.8	3.9	32.4	5.3
All-Tex Patriot RR	394	38.3	28.3	1.07	34	83.0	3.8	26.8	6.1
Experimental Average	621	40.3	30.5	1.07	34	83.4	4.2	29.4	5.1

\* LSD (0.05) = 156 lbs.; LSD (0.01) = 206 lbs.

<sup>1</sup> These experiments were supposed to be irrigated, but not enough water was available in 2004 and 2005 to irrigate them.

**Table 10. Dryland-Irrigated<sup>1</sup> Cotton Variety Test Results near Chickasha, 2003-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
FM 960 BR	932*	40.6	31.0	1.08	35	82.4	4.1	31.8	4.1
FM 989 BR	908	41.0	31.1	1.13	36	82.9	3.9	31.3	4.3
ST 4892 BR	876	42.7	32.7	1.08	35	83.4	4.9	28.0	5.4
PM 2266 RR	795	38.1	29.0	1.08	35	83.1	4.6	31.6	5.6
PM 2326 BG/RR	785	39.1	30.3	1.07	34	83.3	4.6	29.6	6.5
PM 2167 RR	783	39.6	30.8	1.02	33	83.8	4.6	28.2	5.7
FM 958	770	41.4	30.8	1.15	37	83.7	4.4	31.0	4.0
All-Tex Atlas RR	641	37.9	29.0	1.05	34	83.5	4.4	30.1	5.6
PM 2326 RR	635	38.5	28.5	1.07	34	83.5	4.3	31.8	5.9
Experimental Average	792	39.9	30.4	1.08	35	83.3	4.4	30.4	5.2

\* LSD (0.05) = 171 lbs.; LSD (0.01) = 227 lbs.

<sup>1</sup> These experiments were supposed to be irrigated, but not enough water was available in 2004 and 2005 to irrigate them.

**Table 11. Irrigated Cotton Variety Test Results near Altus, 2004-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
ST 4892 BR	2018*	44.9	34.1	1.07	34	83.8	5.0	27.2	6.6
DP 455 BG/RR	1982	47.3	36.5	1.11	36	81.5	4.4	28.8	5.1
FM 960 BR	1969	42.9	32.6	1.13	36	83.2	4.9	29.8	3.8
ST 5599 BR	1969	42.6	34.1	1.10	35	82.3	5.1	28.5	4.2
DP 488 BG/RR	1961	43.9	33.6	1.12	36	83.3	4.5	33.0	5.7
FM 989 BR	1923	41.4	32.1	1.15	37	83.8	5.0	31.0	4.6
ST 5242 BR	1907	43.4	33.9	1.10	35	84.4	4.8	26.8	6.3
ST 4575 BR	1906	44.5	34.1	1.12	36	83.8	4.8	27.2	8.3
DP 445 BG/RR	1873	44.3	33.6	1.11	36	84.5	4.5	28.6	8.0
DP 444 BG/RR	1859	44.3	33.6	1.08	35	83.1	4.4	27.1	5.8
DP 555 BG/RR	1845	45.7	35.3	1.11	36	82.3	4.6	28.1	4.9
ST 4686 R	1796	43.2	33.0	1.12	36	83.0	4.9	28.0	7.3
ST 6636 BR	1735	41.3	31.4	1.17	37	84.2	4.8	29.2	4.6
FM 958 LL	1724	41.7	31.9	1.16	37	84.1	4.9	31.3	4.6
FM 958	1678	41.2	31.3	1.19	38	85.8	4.8	31.7	4.1
PM 2326 BG/RR	1653	41.2	31.3	1.04	33	83.9	5.0	28.0	6.4
BCG 24R	1653	42.4	32.3	1.11	36	84.7	4.9	28.1	7.1
ST 3664 R	1550	41.2	31.3	1.11	36	84.3	4.8	27.5	5.8
ST 6848 R	1548	42.7	32.2	1.12	36	84.1	4.9	31.8	4.9
PM 2266 RR	1510	39.1	29.6	1.08	35	84.4	4.8	30.7	6.2
NG 1553 R	1485	38.3	29.8	1.18	38	84.8	4.6	28.8	6.0
PM 2167 RR	1478	40.9	31.1	1.03	33	83.0	5.2	27.3	6.1
NG 3969 R	1436	38.5	29.7	1.17	37	86.6	4.3	30.0	6.9
NG 2448 R	1430	39.8	30.4	1.11	36	84.5	4.9	31.0	5.9
All-Tex Atlas RR	1365	38.6	29.3	1.06	34	82.4	5.0	29.8	5.8
PM 2326 RR	1341	40.6	30.3	1.07	34	83.9	5.3	29.4	6.5
Experimental Average	1715	42.2	32.2	1.11	36	83.8	4.8	29.2	5.8

\* LSD (0.05) = 119 lbs.; LSD (0.01) = 156 lbs.

**Table 12. Irrigated Cotton Variety Test Results near Altus, 2003-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
ST 4892 BR	1926*	44.0	33.9	1.08	35	83.7	5.1	27.8	6.1
ST 5599 BR	1898	41.9	33.3	1.10	35	82.7	5.0	29.0	4.5
FM 989 BR	1886	41.0	31.9	1.16	37	84.1	4.9	31.6	4.5
FM 960 BR	1883	41.9	31.9	1.15	37	83.3	4.8	31.0	3.8
ST 5242 BR	1780	42.2	33.0	1.09	35	83.6	4.7	27.0	6.7
DP 555 BG/RR	1760	44.9	34.6	1.10	35	82.9	4.4	28.6	5.2
FM 958	1692	41.4	31.4	1.18	38	85.0	4.8	32.0	4.1
BCG 24R	1654	42.3	32.4	1.11	36	84.4	4.8	28.6	7.1
PM 2326 BG/RR	1541	39.5	30.3	1.06	34	84.1	5.1	29.3	6.6
PM 2167 RR	1478	40.2	30.4	1.04	33	83.5	5.1	27.8	6.6
PM 2266 RR	1473	38.4	29.4	1.09	35	84.0	4.9	30.3	6.1
NG 2448 R	1452	39.3	30.1	1.12	36	84.1	4.8	30.2	6.1
All-Tex Atlas RR	1348	38.1	29.3	1.06	34	83.0	5.0	30.2	5.7
PM 2326 RR	1321	39.1	29.7	1.09	35	84.5	5.3	29.8	6.4
Experimental Average	1649	41.0	31.5	1.10	35	83.8	4.9	29.5	5.7

\* LSD (0.05) = 101 lbs.; LSD (0.01) = 134 lbs.

**Table 13. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2004-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
FM 960 B2R	1924*	42.3	32.5	1.13	36	81.9	4.5	30.8	3.5
ST 5599 BR	1916	43.2	34.2	1.10	35	82.3	4.9	27.6	4.4
ST 4575 BR	1913	44.2	33.8	1.12	36	83.4	5.0	26.6	8.1
DP 488 BG/RR	1861	43.9	34.5	1.16	37	84.0	4.5	28.6	5.8
FM 960 BR	1856	42.5	32.9	1.10	35	82.5	4.7	29.7	3.9
FM 989 BR	1831	41.9	32.0	1.12	36	82.3	4.6	31.4	4.7
ST 5242 BR	1791	44.0	33.9	1.07	34	83.9	4.9	26.5	6.0
ST 6636 BR	1749	41.7	32.6	1.16	37	84.5	5.0	29.9	4.9
DP 444 BG/RR	1715	43.6	32.8	1.12	36	84.4	4.5	27.2	6.1
FM 958 LL	1539	41.5	31.5	1.14	37	84.5	5.1	32.4	4.8
PM 2326 BG/RR	1470	38.0	30.0	1.07	34	83.2	5.1	28.4	7.0
Experimental Average	1779	42.4	32.8	1.12	36	83.3	4.8	29.0	5.4

\* LSD (0.05) = 137 lbs.; LSD (0.01) = 182 lbs.

**Table 14. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2003-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
ST 5599 BR	1814*	42.1	33.6	1.11	36	82.3	4.8	27.0	4.7
FM 960 BR	1773	42.0	32.8	1.12	36	83.0	4.7	31.4	3.9
FM 989 BR	1728	41.3	31.8	1.13	36	82.5	4.7	31.5	4.7
ST 5242 BR	1661	43.1	33.5	1.08	35	83.7	4.8	26.6	6.4
Experimental Average	1744	42.1	32.9	1.11	36	82.9	4.8	29.1	4.9

\* LSD (0.05) = 115 lbs.; lint yield differences among varieties were not significant at the 0.01 probability level.

## Dryland Test Results over Years

**Table 15. Dryland Cotton Variety Test Results near Chickasha, 2004-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
PM 2167 RR	601*	37.5	29.1	1.04	33	84.4	4.3	27.6	5.9
FM 958	563	38.8	29.1	1.15	37	82.9	3.9	29.8	3.7
All-Tex Atlas	549	36.0	26.8	1.07	34	82.7	4.1	27.2	6.1
All-Tex Atlas RR	534	36.6	27.4	1.05	34	82.1	3.9	27.8	5.6
All-Tex Excess RR	518	33.9	25.6	1.09	35	83.1	3.7	28.8	5.9
PM 2266 RR	492	36.3	26.9	1.05	34	82.8	4.0	29.3	5.8
ST 4892 BR	490	39.4	29.5	1.08	35	82.0	3.9	26.9	5.0
PM 2326 RR	457	36.0	26.6	1.07	34	82.7	4.1	27.0	5.6
PHY 410 R	407	37.5	27.5	1.12	36	84.0	3.9	27.6	5.7
Experimental Average	512	36.9	27.6	1.08	35	83.0	4.0	28.0	5.5

\*LSD (0.05) = 139 lbs.; LSD (0.01) = 184 lbs.

**Table 16. Dryland Cotton Variety Test Results near Chickasha, 2003-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
PM 2167 RR	527*	37.9	29.3	1.00	32	82.5	4.4	27.2	5.6
All-Tex Atlas	514	37.0	27.6	1.05	34	82.1	4.3	28.6	6.2
ST 4892 BR	504	41.9	31.7	1.02	33	81.6	4.7	26.3	5.3
FM 958	497	40.0	29.9	1.12	36	81.7	4.2	30.0	3.6
All-Tex Atlas RR	492	37.7	28.5	1.01	32	81.1	4.2	27.3	5.6
PM 2266 RR	469	37.0	27.8	1.03	33	82.0	4.3	29.8	5.9
PM 2326 RR	430	36.5	27.3	1.07	34	82.5	4.3	28.4	5.6
Experimental Average	490	38.3	28.9	1.04	33	81.9	4.3	28.2	5.4

\* Lint yield differences among varieties were not significant at the 0.05 or 0.01 probability levels.

**Table 17. Dryland Cotton Variety Test Results near Tipton, 2004-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
ST 4892 BR	639*	44.5	34.3	1.01	32	82.2	5.5	28.0	5.0
BCG 24R	633	42.1	33.2	1.01	32	82.7	5.2	29.8	5.8
PM 2266 RR	619	39.9	30.7	1.02	33	81.2	4.9	29.8	5.1
FM 958	617	42.6	31.9	1.05	34	82.5	4.7	29.4	3.1
DP 494 RR	614	44.9	35.1	1.07	34	83.1	5.3	30.7	4.8
ST 4686 R	605	42.3	32.9	1.01	32	81.0	5.0	28.4	6.6
PM 2167 RR	596	39.2	30.8	0.93	30	80.3	4.9	25.8	4.3
ST 5599 BR	588	42.2	33.4	0.97	31	81.0	5.1	26.7	4.9
NG 1553 R	581	36.1	28.7	1.08	35	82.9	3.9	30.3	6.2
PM 2326 RR	575	38.9	30.5	0.98	31	83.4	5.2	30.0	4.9
All-Tex Atlas RR	560	37.3	29.2	1.01	32	82.8	4.9	30.2	5.8
ST 3664 R	557	40.0	31.2	0.98	31	81.7	4.7	28.3	5.4
All-Tex Excess RR	555	36.9	28.4	1.03	33	82.9	4.5	32.0	6.0
ST 5303 R	542	39.8	30.6	1.02	33	82.7	5.2	31.2	4.7
NG 2448 R	531	38.9	30.6	1.04	33	82.2	4.6	31.8	5.9
NG 3969 R	530	39.2	29.8	1.03	33	83.6	4.3	31.3	6.1
ST 6848 R	441	41.6	32.5	1.06	34	83.8	5.2	32.8	4.5
Experimental Average	575	40.4	31.4	1.01	32	82.3	4.9	29.8	5.2

\*LSD (0.05) = 81 lbs.; LSD (0.01) = 107 lbs.



**Table 18. Dryland Cotton Variety Test Results near Tipton, 2003-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
BCG 24R	500*	41.5	32.4	1.00	32	82.2	5.3	29.7	5.6
FM 958	493	42.0	30.9	1.02	33	82.0	4.5	29.5	3.3
ST 4892 BR	491	43.4	32.9	1.00	32	81.6	5.2	26.7	4.8
PM 2167 RR	482	39.1	30.4	0.93	30	80.1	4.8	25.7	4.3
PM 2266 RR	481	38.4	29.2	1.02	33	81.5	4.7	30.2	5.0
ST 5599 BR	475	41.8	32.8	0.96	31	81.0	5.3	25.9	4.7
PM 2326 RR	470	38.3	29.7	0.97	31	82.8	4.9	30.2	4.9
NG 1553 R	462	35.9	28.3	1.05	34	82.1	3.9	29.7	5.9
All-Tex Atlas RR	454	37.4	28.9	0.99	32	82.3	4.6	28.9	5.6
ST 5303 R	437	40.5	31.0	1.01	32	82.3	5.3	30.0	4.5
NG 2448 R	427	38.6	29.9	1.02	33	81.8	4.5	31.0	5.7
Experimental Average	470	39.7	30.6	1.00	32	81.8	4.8	28.9	4.9

\* LSD (0.05) = 63 lbs.; lint yield differences among varieties were not significant at the 0.01 probability level.

**Table 19. Dryland Cotton Variety Test Results near Perkins, 2004-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
PM 2167 RR	563*	39.7	31.1	1.00	32	82.2	4.5	27.1	5.4
PM 2266 RR	536	37.9	29.2	1.07	34	83.4	4.5	28.5	6.1
PM 2326 BG/RR	484	38.0	29.9	1.02	33	83.3	4.7	27.1	7.3
All-Tex Atlas RR	478	38.6	30.0	1.02	33	82.1	4.6	28.8	6.4
Tamcot Luxor	478	40.4	30.2	1.04	33	82.4	4.5	26.9	5.8
FM 5013	443	39.2	29.5	1.03	33	82.1	4.5	28.2	5.9
PM 2326 RR	419	38.9	29.6	1.05	34	82.9	4.6	28.7	6.2
BCG 28R	412	40.1	31.6	1.11	36	84.7	4.6	27.3	5.1
ST 4892 BR	412	42.1	32.7	1.06	34	82.4	4.4	26.7	5.7
Experimental Average	469	39.4	30.4	1.04	33	82.8	4.5	27.7	6.0

\* LSD (0.05) = 83 lbs.; LSD (0.01) = 111 lbs.

**Table 20. Dryland Cotton Variety Test Results near Perkins, 2003-2005.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber	
		Picked	Pulled			Ratio	Micronaire	Strength	Elongation
PM 2167 RR	569*	39.9	31.0	0.98	31	82.0	5.0	27.7	6.1
PM 2266 RR	527	39.5	30.4	1.03	33	82.4	5.0	28.6	6.5
PM 2326 BG/RR	490	38.4	29.9	1.02	33	82.6	4.8	28.3	7.1
PM 2326 RR	463	39.0	29.9	1.04	33	82.7	4.9	29.1	5.9
ST 4892 BR	437	41.9	32.5	1.07	34	82.4	4.9	27.9	5.5
Experimental Average	497	39.7	30.7	1.03	33	82.4	4.9	28.3	6.2

\* LSD (0.05) = 78 lbs.; LSD (0.01) = 105 lbs.

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