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# Cotton Variety Tests, Oklahoma – 2004[1]

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Many cotton producers in Oklahoma could increase their lint yield, fiber quality, or both by growing 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 for the various production areas of the state.

In 2004, irrigated cotton variety trials were planted on research stations near Chickasha and Altus. Sufficient water was not available during the season to irrigate the Chickasha experiment. Dryland tests were grown on research stations near Chickasha, Tipton, and Perkins. Soil types, planting dates, harvest dates, and cultural treatments for those tests are provided in Table 1. The experiments included varieties grown commercially throughout the Cotton Belt. Because these tests are conducted on a fee basis, some varieties were not tested as the companies who own or market them chose not to participate. The trials were conducted using randomized complete-block experimental designs. Most tests included five replications; four were used in the Altus picker-harvested test. One replication in the Chickasha dryland test was not harvested due to an excessive number of weeds. Each plot consisted of four rows 50 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 were sent to the International Textile Center at Texas Tech University in Lubbock for High Volume Instrument (HVI) fiber quality measurements using the Uster 900A system. Results from the tests in 2004 are presented in Tables 2 through 7.

Some of the varieties grown in a particular experiment in 2004 were also included in the experiments at that location in the previous year or years. Tables 8 through 19 present average data for varieties included in those trials for 2 years (2003 and 2004) or 3 years (2002 through 2004).

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 8 through 19). Because those two traits are environmentally sensitive, 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 producers' cotton acreages are substantial, they should probably grow more than one variety to reduce losses, if and when they occur.

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"

[1] Research in this report was conducted under Oklahoma Agricultural Experiment Station Project S-714 (Evaluation of Cotton Varieties for Oklahoma) by the Department of Plant and Soil Sciences, Oklahoma State University, Stillwater, OK 74078.

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 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 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 also were 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.

Based on their relative performance over the past 2 to 3 years, the better **yielding** cotton varieties (in alphabetical order) for South Central and Southwestern Oklahoma appear to be:

| *For Dryland Production* | *For Irrigated Production* |
|---|---|
| All-Tex Atlas | BCG 24R |
| All-Tex Atlas RR | DP 458 B/RR |
| DP 458 B/RR | DP 555 BG/RR |
| FiberMax 958 | FiberMax 958 |
| FiberMax 5013 | FiberMax 960 BR |
| PM 2167 RR | FiberMax 989 BR |
| PM 2266 RR | ST 474 |
| PM 2326 RR | ST 4646 B2R |
| ST 4892 BR | ST 4892 BR |
| Tamcot Luxor | ST 5599 BR |

Those producers in North Central Oklahoma should refer to Tables 18 and 19.

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

BCG = Beltwide Cotton Genetics
DP = Deltapine
NG = NexGen
PM = Paymaster
ST = Stoneville

B or BG = Bollgard
R or RR = Roundup Ready
B2 or BII = Bollgard II
LL = LibertyLink

**Table 1. Locations, Soil Types, Planting Dates, Harvest Dates, and Cultural Treatments for the Cotton Variety Tests in Oklahoma, 2004.**

| *Table Number* | *Nearest Town* | *Soil Type* | *Date Planted*[1] | *Date Harvested*[1] | *Cultural Treatments*[1,2] |
|---|---|---|---|---|---|
| 2 | Chickasha | Reinach silt loam[3] | May 27 | December 3 | 100 lb./A 18-46-0<br>No irrigations[7]<br>No insecticide applications<br>2 defoliants + a boll opener + a nonionic surfactant |
| 3 | Altus | Hollister clay loam[4] | May 10 | November 10 | 280 lb./A 40-10-0<br>4 irrigations<br>3 insecticide applications<br>2 defoliants + a boll opener + a nonionic surfactant |
| 4 | Altus | Hollister (Picker Test) clay loam[4] | May 10 | November 9 | 280 lb./A 40-10-0<br>4 irrigations<br>3 insecticide applications<br>2 defoliants + a boll opener + a nonionic surfactant |
| 5 | Chickasha | Reinach silt loam[3] | May 19 | December 2 | 100 lb./A 18-46-0<br>No irrigations<br>No insecticide applications<br>2 defoliants + a boll opener + a nonionic surfactant |
| 6 | Tipton | Tipton silt loam[5] | May 12 | September 27 | 75 lb./A 46-0-0<br>No irrigations<br>2 insecticide applications<br>2 defoliants + a boll opener + a nonionic surfactant |
| 7 | Perkins | Teller loam[6] | May 26 | December 21 | 80 lb./A 46-0-0 + 130 lb./A 18-46-0<br>No irrigations<br>No insecticide applications<br>No harvest aid treatments |

[1] This information for Tables 8 through 19 for 2002 and 2003 may be found in the previous variety test reports CR-2094 (0303) and CR-2094 (0204), respectively.
[2] All experiments received preplant incorporated (PPI) herbicides. Experiments at Altus and Tipton also received preemergence (PRE) herbicides.
[3] Coarse-silty, mixed, superactive, thermic Pachic Haplustoll.
[4] Fine, smectitic, thermic Typic Haplustert.
[5] Fine-loamy, mixed, superactive, thermic Pachic Argiustoll.
[6] Fine-loamy, mixed, active, thermic Udic Argiustoll.
[7] Sufficient water was not available during the season to irrigate this experiment.

# Irrigated Test Results in 2004

**Table 2. Irrigated Cotton Variety Test Results near Chickasha, 2004.[1]**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity | | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | 32's | Ratio | | | |
| Tamcot Luxor | 858* | 41.2 | 31.8 | 1.04 | 33 | 83.4 | 4.4 | 31.3 | 4.8 |
| DP 458 B/RR | 845 | 42.0 | 34.7 | 1.06 | 34 | 81.8 | 4.7 | 29.8 | 5.3 |
| FiberMax 989 BR | 837 | 39.9 | 32.4 | 1.17 | 37 | 82.9 | 3.7 | 31.4 | 3.5 |
| ST 4892 BR | 837 | 44.7 | 35.5 | 1.02 | 33 | 82.9 | 4.9 | 27.5 | 5.4 |
| BCG 24R | 828 | 41.6 | 33.1 | 1.08 | 35 | 84.8 | 4.5 | 29.4 | 6.9 |
| PM 2326 BG/RR | 818 | 39.5 | 31.0 | 1.07 | 34 | 84.8 | 4.0 | 29.6 | 6.9 |
| PM 2167 RR | 814 | 39.8 | 31.4 | 1.05 | 34 | 84.9 | 4.2 | 29.7 | 5.7 |
| FiberMax 5013 | 810 | 42.1 | 32.1 | 1.02 | 33 | 82.1 | 4.5 | 28.2 | 6.2 |
| FiberMax 960 BR | 800 | 43.3 | 34.7 | 1.02 | 33 | 82.0 | 3.7 | 28.2 | 4.6 |
| All-Tex Atlas RR | 797 | 39.7 | 32.2 | 1.06 | 34 | 84.2 | 4.0 | 29.9 | 5.3 |
| PM 2326 RR | 792 | 39.2 | 30.7 | 1.08 | 35 | 83.9 | 4.3 | 29.5 | 5.5 |
| Phytogen 410 R | 780 | 42.2 | 33.3 | 1.07 | 34 | 84.5 | 4.3 | 28.8 | 7.3 |
| FiberMax 958 LL | 775 | 42.5 | 33.3 | 1.15 | 37 | 83.9 | 4.4 | 29.6 | 3.7 |
| All-Tex Top-Pick | 774 | 41.6 | 31.5 | 1.13 | 36 | 83.8 | 4.5 | 29.0 | 5.8 |
| All-Tex Atlas | 768 | 40.1 | 31.0 | 1.04 | 33 | 82.2 | 4.5 | 27.8 | 6.2 |
| FiberMax 5035 LL | 751 | 38.6 | 29.1 | 1.09 | 35 | 84.0 | 4.0 | 30.9 | 6.5 |
| FiberMax 958 | 749 | 43.3 | 32.8 | 1.09 | 35 | 82.0 | 3.9 | 29.9 | 3.6 |
| PM 2266 RR | 747 | 38.8 | 29.8 | 1.09 | 35 | 83.2 | 4.2 | 30.2 | 5.0 |
| ST 2454 R | 740 | 42.0 | 32.9 | 1.09 | 35 | 83.8 | 4.2 | 29.7 | 6.0 |
| Acala 1517-99 | 721 | 42.7 | 32.7 | 1.14 | 37 | 84.3 | 4.1 | 32.0 | 4.0 |
| ST 474 | 716 | 46.1 | 35.8 | 1.04 | 33 | 82.2 | 5.0 | 26.4 | 5.7 |
| FiberMax 5045 BR | 704 | 40.3 | 31.8 | 1.05 | 34 | 82.7 | 4.0 | 27.9 | 6.0 |
| BCG 28R | 647 | 42.1 | 33.5 | 1.10 | 35 | 81.0 | 4.4 | 27.3 | 4.1 |
| All-Tex Patriot RR | 637 | 39.2 | 29.5 | 1.02 | 33 | 83.9 | 3.8 | 26.9 | 6.6 |
| Experimental Average | 773 | 41.3 | 32.4 | 1.07 | 34 | 83.3 | 4.3 | 29.2 | 5.4 |

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

[1] Sufficient water was not available during the season to irrigate this experiment.

**Table 3. Irrigated Cotton Variety Test Results near Altus, 2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity | | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | 32's | Ratio | | | |
| ST 4892 BR | 1934* | 43.9 | 33.9 | 1.10 | 35 | 84.3 | 4.9 | 27.5 | 6.6 |
| DP 488 BG/RR | 1900 | 44.2 | 33.6 | 1.13 | 36 | 83.6 | 4.4 | 29.8 | 5.4 |
| FiberMax 989 BR | 1882 | 42.2 | 32.7 | 1.15 | 37 | 84.5 | 5.0 | 32.1 | 4.3 |
| DP 455 BG/RR | 1869 | 47.5 | 35.8 | 1.11 | 36 | 80.7 | 4.2 | 29.4 | 4.4 |
| FiberMax 960 BR | 1865 | 41.6 | 31.9 | 1.20 | 38 | 83.8 | 4.7 | 31.3 | 3.7 |
| ST 4575 BR | 1819 | 45.2 | 33.7 | 1.12 | 36 | 83.9 | 4.5 | 28.9 | 6.9 |
| DP 445 BG/RR | 1794 | 45.0 | 34.2 | 1.12 | 36 | 85.1 | 4.3 | 28.5 | 7.3 |
| ST 4646 B2R | 1755 | 41.2 | 31.9 | 1.12 | 36 | 83.1 | 5.1 | 28.4 | 5.1 |
| DP 458 B/RR | 1755 | 41.6 | 32.5 | 1.14 | 37 | 83.1 | 4.7 | 29.1 | 4.9 |
| ST X3636 B2R | 1750 | 41.8 | 32.9 | 1.11 | 36 | 83.8 | 5.1 | 28.0 | 5.1 |
| ST 5599 BR | 1747 | 40.9 | 32.6 | 1.11 | 36 | 82.1 | 5.1 | 28.9 | 4.0 |
| DP 444 BG/RR | 1741 | 43.7 | 33.5 | 1.12 | 36 | 84.5 | 4.4 | 27.7 | 5.2 |
| DP 555 BG/RR | 1726 | 45.3 | 35.3 | 1.12 | 36 | 82.0 | 4.5 | 28.0 | 4.9 |
| ST 474 | 1726 | 47.1 | 33.5 | 1.05 | 34 | 83.3 | 5.0 | 26.2 | 7.1 |
| ST 5242 BR | 1723 | 42.7 | 33.0 | 1.13 | 36 | 85.5 | 4.7 | 27.5 | 6.7 |
| BCG 24R | 1718 | 43.1 | 33.1 | 1.13 | 36 | 85.5 | 4.9 | 28.9 | 6.5 |
| ST 4686 R | 1691 | 42.5 | 32.1 | 1.15 | 37 | 83.9 | 4.7 | 28.0 | 5.5 |
| ST X5454 B2R | 1688 | 42.1 | 32.1 | 1.11 | 36 | 83.3 | 4.9 | 29.3 | 5.4 |
| ST 6636 BR | 1673 | 41.7 | 31.9 | 1.21 | 39 | 85.6 | 4.8 | 29.9 | 4.2 |
| DP 449 BG/RR | 1637 | 42.1 | 31.9 | 1.15 | 37 | 85.5 | 4.6 | 28.7 | 4.2 |
| Phytogen 410 R | 1618 | 43.9 | 32.1 | 1.08 | 35 | 85.7 | 4.8 | 28.3 | 7.2 |
| FiberMax 958 | 1611 | 42.1 | 31.3 | 1.17 | 37 | 86.2 | 4.8 | 31.6 | 3.9 |
| FiberMax 958 LL | 1604 | 40.8 | 31.0 | 1.18 | 38 | 84.5 | 4.7 | 31.2 | 4.1 |
| PM 2326 BG/RR | 1602 | 41.3 | 30.7 | 1.05 | 34 | 85.3 | 4.7 | 29.8 | 5.9 |
| FiberMax 5045 BR | 1568 | 38.9 | 29.7 | 1.12 | 36 | 83.6 | 4.8 | 28.5 | 6.9 |
| ST 6848 R | 1567 | 43.6 | 33.0 | 1.13 | 36 | 84.5 | 4.7 | 33.8 | 4.1 |
| ST 2454 R | 1530 | 43.2 | 31.1 | 1.05 | 34 | 83.3 | 4.8 | 27.1 | 6.3 |
| ST 3664 R | 1525 | 41.3 | 31.2 | 1.10 | 35 | 85.9 | 4.8 | 29.2 | 5.6 |
| BCG 28R | 1485 | 42.1 | 31.5 | 1.18 | 38 | 84.9 | 5.0 | 29.1 | 4.5 |
| FiberMax 5013 | 1471 | 40.2 | 29.8 | 1.07 | 34 | 83.3 | 4.9 | 28.9 | 5.1 |
| Tamcot Luxor | 1458 | 41.1 | 29.1 | 1.10 | 35 | 85.7 | 4.6 | 29.6 | 5.0 |
| PM 2266 RR | 1452 | 40.1 | 29.0 | 1.06 | 34 | 83.3 | 4.5 | 30.7 | 5.5 |
| All-Tex Top-Pick | 1449 | 40.0 | 28.3 | 1.15 | 37 | 84.7 | 4.2 | 29.6 | 5.4 |
| All-Tex Patriot RR | 1448 | 38.7 | 28.7 | 1.21 | 39 | 84.3 | 4.3 | 26.5 | 5.3 |
| NG 2448 R | 1417 | 38.8 | 29.8 | 1.15 | 37 | 85.2 | 4.8 | 30.4 | 5.9 |
| NG 1553 R | 1404 | 37.1 | 28.9 | 1.18 | 38 | 85.8 | 4.6 | 29.1 | 5.4 |
| All-Tex Atlas | 1370 | 37.1 | 28.3 | 1.08 | 35 | 83.4 | 5.0 | 27.7 | 6.3 |
| PM 2167 RR | 1353 | 40.0 | 29.7 | 1.05 | 34 | 83.6 | 5.1 | 28.2 | 5.8 |
| PM 2326 RR | 1341 | 39.6 | 28.8 | 1.07 | 34 | 84.1 | 4.9 | 30.9 | 5.8 |
| All-Tex Atlas RR | 1307 | 39.0 | 29.3 | 1.03 | 33 | 83.0 | 4.9 | 31.0 | 5.2 |
| NG 3969 R | 1296 | 36.9 | 28.4 | 1.18 | 38 | 87.3 | 4.4 | 29.6 | 6.9 |
| Acala 1517-99 | 1267 | 39.0 | 29.0 | 1.24 | 40 | 87.9 | 4.3 | 33.0 | 4.8 |
| Experimental Average | 1608 | 41.7 | 31.4 | 1.12 | 36 | 84.3 | 4.7 | 29.3 | 5.4 |

* LSD(0.05) = 104 lb.; LSD(0.01) = 137 lb.

**Table 4. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity | | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | 32's | Ratio | | | |
| FiberMax 960 B2R | 1935* | 42.0 | 32.0 | 1.14 | 37 | 82.4 | 4.4 | 30.7 | 3.2 |
| ST 4575 BR | 1892 | 43.4 | 33.2 | 1.15 | 37 | 82.9 | 4.8 | 26.6 | 8.3 |
| ST 5599 BR | 1891 | 43.0 | 33.9 | 1.09 | 35 | 82.4 | 4.6 | 28.4 | 4.3 |
| DP 488 BG/RR | 1882 | 43.4 | 34.0 | 1.15 | 37 | 83.1 | 4.0 | 29.5 | 5.2 |
| FiberMax 960 BR | 1860 | 41.0 | 31.9 | 1.15 | 37 | 83.4 | 4.4 | 31.9 | 3.8 |
| ST 4646 B2R | 1854 | 41.8 | 32.8 | 1.10 | 35 | 81.4 | 4.7 | 26.7 | 5.2 |
| FiberMax 989 BR | 1828 | 41.6 | 31.8 | 1.13 | 36 | 83.0 | 4.4 | 31.7 | 4.3 |
| ST 5242 BR | 1808 | 43.9 | 32.9 | 1.08 | 35 | 84.4 | 4.8 | 26.6 | 6.0 |
| ST 6636 BR | 1806 | 41.3 | 32.6 | 1.18 | 38 | 85.1 | 4.9 | 30.3 | 4.8 |
| DP 555 BG/RR | 1785 | 45.4 | 36.2 | 1.07 | 34 | 80.5 | 4.7 | 27.2 | 4.5 |
| ST X3636 B2R | 1779 | 42.2 | 32.8 | 1.12 | 36 | 83.7 | 4.9 | 26.3 | 4.4 |
| DP 424 BGII/RR | 1776 | 38.2 | 29.8 | 1.12 | 36 | 84.6 | 4.4 | 26.9 | 6.8 |
| FiberMax 800 BR | 1746 | 39.2 | 30.6 | 1.23 | 39 | 85.6 | 4.3 | 29.4 | 5.4 |
| DP 449 BG/RR | 1683 | 41.3 | 31.7 | 1.14 | 37 | 83.6 | 4.6 | 32.2 | 4.6 |
| DP 444 BG/RR | 1623 | 43.1 | 32.0 | 1.12 | 36 | 85.4 | 4.5 | 27.5 | 5.8 |
| Phytogen 410 R | 1597 | 41.7 | 31.2 | 1.09 | 35 | 85.3 | 4.9 | 29.8 | 7.1 |
| ST X5454 B2R | 1534 | 38.5 | 30.2 | 1.20 | 38 | 85.3 | 4.9 | 29.8 | 6.0 |
| FiberMax 958 LL | 1468 | 40.3 | 30.4 | 1.17 | 37 | 84.3 | 5.0 | 31.5 | 4.7 |
| FiberMax 832 LL | 1400 | 38.9 | 30.0 | 1.23 | 39 | 85.1 | 4.6 | 32.7 | 4.5 |
| PM 2326 BG/RR | 1367 | 35.1 | 28.3 | 1.09 | 35 | 84.6 | 5.1 | 27.7 | 7.0 |
| Experimental Average | 1726 | 41.3 | 31.9 | 1.14 | 37 | 83.8 | 4.6 | 29.2 | 5.3 |

* LSD(0.05) = 123 lb.; LSD(0.01) = 164 lb.

# Dryland Test Results in 2004

**Table 5. Dryland Cotton Variety Test Results near Chickasha, 2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity | | | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | 32's | Ratio | Micronaire | | |
| All-Tex Atlas RR | 552* | 34.1 | 25.9 | 1.07 | 34 | 81.7 | 3.8 | 28.4 | 6.0 |
| All-Tex Atlas | 543 | 33.3 | 25.1 | 1.12 | 36 | 83.5 | 3.7 | 29.6 | 6.5 |
| PM 2266 RR | 536 | 34.2 | 25.5 | 1.03 | 33 | 82.0 | 3.7 | 26.4 | 6.3 |
| PM 2167 RR | 530 | 34.4 | 26.4 | 1.04 | 33 | 84.9 | 3.7 | 27.6 | 6.7 |
| FiberMax 5013 | 518 | 32.9 | 24.5 | 1.08 | 35 | 84.2 | 3.8 | 26.6 | 7.4 |
| FiberMax 5045 BR | 508 | 34.9 | 26.1 | 1.08 | 35 | 83.5 | 3.2 | 28.9 | 7.6 |
| FiberMax 5035 LL | 506 | 31.0 | 22.3 | 1.11 | 36 | 86.5 | 3.3 | 27.0 | 7.6 |
| All-Tex Excess RR | 482 | 30.4 | 22.5 | 1.12 | 36 | 84.4 | 2.9 | 27.8 | 6.6 |
| PM 2326 BG/RR | 482 | 31.7 | 24.4 | 1.08 | 35 | 82.1 | 3.2 | 27.9 | 7.6 |
| FiberMax 958 | 479 | 36.4 | 26.8 | 1.16 | 37 | 83.0 | 3.5 | 30.0 | 3.6 |
| ST 2454 R | 461 | 34.6 | 26.3 | 1.11 | 36 | 85.3 | 3.4 | 24.6 | 8.1 |
| Phytogen 410 R | 459 | 33.5 | 25.3 | 1.15 | 37 | 86.0 | 3.6 | 26.5 | 6.1 |
| Acala 1517-99 | 452 | 36.7 | 27.8 | 1.19 | 38 | 84.3 | 3.7 | 30.1 | 4.4 |
| Tamcot Luxor | 449 | 35.1 | 25.6 | 1.07 | 34 | 83.8 | 3.6 | 26.2 | 5.7 |
| PM 2326 RR | 409 | 33.2 | 24.6 | 1.07 | 34 | 83.6 | 3.8 | 26.6 | 6.7 |
| ST 4892 BR | 399 | 36.2 | 27.2 | 1.11 | 36 | 82.8 | 3.5 | 27.4 | 5.3 |
| ST 474 | 375 | 39.0 | 28.8 | 1.08 | 35 | 82.8 | 3.7 | 25.6 | 5.8 |
| DP 458 B/RR | 352 | 34.4 | 26.8 | 1.17 | 37 | 83.7 | 3.5 | 31.5 | 4.5 |
| Experimental Average | 472 | 34.2 | 25.7 | 1.10 | 35 | 83.8 | 3.5 | 27.7 | 6.3 |

* LSD(0.05) = 99 lb.; LSD(0.01) = 132 lb.

**Table 6. Dryland Cotton Variety Test Results near Tipton, 2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity | | | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | 32's | Ratio | Micronaire | | |
| ST 4892 BR | 512* | 43.9 | 35.0 | 1.01 | 32 | 82.3 | 5.8 | 27.6 | 5.4 |
| BCG 28R | 496 | 43.8 | 35.2 | 1.00 | 32 | 82.0 | 5.2 | 28.7 | 5.0 |
| FiberMax 958 | 489 | 43.0 | 32.3 | 1.03 | 33 | 82.8 | 4.8 | 31.8 | 3.3 |
| NG 1553 R | 486 | 37.7 | 30.3 | 1.05 | 34 | 83.7 | 4.5 | 28.5 | 6.2 |
| BCG 24R | 486 | 42.5 | 34.7 | 1.00 | 32 | 82.2 | 5.5 | 29.2 | 5.8 |
| DP 494 RR | 485 | 44.9 | 35.8 | 1.07 | 34 | 82.9 | 5.4 | 31.2 | 5.0 |
| PM 2266 RR | 475 | 40.4 | 31.8 | 1.03 | 33 | 80.4 | 5.0 | 29.7 | 5.0 |
| DP 458 B/RR | 473 | 39.7 | 31.7 | 1.03 | 33 | 80.9 | 5.3 | 29.1 | 5.5 |
| ST 4686 R | 468 | 41.3 | 32.4 | 1.00 | 32 | 80.8 | 5.3 | 27.6 | 6.5 |
| All-Tex Atlas | 459 | 37.1 | 28.5 | 0.99 | 32 | 81.0 | 5.3 | 28.4 | 6.3 |
| DP X02T57 R | 457 | 38.9 | 31.6 | 0.99 | 32 | 80.9 | 4.9 | 31.1 | 6.4 |
| ST 5303 R | 457 | 40.8 | 32.2 | 1.01 | 32 | 83.7 | 5.3 | 31.0 | 5.4 |
| FiberMax 5035 LL | 457 | 39.3 | 29.6 | 0.96 | 31 | 81.2 | 5.3 | 27.0 | 6.5 |
| Tamcot Luxor | 455 | 39.6 | 30.1 | 0.95 | 30 | 81.2 | 4.8 | 28.4 | 6.1 |
| PM 2167 RR | 453 | 38.7 | 31.0 | 0.91 | 29 | 79.9 | 5.0 | 26.1 | 3.4 |
| Phytogen 410R | 453 | 40.9 | 32.0 | 0.99 | 32 | 82.4 | 5.6 | 31.1 | 7.9 |
| PM 2326 RR | 452 | 38.4 | 31.3 | 0.96 | 31 | 82.7 | 5.2 | 29.3 | 4.9 |
| ST 2454 R | 448 | 40.1 | 31.6 | 0.98 | 31 | 80.6 | 5.3 | 27.5 | 6.4 |
| All-Tex Excess RR | 446 | 37.5 | 29.6 | 1.00 | 32 | 83.3 | 4.9 | 30.1 | 6.0 |
| FiberMax 5045 BR | 442 | 41.0 | 33.1 | 0.98 | 31 | 81.4 | 5.6 | 27.9 | 6.2 |
| All-Tex Atlas RR | 438 | 38.2 | 30.6 | 0.98 | 31 | 81.5 | 5.1 | 30.0 | 6.0 |
| NG 3969 R | 426 | 39.1 | 30.7 | 1.01 | 32 | 81.8 | 4.3 | 29.4 | 6.1 |
| DP 5415 R | 423 | 40.0 | 32.0 | 1.04 | 33 | 82.9 | 5.1 | 29.7 | 5.5 |
| ST 3664 R | 419 | 40.4 | 32.2 | 0.95 | 30 | 81.3 | 4.9 | 28.6 | 5.3 |
| ST 5599 BR | 416 | 43.7 | 35.1 | 0.96 | 31 | 81.4 | 5.9 | 27.5 | 5.2 |
| ST 474 | 415 | 42.1 | 32.6 | 1.01 | 32 | 80.4 | 5.1 | 28.0 | 5.2 |
| Acala 1517-99 | 413 | 40.6 | 31.0 | 1.09 | 35 | 84.0 | 4.6 | 33.8 | 4.7 |
| FiberMax 5013 | 408 | 36.1 | 27.7 | 0.96 | 31 | 81.4 | 5.2 | 27.1 | 6.2 |
| ST 6848 R | 383 | 42.3 | 33.6 | 1.04 | 33 | 84.0 | 5.4 | 33.1 | 4.7 |
| NG 2448 R | 347 | 39.7 | 32.1 | 1.00 | 32 | 81.8 | 5.0 | 31.1 | 6.1 |
| Experimental Average | 448 | 40.4 | 31.9 | 1.00 | 32 | 81.9 | 5.2 | 29.3 | 5.6 |

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

**Table 7. Dryland Cotton Variety Test Results near Perkins, 2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| PM 2145 RR | 746* | 39.2 | 31.5 | 1.03 | 33 | 82.6 | 4.1 | 28.0 | 4.9 |
| PM 2167 RR | 739 | 40.1 | 32.2 | 0.99 | 32 | 82.1 | 4.2 | 25.3 | 4.6 |
| PM 2266 RR | 663 | 37.8 | 29.6 | 1.06 | 34 | 82.7 | 3.9 | 27.5 | 5.7 |
| Tamcot Luxor | 656 | 40.0 | 30.7 | 1.03 | 33 | 80.5 | 3.9 | 26.9 | 5.5 |
| All-Tex Atlas RR | 631 | 38.9 | 30.6 | 1.00 | 32 | 81.5 | 4.2 | 27.6 | 6.0 |
| PM 2326 RR | 615 | 39.0 | 30.9 | 1.04 | 33 | 81.9 | 4.5 | 29.0 | 5.8 |
| FiberMax 5013 | 613 | 39.7 | 30.9 | 0.98 | 31 | 80.1 | 4.2 | 27.7 | 5.1 |
| PM 2326 BG/RR | 609 | 37.8 | 30.5 | 1.01 | 32 | 82.2 | 4.2 | 25.7 | 7.2 |
| ST 4892 BR | 566 | 43.3 | 34.6 | 1.01 | 32 | 80.8 | 4.4 | 25.1 | 5.5 |
| BCG 28R | 500 | 40.8 | 32.5 | 1.03 | 33 | 82.6 | 4.3 | 25.5 | 4.8 |
| Experimental Average | 634 | 39.7 | 31.4 | 1.02 | 33 | 81.7 | 4.2 | 26.8 | 5.5 |

* LSD(0.05) = 67 lb.; LSD(0.01) = 90 lb.

# Irrigated Test Results over Years

**Table 8. Irrigated Cotton Variety Test Results near Chickasha, 2003-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| FiberMax 989 BR | 1043* | 40.4 | 32.0 | 1.15 | 37 | 83.1 | 4.1 | 31.8 | 4.5 |
| FiberMax 960 BR | 1009 | 40.8 | 31.6 | 1.09 | 35 | 82.5 | 4.2 | 31.9 | 4.5 |
| ST 4892 BR | 1006 | 43.2 | 33.5 | 1.08 | 35 | 83.7 | 5.1 | 28.5 | 5.6 |
| DP 458 B/RR | 962 | 39.9 | 31.9 | 1.11 | 36 | 82.2 | 4.7 | 31.3 | 5.6 |
| PM 2266 RR | 955 | 38.2 | 29.1 | 1.09 | 35 | 83.4 | 4.6 | 32.5 | 5.7 |
| Tamcot Luxor | 929 | 40.5 | 30.6 | 1.09 | 35 | 84.1 | 4.4 | 30.9 | 5.7 |
| PM 2167 RR | 923 | 39.6 | 31.1 | 1.05 | 34 | 84.1 | 4.6 | 29.3 | 6.1 |
| ST 474 | 909 | 44.2 | 33.8 | 1.08 | 35 | 83.2 | 5.0 | 28.0 | 5.9 |
| ST 2454 R | 895 | 41.3 | 32.1 | 1.11 | 36 | 83.7 | 4.5 | 30.7 | 6.0 |
| FiberMax 5013 | 887 | 40.5 | 30.9 | 1.06 | 34 | 82.9 | 4.7 | 28.8 | 6.3 |
| PM 2326 BG/RR | 875 | 39.0 | 30.8 | 1.09 | 35 | 83.3 | 4.6 | 30.9 | 6.7 |
| Acala 1517-99 | 857 | 40.4 | 30.4 | 1.19 | 38 | 84.9 | 4.2 | 34.1 | 4.8 |
| All-Tex Atlas | 846 | 38.2 | 29.0 | 1.11 | 36 | 83.4 | 4.7 | 29.1 | 6.4 |
| FiberMax 958 | 841 | 41.6 | 30.6 | 1.17 | 37 | 83.4 | 4.4 | 31.4 | 4.0 |
| PM 2326 RR | 830 | 39.3 | 30.4 | 1.09 | 35 | 83.5 | 4.7 | 30.0 | 6.3 |
| All-Tex Atlas RR | 803 | 38.2 | 29.8 | 1.07 | 34 | 84.3 | 4.4 | 30.7 | 6.1 |
| Experimental Average | 911 | 40.3 | 31.1 | 1.10 | 35 | 83.5 | 4.5 | 30.6 | 5.6 |

* LSD(0.05) = 180 lb.; LSD(0.01) = 239 lb.

**Table 9. Irrigated Cotton Variety Test Results near Chickasha, 2002-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| FiberMax 989 BR | 1125* | 40.9 | 32.8 | 1.12 | 36 | 83.2 | 4.5 | 33.0 | 4.6 |
| ST 4892 BR | 1111 | 44.0 | 34.6 | 1.07 | 34 | 84.1 | 5.3 | 30.0 | 5.7 |
| DP 458 B/RR | 1087 | 40.7 | 32.9 | 1.10 | 35 | 82.0 | 5.0 | 32.2 | 5.6 |
| ST 474 | 1034 | 44.8 | 34.6 | 1.06 | 34 | 83.5 | 5.3 | 28.4 | 6.0 |
| Tamcot Luxor | 1008 | 41.3 | 31.6 | 1.06 | 34 | 84.0 | 4.6 | 31.3 | 5.8 |
| PM 2167 RR | 996 | 40.5 | 32.2 | 1.04 | 33 | 83.3 | 4.7 | 29.8 | 6.2 |
| PM 2266 RR | 972 | 38.4 | 29.7 | 1.08 | 35 | 83.5 | 4.7 | 33.5 | 5.8 |
| FiberMax 958 | 961 | 42.0 | 31.9 | 1.13 | 36 | 83.1 | 4.6 | 32.2 | 4.1 |
| FiberMax 5013 | 936 | 40.3 | 31.0 | 1.04 | 33 | 82.9 | 4.8 | 30.4 | 6.1 |
| PM 2326 RR | 926 | 40.2 | 31.5 | 1.07 | 34 | 83.1 | 4.8 | 30.9 | 6.1 |
| ST 2454 R | 908 | 41.4 | 32.3 | 1.08 | 35 | 83.6 | 4.7 | 31.5 | 5.8 |
| Acala 1517-99 | 873 | 40.8 | 31.1 | 1.17 | 37 | 84.4 | 4.5 | 35.4 | 4.9 |
| All-Tex Atlas RR | 832 | 38.8 | 30.5 | 1.06 | 34 | 84.1 | 4.7 | 32.3 | 5.8 |
| All-Tex Atlas | 811 | 38.3 | 29.4 | 1.08 | 35 | 83.7 | 4.8 | 30.6 | 6.2 |
| Experimental Average | 970 | 40.9 | 31.9 | 1.08 | 35 | 83.4 | 4.8 | 31.5 | 5.6 |

* LSD(0.05) = 180 lb.; LSD(0.01) = 238 lb.

**Table 10. Irrigated Cotton Variety Test Results near Altus, 2003-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| FiberMax 989 BR | 1847* | 41.2 | 32.1 | 1.17 | 37 | 84.7 | 5.0 | 32.5 | 4.4 |
| ST 4892 BR | 1839 | 43.0 | 33.6 | 1.11 | 36 | 83.9 | 5.2 | 28.2 | 5.9 |
| FiberMax 960 BR | 1789 | 40.8 | 31.2 | 1.19 | 38 | 83.7 | 4.6 | 32.5 | 3.9 |
| DP 458 B/RR | 1752 | 41.0 | 32.4 | 1.15 | 37 | 82.9 | 4.8 | 29.4 | 5.5 |
| ST 5599 BR | 1751 | 40.7 | 32.1 | 1.11 | 36 | 82.8 | 5.0 | 29.5 | 4.6 |
| ST 474 | 1735 | 45.3 | 33.2 | 1.09 | 35 | 83.5 | 5.0 | 27.3 | 6.6 |
| BCG 24R | 1687 | 42.7 | 32.8 | 1.12 | 36 | 84.8 | 4.8 | 29.3 | 6.9 |
| ST 4646 B2R | 1683 | 40.0 | 31.3 | 1.15 | 37 | 82.5 | 5.0 | 30.4 | 5.0 |
| FiberMax 958 | 1666 | 42.0 | 31.5 | 1.17 | 37 | 84.8 | 4.8 | 32.1 | 4.1 |
| DP 555 BG/RR | 1659 | 44.2 | 34.3 | 1.11 | 36 | 83.1 | 4.4 | 28.9 | 5.4 |
| ST 5242 BR | 1625 | 41.3 | 32.2 | 1.10 | 35 | 83.9 | 4.7 | 27.6 | 7.1 |
| BCG 28R | 1509 | 41.6 | 31.3 | 1.17 | 37 | 83.4 | 4.9 | 29.3 | 4.7 |
| ST 2454 R | 1471 | 41.3 | 30.9 | 1.07 | 34 | 83.0 | 4.8 | 28.1 | 6.3 |
| PM 2326 BG/RR | 1460 | 38.6 | 29.5 | 1.08 | 35 | 84.9 | 5.1 | 30.9 | 6.5 |
| NG 2448 R | 1457 | 38.5 | 29.7 | 1.15 | 37 | 84.3 | 4.8 | 29.6 | 6.2 |
| FiberMax 5013 | 1441 | 39.1 | 29.4 | 1.07 | 34 | 83.2 | 5.0 | 30.1 | 6.0 |
| PM 2266 RR | 1426 | 38.5 | 29.0 | 1.09 | 35 | 83.4 | 4.8 | 30.1 | 5.7 |
| PM 2167 RR | 1416 | 39.4 | 29.5 | 1.06 | 34 | 84.1 | 5.0 | 28.5 | 6.7 |
| Tamcot Luxor | 1397 | 40.4 | 29.7 | 1.12 | 36 | 85.5 | 4.5 | 29.2 | 5.2 |
| Acala 1517-99 | 1366 | 38.9 | 29.1 | 1.24 | 40 | 85.2 | 4.2 | 32.9 | 4.9 |
| All-Tex Atlas | 1364 | 37.6 | 28.2 | 1.08 | 35 | 83.3 | 4.9 | 30.2 | 6.9 |
| PM 2326 RR | 1312 | 37.9 | 28.6 | 1.10 | 35 | 84.9 | 5.1 | 30.8 | 6.1 |
| All-Tex Atlas RR | 1310 | 38.1 | 29.2 | 1.05 | 34 | 83.6 | 5.0 | 31.1 | 5.3 |
| Experimental Average | 1564 | 40.5 | 30.9 | 1.12 | 36 | 83.9 | 4.8 | 29.9 | 5.6 |

* LSD(0.05) = 86 lb.; LSD(0.01) = 113 lb.

**Table 11. Irrigated Cotton Variety Test Results near Altus, 2002-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| ST 5599 BR | 1764* | 41.0 | 32.5 | 1.11 | 36 | 83.0 | 5.1 | 31.2 | 4.6 |
| FiberMax 989 BR | 1706 | 40.5 | 31.7 | 1.14 | 37 | 83.8 | 4.9 | 32.8 | 4.3 |
| ST 4892 BR | 1663 | 42.3 | 33.0 | 1.10 | 35 | 83.9 | 5.2 | 29.5 | 5.9 |
| DP 555 BG/RR | 1631 | 44.5 | 34.6 | 1.10 | 35 | 83.2 | 4.5 | 29.9 | 5.0 |
| DP 458 B/RR | 1627 | 40.4 | 31.9 | 1.13 | 36 | 82.9 | 4.9 | 29.9 | 5.6 |
| FiberMax 958 | 1539 | 41.1 | 30.8 | 1.16 | 37 | 85.0 | 4.7 | 33.7 | 3.8 |
| ST 474 | 1491 | 43.7 | 31.9 | 1.10 | 35 | 83.8 | 4.8 | 28.6 | 6.3 |
| FiberMax 5013 | 1319 | 38.6 | 29.2 | 1.07 | 34 | 84.0 | 5.1 | 31.1 | 5.9 |
| ST 2454 R | 1274 | 40.3 | 30.7 | 1.08 | 35 | 83.7 | 4.9 | 29.3 | 6.0 |
| PM 2266 RR | 1268 | 38.0 | 28.6 | 1.09 | 35 | 83.9 | 4.8 | 31.9 | 5.7 |
| Acala 1517-99 | 1250 | 38.1 | 28.4 | 1.24 | 40 | 85.5 | 4.2 | 34.5 | 4.7 |
| Tamcot Luxor | 1236 | 39.6 | 29.0 | 1.11 | 36 | 85.2 | 4.5 | 30.0 | 5.2 |
| PM 2167 RR | 1222 | 38.7 | 28.9 | 1.06 | 34 | 84.1 | 4.9 | 29.4 | 6.5 |
| All-Tex Atlas | 1213 | 37.1 | 27.3 | 1.09 | 35 | 83.8 | 4.7 | 32.3 | 6.5 |
| All-Tex Atlas RR | 1177 | 37.8 | 28.6 | 1.06 | 34 | 83.8 | 4.9 | 32.0 | 5.4 |
| PM 2326 RR | 1171 | 37.9 | 28.6 | 1.09 | 35 | 84.7 | 5.1 | 31.4 | 5.8 |
| Experimental Average | 1409 | 40.0 | 30.4 | 1.11 | 36 | 84.0 | 4.8 | 31.1 | 5.5 |

* LSD(0.05) = 97 lb.; LSD(0.01) = 128 lb.

**Table 12. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2003-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| ST 5599 BR | 1751* | 41.5 | 33.1 | 1.12 | 36 | 82.4 | 4.6 | 27.2 | 4.9 |
| FiberMax 960 BR | 1734 | 41.0 | 32.2 | 1.16 | 37 | 83.7 | 4.6 | 33.3 | 4.0 |
| ST 4646 B2R | 1685 | 41.3 | 32.6 | 1.11 | 36 | 82.2 | 4.9 | 27.6 | 5.5 |
| FiberMax 989 BR | 1676 | 40.9 | 31.5 | 1.15 | 37 | 83.0 | 4.7 | 31.8 | 4.5 |
| DP 555 BG/RR | 1664 | 45.4 | 35.5 | 1.11 | 36 | 81.7 | 4.3 | 27.0 | 5.0 |
| ST 5242 BR | 1604 | 42.6 | 32.8 | 1.09 | 35 | 83.9 | 4.7 | 26.8 | 6.6 |
| Experimental Average | 1686 | 42.1 | 33.0 | 1.12 | 36 | 82.8 | 4.6 | 29.0 | 5.1 |

* LSD(0.05) = 98 lb.; LSD(0.01) = 131 lb.

**Table 13. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2002-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| ST 5599 BR | 1708* | 42.0 | 34.0 | 1.09 | 35 | 82.6 | 4.9 | 29.0 | 4.8 |
| DP 555 BG/RR | 1584 | 45.7 | 36.2 | 1.09 | 35 | 82.2 | 4.6 | 28.3 | 4.8 |
| FiberMax 989 BR | 1481 | 40.4 | 31.6 | 1.12 | 36 | 83.6 | 4.7 | 32.5 | 4.7 |
| Experimental Average | 1591 | 42.7 | 33.9 | 1.10 | 35 | 82.8 | 4.7 | 29.9 | 4.8 |

* LSD(0.05) = 117 lb.; LSD(0.01) = 157 lb.

# Dryland Test Results over Years

**Table 14. Dryland Cotton Variety Test Results near Chickasha, 2003-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| All-Tex Atlas | 494* | 36.2 | 27.1 | 1.07 | 34 | 82.2 | 4.3 | 30.6 | 6.4 |
| FiberMax 5013 | 493 | 36.3 | 27.4 | 1.05 | 34 | 82.9 | 4.6 | 28.5 | 7.0 |
| All-Tex Atlas RR | 480 | 37.0 | 28.3 | 1.01 | 32 | 80.4 | 4.3 | 27.5 | 5.9 |
| PM 2266 RR | 479 | 36.3 | 27.6 | 1.01 | 32 | 81.2 | 4.4 | 28.6 | 6.2 |
| ST 4892 BR | 465 | 41.5 | 31.7 | 1.01 | 32 | 81.9 | 5.0 | 26.3 | 5.7 |
| PM 2167 RR | 455 | 36.6 | 28.1 | 0.99 | 32 | 81.9 | 4.2 | 27.0 | 5.9 |
| PM 2326 BG/RR | 454 | 36.7 | 28.3 | 1.03 | 33 | 81.8 | 4.4 | 28.1 | 6.9 |
| Tamcot Luxor | 427 | 37.7 | 28.3 | 1.01 | 32 | 82.7 | 4.4 | 27.5 | 5.7 |
| FiberMax 958 | 422 | 39.4 | 29.2 | 1.11 | 36 | 81.1 | 4.2 | 30.3 | 3.5 |
| DP 458 B/RR | 403 | 37.5 | 29.3 | 1.13 | 36 | 82.2 | 4.6 | 30.1 | 5.3 |
| ST 2454 R | 398 | 37.7 | 28.9 | 1.08 | 35 | 83.8 | 4.2 | 26.7 | 6.7 |
| PM 2326 RR | 392 | 35.4 | 26.6 | 1.07 | 34 | 82.9 | 4.4 | 29.0 | 6.1 |
| ST 474 | 390 | 41.7 | 30.6 | 1.03 | 33 | 81.4 | 4.8 | 25.6 | 5.9 |
| Acala 1517-99 | 386 | 39.9 | 29.4 | 1.16 | 37 | 82.0 | 4.7 | 30.4 | 4.8 |
| Experimental Average | 438 | 37.8 | 28.6 | 1.05 | 34 | 82.0 | 4.4 | 28.3 | 5.8 |

* LSD(0.05) = 94 lb.; lint yield differences among varieties were not significant at the 0.01 probability level.

**Table 15. Dryland Cotton Variety Test Results near Chickasha, 2002-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| FiberMax 5013 | 488* | 36.9 | 27.9 | 1.04 | 33 | 82.5 | 4.4 | 28.7 | 6.2 |
| All-Tex Atlas | 468 | 37.0 | 27.9 | 1.04 | 33 | 82.0 | 4.3 | 30.8 | 6.2 |
| ST 4892 BR | 465 | 42.5 | 33.1 | 1.00 | 32 | 82.0 | 5.1 | 26.7 | 5.4 |
| All-Tex Atlas RR | 448 | 37.3 | 28.7 | 1.01 | 32 | 80.8 | 4.2 | 28.9 | 5.6 |
| PM 2266 RR | 439 | 35.9 | 27.5 | 1.02 | 33 | 81.7 | 4.1 | 28.7 | 5.9 |
| Tamcot Luxor | 431 | 40.8 | 30.8 | 0.99 | 32 | 81.6 | 4.6 | 27.1 | 5.1 |
| PM 2167 RR | 417 | 37.9 | 29.5 | 0.97 | 31 | 81.6 | 4.3 | 28.1 | 5.4 |
| PM 2326 RR | 401 | 36.8 | 29.3 | 1.06 | 34 | 83.1 | 4.4 | 29.5 | 5.9 |
| DP 458 B/RR | 397 | 38.9 | 30.9 | 1.09 | 35 | 81.8 | 4.8 | 31.6 | 5.1 |
| ST 474 | 393 | 42.3 | 31.8 | 1.03 | 33 | 82.0 | 4.8 | 26.8 | 5.5 |
| FiberMax 958 | 391 | 39.8 | 30.0 | 1.09 | 35 | 81.3 | 4.3 | 29.7 | 3.5 |
| Acala 1517-99 | 379 | 40.2 | 30.1 | 1.15 | 37 | 82.4 | 4.6 | 33.1 | 4.6 |
| ST 2454 R | 372 | 38.7 | 30.1 | 1.05 | 34 | 83.1 | 4.2 | 28.0 | 6.2 |
| Experimental Average | 422 | 38.8 | 29.8 | 1.04 | 33 | 82.0 | 4.5 | 29.1 | 5.4 |

* LSD(0.05) = 91 lb.; lint yield differences among varieties were not significant at the 0.01 probability level.

**Table 16. Dryland Cotton Variety Test Results near Tipton, 2003-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity | | | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | 32's | Ratio | Micronaire | | |
| FiberMax 958 | 366* | 41.9 | 30.7 | 1.01 | 32 | 82.0 | 4.4 | 30.8 | 3.6 |
| BCG 24R | 361 | 41.5 | 32.9 | 1.00 | 32 | 81.8 | 5.5 | 29.3 | 5.5 |
| BCG 28R | 360 | 44.8 | 34.8 | 0.98 | 31 | 80.7 | 5.5 | 26.5 | 4.8 |
| All-Tex Atlas | 359 | 37.7 | 28.4 | 0.97 | 31 | 81.3 | 5.1 | 28.1 | 6.0 |
| PM 2326 RR | 356 | 37.8 | 29.7 | 0.96 | 31 | 82.2 | 4.9 | 30.0 | 4.9 |
| NG 1553 R | 355 | 36.7 | 29.0 | 1.03 | 33 | 82.1 | 4.2 | 28.5 | 5.8 |
| ST 4892 BR | 354 | 42.5 | 32.5 | 1.00 | 32 | 81.3 | 5.3 | 25.9 | 4.9 |
| PM 2167 RR | 354 | 38.8 | 30.3 | 0.92 | 29 | 79.9 | 4.9 | 25.8 | 3.9 |
| Tamcot Luxor | 351 | 40.3 | 29.9 | 0.94 | 30 | 80.8 | 4.6 | 27.2 | 5.5 |
| DP 458 B/RR | 350 | 40.6 | 31.5 | 0.98 | 31 | 80.1 | 4.9 | 28.4 | 4.9 |
| ST 5303 R | 342 | 41.4 | 32.0 | 1.01 | 32 | 82.7 | 5.4 | 29.4 | 4.8 |
| All-Tex Atlas RR | 340 | 37.9 | 29.4 | 0.97 | 31 | 81.5 | 4.6 | 28.2 | 5.7 |
| PM 2266 RR | 339 | 37.8 | 29.0 | 1.03 | 33 | 81.3 | 4.7 | 30.4 | 5.0 |
| ST 2454 R | 339 | 39.9 | 30.8 | 0.97 | 31 | 80.9 | 4.7 | 28.1 | 5.9 |
| FiberMax 5013 | 336 | 37.2 | 27.6 | 0.96 | 31 | 81.4 | 4.8 | 29.0 | 5.9 |
| ST 5599 BR | 332 | 42.3 | 33.3 | 0.95 | 30 | 81.3 | 5.8 | 26.0 | 4.7 |
| Acala 1517-99 | 308 | 39.9 | 29.6 | 1.07 | 34 | 83.0 | 4.5 | 33.7 | 4.6 |
| ST 474 | 305 | 42.0 | 31.4 | 1.01 | 32 | 80.6 | 5.1 | 27.2 | 4.8 |
| NG 2448 R | 284 | 38.8 | 30.3 | 1.00 | 32 | 81.4 | 4.7 | 30.2 | 5.8 |
| Experimental Average | 342 | 40.0 | 30.7 | 0.98 | 31 | 81.4 | 4.9 | 28.5 | 5.1 |

* LSD(0.05) = 58 lb.; LSD(0.01) = 77 lb.

**Table 17. Dryland Cotton Variety Test Results near Tipton, 2002-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity | | | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | 32's | Ratio | Micronaire | | |
| Tamcot Luxor | 380* | 39.1 | 28.5 | 0.97 | 31 | 81.8 | 4.2 | 27.5 | 5.1 |
| PM 2326 RR | 376 | 37.6 | 28.7 | 0.97 | 31 | 82.4 | 4.5 | 30.9 | 4.9 |
| FiberMax 5013 | 374 | 36.8 | 26.7 | 0.98 | 31 | 81.5 | 4.4 | 29.2 | 5.5 |
| PM 2266 RR | 373 | 37.4 | 28.1 | 1.01 | 32 | 81.6 | 4.5 | 30.9 | 5.1 |
| PM 2167 RR | 366 | 37.8 | 28.9 | 0.94 | 30 | 80.4 | 4.5 | 26.0 | 4.0 |
| All-Tex Atlas | 359 | 36.9 | 27.1 | 0.98 | 31 | 81.5 | 4.6 | 29.7 | 5.6 |
| All-Tex Atlas RR | 356 | 37.2 | 28.3 | 0.97 | 31 | 81.6 | 4.4 | 28.2 | 5.4 |
| FiberMax 958 | 356 | 40.5 | 29.0 | 1.03 | 33 | 82.0 | 4.0 | 31.4 | 3.4 |
| ST 2454 R | 354 | 38.8 | 29.4 | 1.00 | 32 | 81.3 | 4.3 | 29.2 | 5.6 |
| DP 458 B/RR | 343 | 39.1 | 29.8 | 1.00 | 32 | 80.2 | 4.5 | 28.8 | 4.5 |
| ST 4892 BR | 341 | 40.8 | 30.5 | 1.02 | 33 | 81.2 | 4.7 | 26.6 | 4.6 |
| ST 5303 R | 337 | 40.0 | 30.2 | 1.02 | 33 | 82.6 | 4.9 | 30.0 | 4.4 |
| ST 474 | 300 | 40.6 | 29.8 | 1.03 | 33 | 81.3 | 4.6 | 27.9 | 4.6 |
| Acala 1517-99 | 297 | 38.9 | 28.3 | 1.09 | 35 | 83.1 | 4.1 | 35.1 | 4.4 |
| Experimental Average | 351 | 38.7 | 28.8 | 1.00 | 32 | 81.6 | 4.5 | 29.4 | 4.8 |

* LSD(0.05) = 50 lb.; LSD(0.01) = 66 lb.

**Table 18. Dryland Cotton Variety Test Results near Perkins, 2003-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| PM 2167 RR | 660* | 40.2 | 31.5 | 0.97 | 31 | 81.9 | 5.1 | 27.2 | 6.1 |
| PM 2145 RR | 626 | 40.8 | 32.6 | 0.97 | 31 | 81.1 | 5.2 | 28.0 | 5.4 |
| PM 2266 RR | 586 | 40.3 | 31.2 | 1.02 | 33 | 81.6 | 5.1 | 28.2 | 6.5 |
| PM 2326 RR | 583 | 39.2 | 30.7 | 1.04 | 33 | 82.2 | 5.0 | 29.5 | 5.6 |
| PM 2326 BG/RR | 555 | 38.5 | 30.2 | 1.01 | 32 | 81.8 | 4.7 | 28.3 | 7.0 |
| ST 4892 BR | 527 | 42.5 | 33.3 | 1.05 | 34 | 81.7 | 5.2 | 27.7 | 5.3 |
| Experimental Average | 590 | 40.3 | 31.6 | 1.01 | 32 | 81.7 | 5.0 | 28.1 | 6.0 |

* LSD(0.05) = 68 lb.; LSD(0.01) = 92 lb.

**Table 19. Dryland Cotton Variety Test Results near Perkins, 2002-2004.**

| Variety | Lint Yield (lb./A) | Lint Percentage | | Fiber Length | Uniformity 32's | Uniformity Ratio | Micronaire | Fiber Strength | Elongation |
|---|---|---|---|---|---|---|---|---|---|
| | | Picked | Pulled | | | | | | |
| PM 2145 RR | 716* | 40.9 | 32.4 | 1.00 | 32 | 82.4 | 5.2 | 29.9 | 5.6 |
| PM 2326 BG/RR | 660 | 38.5 | 30.2 | 1.04 | 33 | 82.9 | 4.9 | 31.3 | 7.0 |
| PM 2326 RR | 648 | 39.1 | 30.4 | 1.06 | 34 | 83.0 | 5.1 | 31.9 | 5.8 |
| Experimental Average | 675 | 39.5 | 31.0 | 1.03 | 33 | 82.8 | 5.1 | 31.0 | 6.1 |

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

# The Oklahoma Cooperative Extension Service
## *Bringing the University to You!*

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.



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