



# Current Report

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## Cotton Variety Tests, Oklahoma – 2007<sup>1</sup>

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Cotton producers in Oklahoma could often 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 select better varieties.

### Materials and Methods

In 2007, two irrigated cotton variety trials were planted on the Southwest Research and Extension Center near Altus. Dryland tests were grown on the South Central Research Station and the Southwest Agronomy Research Station near Chickasha and Tipton, respectively. The dryland trial intended for the Cimarron Valley Research Station near Perkins could not be planted because of excessive rainfall until long after a reasonable planting time. Soil types, planting dates, harvest dates, and cultural treatments for all 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 were determined using the cotton degree-day calculator available at <http://agweather.mesonet.org/crops/default.html>.

The experiments included varieties grown commercially throughout the Cotton Belt as well as a 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 be in the next year or two. The trials were conducted using randomized complete-block experimental designs with four replications. Each plot consisted of four rows 30 feet long with 40 inches between rows. The two center rows in each plot were machine harvested to determine lint yield.

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

Most tests were harvested with strippers. One test at Altus was once-over harvested with a picker. Boll samples were taken from the outside rows of those plots prior to harvest to determine lint percentages and fiber properties. 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 harvested in 2007 are presented in Tables 3 through 6. Some of the varieties grown in those experiments in 2007 were also included in experiments at those locations in the previous year or years. Tables 7 through 10 present average data for varieties included in the Altus trials for 2 years (2006 and 2007) or 3 years (2005 through 2007). Because they were not harvested in 2006 (due to a severe drought), the Chickasha results (Table 11) and the Tipton results (Table 12) were averaged over years 2005 and 2007 only. The Perkins results were reported over 2 years (2005-2006) in Table 13.

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 7 through 13). 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 producers' 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, micronaire, 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. Micronaire 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, lint percentages, fiber length, uniformity ratio, fiber strength, and elongation are generally more desirable than lower ones. Micronaire is acceptable anywhere within the "base" range of 3.5 to 4.9 inclusive. The "premium" range is between 3.7 and 4.2 inclusive. If micronaire 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, the 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 is 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 2 to 3 years, the better **yielding** cotton varieties (in alphabetical order) for South Central and Southwestern Oklahoma appear to be:

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<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 Council 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>	
	<i>Stripper Harvest</i>	<i>Picker Harvest</i>
AFD 3511 RR	DP 143 B2RF	DP 143 B2RF
CG 3020 B2RF	DP 455 BG/RR	DP 164 B2RF
CG 3520 B2RF	DP 515 BG/RR	DP 445 BG/RR
DG 2100 B2RF	DP 555 BG/RR	DP 455 BG/RR
DG 2520 B2RF	FM 960 B2R	FM 960 B2R
DP 455 BG/RR	PHY 310 R	PHY 370 WR
FM 958	PHY 480 WR	PHY 425 RF
FM 960 B2R	ST 4892 BR	PHY 480 WR
NG 3550 RF	ST 5327 B2RF	PHY 485 WRF
PHY 310 R	ST 5599 BR	ST 4554 B2RF
PHY 370 WR		ST 5599 BR
PM 2326 RR		
ST 4892 BR		

Producers in North Central Oklahoma should refer to Table 13.

## Acknowledgments

The authors wish to gratefully acknowledge the many contributions to this research made by Toby S. Kelley (Assistant Superintendent) of the Southwest Research and Extension Center and the Southwest Agronomy Research Stations, by Lawrence B. Hurt (Foreman) of the South Central Research Station, and by Rick L. Matheson (Former Superintendent) of the Cimarron Valley Research Station. Computer expertise was graciously provided by F. Michael Bayles.

### Note:

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

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

## Seed Sources

AFD of Bayer CropScience  
5224 85<sup>th</sup> Street  
Lubbock, TX 79424

All-Tex Cotton Seed Co.  
P.O. Box 1057  
Levelland, TX 79336

Americot  
4010 82<sup>nd</sup> Street  
Suite 250  
Lubbock, TX 79423

Bayer CropScience  
3223 S. Loop 289  
Suite 325  
Lubbock, TX 79423

Beltwide Cotton Genetics  
574 Greentree Cove  
Suite 101  
Collierville, TN 38017

Croplan Genetics  
8700 Trail Lake Drive West  
Suite 100  
Memphis, TN 38125

Delta and Pine Land Co.  
1301 E. 50th Street  
Lubbock, TX 79404

Delta and Pine Land Co.  
P.O. Box 157  
Scott, MS 38772

Monsanto Co.  
800 N. Lindbergh Blvd.  
St. Louis, MO 63167

Phytogen Seed Co. LLC  
1832 Swynford Lane  
Collierville, TN 38017

Stoneville Pedigreed Seed  
6025 85th Street  
Lubbock, TX 79424

United Agriculture Products (UAP)  
Dyna-Gro Seed  
101 E. Corporate Drive  
Suite 180  
Lewisville, TX 75067

**Table 1. Locations, Soil Types, Planting Dates, Harvest Dates, and Cultural Treatments for the Cotton Variety Tests in Oklahoma, 2007.**

<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	Altus	Hollister clay loam <sup>3</sup>	May 18	October 23	275 lbs./A 40-10-0 5 irrigations 3 insecticide applications 1 plant growth regulator application 1 defoliant + boll opener + nonionic surfactant 1 defoliant + crop oil
4	Altus (Picker Test)	Hollister clay loam <sup>3</sup>	May 18	October 24	275 lbs./A 40-10-0 5 irrigations 3 insecticide applications 1 plant growth regulator application 1 defoliant + boll opener + nonionic surfactant 1 defoliant + crop oil
5	Chickasha	Reinach silt loam <sup>4</sup>	June 7	November 7	100 lbs./A 46-0-0 No irrigations No insecticide applications 1 defoliant + boll opener
6	Tipton	Tipton silt loam <sup>5</sup>	May 16	October 27	150 lbs./A 46-0-0 No irrigations 2 insecticide applications 1 plant growth regulator application 1 defoliant + boll opener + nonionic surfactant 1 defoliant + crop oil

<sup>1</sup> This information for Tables 7 through 13 for 2005 and 2006 may be found in the previous variety test reports CR-2094 (0406) and CR-2094 (0407), respectively.

<sup>2</sup> All experiments received preplant incorporated (PPI) herbicides. Experiments at Altus and Tipton also received preemergence (PRE) herbicides. The experiment at Chickasha received a postemergence (POST) herbicide. All seed were pretreated with fungicides of that company's choice.

<sup>3</sup> Fine, smectitic, thermic Typic Haplustert.

<sup>4</sup> Coarse-silty, mixed, superactive, thermic Pachic Haplustoll.

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

**Table 2. Weather Summaries for Growing Seasons at Each Location, 2007.<sup>1,2</sup>**

Month	Average Maximum Temp. (°F)	Average Minimum Temp. (°F)	Average 4-inch Bare Soil Temp. (°F)	Number of Days Where Max. Temp. >100°F	Number of Days Where Min. Temp. <60°F	Number of Days Where Min. Temp. >85°F	DD60	Rain (in.)
<b>Altus</b>								
May	81	61	72	0	7	0	333	2.73
June	87	66	80	0	2	0	499	5.35
July	91	69	85	0	0	0	617	1.38
August	93	72	87	0	0	0	689	3.23
September	88	65	81	0	4	0	486	0.29
October	81	51	70	0	21	0	236	1.26
TOTAL				0	34	0	2,860	14.24
<b>Chickasha</b>								
May	79	60	72	0	13	0	304	8.24
June	86	67	78	0	2	0	490	15.74
July	91	69	86	0	0	0	607	4.99
August	94	71	89	3	0	0	706	5.83
September	87	63	81	0	7	0	461	2.07
October	78	50	67	0	22	0	198	2.69
TOTAL				3	44	0	2,766	39.56
<b>Perkins</b>								
May	79	61	73	0	6	0	311	10.14
June	85	67	77	0	2	0	482	13.78
July	90	70	83	0	0	0	616	6.91
August	94	73	88	3	0	0	724	2.28
September	85	64	78	0	6	0	437	2.54
October	81 <sup>3</sup>	58 <sup>3</sup>	66	0 <sup>3</sup>	11 <sup>3</sup>	0 <sup>3</sup>	--- <sup>3</sup>	3.57
TOTAL				3 <sup>3</sup>	25 <sup>3</sup>	0 <sup>3</sup>	2,570 <sup>3</sup>	39.22
<b>Tipton</b>								
May	80	61	75	0	8	0	333	2.29
June	87	67	81	0	1	0	511	9.72
July	91	70	86	0	0	0	634	1.38
August	95	72	88	5	0	0	727	3.30
September	90	65	81	0	4	0	524	1.04
October	82	52	70	0	20	0	263	0.62
TOTAL				5	33	0	2,992	18.35

<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>.

<sup>2</sup> This information for 2005 and 2006 may be found in the previous variety test reports CR-2094 (0406) and CR-2094 (0407), respectively.

<sup>3</sup> Mesonet atmospheric temperature data were unavailable at this location for October 18-30.

# Irrigated Test Results in 2007

**Table 3. Irrigated Cotton Variety Test Results near Altus, 2007.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
PM 3225 B2RF	2123*	43.1	34.3	1.06	34	82.6	5.2	32.0	9.3
PM 3535 BG/RR	2000	42.5	34.6	1.21	39	82.3	4.6	29.0	7.2
ST 5458 B2RF	1983	42.2	34.4	1.12	36	80.7	5.5	27.7	7.9
ST 5599 BR	1979	41.3	33.6	1.01	32	79.3	5.3	27.8	8.0
FM 9150 F	1971	41.4	31.1	1.22	39	82.2	4.4	32.0	6.4
DP 141 B2RF	1965	42.4	32.9	1.17	37	84.4	4.8	30.5	7.7
DP 143 B2RF	1962	40.0	31.1	1.21	39	81.7	4.2	30.9	7.5
FM X4327 B2F	1926	41.5	32.9	1.19	38	82.4	4.7	29.2	6.4
PHY 485 WRF	1911	41.6	32.3	1.11	36	82.9	5.4	30.6	9.2
DP 515 BG/RR	1889	42.0	33.4	1.10	35	80.6	5.3	27.8	7.6
PHY 480 WR	1862	40.5	31.6	1.11	36	83.5	5.4	30.3	9.5
FM 9180 B2F	1843	40.8	31.1	1.15	37	82.5	5.0	33.3	7.3
FM 960 B2R	1839	40.2	31.2	1.17	37	81.7	4.7	31.8	6.5
FM 9058 F	1824	40.3	30.0	1.19	38	81.7	4.7	28.5	7.2
DP 555 BG/RR	1824	44.8	35.2	1.14	37	80.6	4.7	29.1	7.2
DP 455 BG/RR	1815	42.3	32.6	1.14	37	82.9	4.8	32.3	7.2
FM 9060 F	1809	41.2	30.4	1.21	39	82.0	4.5	32.3	7.0
FM 9063 B2F	1794	38.4	28.8	1.24	40	84.1	4.6	30.7	7.2
PHY 315 RF	1792	42.3	31.3	1.11	36	80.7	4.4	30.5	8.0
CG 3035 RF	1790	42.8	33.3	1.14	37	85.6	4.5	30.4	8.7
CTO 7550 B2RF	1787	40.9	32.3	1.08	35	83.1	5.3	29.1	9.9
DP 174 RF	1783	45.0	32.9	1.23	39	83.8	4.1	29.4	8.2
DP 121 RF	1764	41.6	32.2	1.09	35	83.8	5.3	29.8	8.8
ST 6351 B2RF	1758	38.7	31.0	1.18	38	83.4	5.2	29.5	7.7
FM 958	1756	41.2	30.3	1.16	37	83.2	4.8	34.8	6.8
PHY 375 WRF	1740	42.4	32.3	1.07	34	81.5	5.2	28.7	8.4
ST 4554 B2RF	1739	39.8	30.7	1.18	38	84.1	5.0	30.9	9.3
PHY 425 RF	1739	40.3	30.6	1.17	37	82.9	5.3	30.6	8.8
CTO 7343 RF	1711	43.1	32.7	1.15	37	84.2	4.4	28.4	8.7
ST 4427 B2RF	1708	40.6	31.2	1.07	34	81.5	5.2	28.5	7.7
DP 164 B2RF	1695	37.4	28.5	1.17	37	83.3	4.8	29.8	7.4
ST 4498 B2RF	1690	39.7	30.3	1.11	36	84.0	5.0	32.0	9.5
PHY 310 R	1679	41.9	31.9	1.07	34	83.1	5.1	29.9	8.6
PM 2326 RR	1673	38.7	30.5	1.05	34	84.4	5.1	30.9	8.6
ST 4892 BR	1669	40.9	31.2	1.12	36	82.6	5.6	29.0	8.3
DG 2383 RF	1665	40.3	30.6	1.18	38	84.5	4.4	29.7	7.9
PHY 370 WR	1659	40.6	31.5	1.12	36	81.5	5.3	29.0	8.3
DP 161 B2RF	1635	39.5	29.8	1.16	37	81.1	4.5	30.6	7.8
DP 445 BG/RR	1626	41.8	32.4	1.16	37	83.2	4.9	30.2	8.9
DG 2490 B2RF	1622	38.9	29.1	1.09	35	82.1	4.3	27.0	9.3
ST 5327 B2RF	1615	40.4	30.9	1.15	37	85.0	4.8	30.4	8.6
ST 4596 B2RF	1612	38.6	29.4	1.18	38	83.2	5.0	29.0	9.6
PM 2266 RR	1581	38.4	29.0	1.07	34	84.5	5.1	32.0	8.1
CG 4020 B2RF	1572	39.8	29.1	1.19	38	84.2	4.7	25.6	8.3
BCG 24R	1555	39.5	30.7	1.18	38	83.2	4.6	28.7	8.2
All-Tex Atlas RR	1547	38.2	29.0	1.12	36	83.9	4.6	31.2	8.0
DG 2520 B2RF	1545	39.1	29.0	1.20	38	80.1	4.7	25.3	8.1
ST 4357 B2RF	1542	39.6	29.4	1.16	37	82.3	5.2	27.2	8.2

(Table 3. continued on next page)

**Table 3. (continued)**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
PM 2280 BG/RR	1524	39.3	31.3	1.03	33	81.7	5.1	30.3	8.3
AFD 3511 RR	1518	37.5	28.7	1.07	34	81.5	5.0	26.9	8.4
All-Tex Apex B2/RF	1514	39.1	28.5	1.19	38	82.5	4.4	26.4	8.3
PM 2167 RR	1505	39.0	29.1	1.01	32	83.2	4.9	29.5	7.9
FM 955 LLB2	1500	38.4	28.7	1.19	38	82.6	5.0	28.2	7.5
CG 3220 B2RF	1491	39.9	30.1	1.16	37	81.7	5.1	30.0	8.7
CG 3020 B2RF	1479	39.0	29.5	1.10	35	82.3	5.0	26.4	8.2
AM 1532 B2RF	1468	39.9	28.9	1.18	38	82.1	4.6	27.6	7.6
FM 5044 RR	1468	35.5	26.7	1.17	37	83.2	4.3	29.4	8.6
DG 2100 B2RF	1453	38.7	29.3	1.12	36	83.9	4.7	28.6	8.2
PHY 72	1444	38.0	28.2	1.23	39	83.2	4.1	35.1	8.6
All-Tex Excess RR	1415	37.0	28.0	1.09	35	83.3	4.7	32.1	8.1
NG 2448 R	1411	35.7	27.2	1.10	35	80.0	4.8	28.8	8.5
All-Tex 65018 RF	1404	37.7	28.1	1.06	34	81.1	5.3	28.8	8.5
DG 2242 B2RF	1396	39.2	29.0	1.18	38	85.2	5.2	26.5	8.0
All-Tex 65027 RF	1393	37.1	27.5	1.19	38	82.3	4.7	26.7	7.9
AM 1622 B2RF	1382	36.0	26.0	1.20	38	84.2	4.7	27.9	8.0
All-Tex Summit B2/RF	1362	37.4	28.1	1.02	33	82.0	4.9	24.7	9.0
All-Tex 45002 RF	1360	37.8	27.7	1.15	37	83.3	4.7	34.7	8.0
All-Tex 55066 B2/RF	1356	38.9	28.6	1.11	36	83.5	5.3	23.4	9.3
CG 3520 B2RF	1355	38.8	28.5	1.13	36	83.5	4.9	27.6	8.5
All-Tex Marathon B2/RF	1328	36.9	27.5	1.13	36	81.7	4.8	27.4	8.4
All-Tex 45001 RF	1302	37.7	28.2	1.01	32	83.4	5.5	32.8	8.7
ST 4678 B2RF	1260	38.4	29.2	1.20	38	84.0	5.0	32.4	7.5
Experimental Average	1648	39.9	30.4	1.14	37	82.7	4.9	29.5	8.2

\* LSD (0.05) = 164 lbs.; LSD (0.01) = 216 lbs.

**Table 4. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2007.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
FM 960 B2R	1631*	41.0	31.7	1.10	35	80.9	5.1	28.5	7.2
PHY 485 WRF	1609	41.1	30.8	1.12	36	83.7	5.2	29.9	10.1
ST 5599 BR	1588	42.1	34.3	1.02	33	80.6	5.6	27.7	8.3
DP 164 B2RF	1586	40.2	30.3	1.18	38	82.8	4.8	30.5	8.2
PHY 425 RF	1584	40.4	30.4	1.14	37	83.5	5.1	29.9	9.5
DP 143 B2RF	1565	39.9	30.7	1.19	38	81.9	4.5	29.5	8.1
PHY 375 WRF	1515	42.7	32.0	1.11	36	80.6	4.8	28.1	8.4
PHY 370 WR	1498	40.8	31.2	1.19	38	84.2	5.0	29.4	7.8
FM 9150 F	1497	41.7	32.1	1.19	38	82.2	4.8	33.2	7.0
ST 6351 B2RF	1494	39.6	30.8	1.13	36	83.7	5.0	27.0	8.8
ST 4498 B2RF	1485	41.3	31.7	1.11	36	82.6	5.2	29.4	9.9
PHY 480 WR	1467	37.9	29.3	1.19	38	84.3	5.1	31.7	9.3
DP 141 B2RF	1454	39.9	29.8	1.19	38	80.4	3.8	30.1	7.8
PHY 315 RF	1439	41.8	30.7	1.15	37	84.0	4.5	26.9	8.0
ST 4427 B2RF	1436	40.1	30.4	1.18	38	81.6	4.9	29.0	7.8
PHY 310 R	1433	41.7	32.9	1.09	35	83.5	5.3	29.1	9.2
DP 455 BG/RR	1431	42.8	33.6	1.10	35	80.5	4.8	31.8	7.8
FM 9180 B2F	1420	40.6	30.6	1.21	39	82.8	4.8	29.6	7.8
CTO 7550 B2RF	1415	40.7	31.4	1.14	37	84.7	4.7	30.3	8.9
FM 9063 B2F	1382	38.7	29.4	1.24	40	83.2	4.7	30.8	7.1
CG 3035 RF	1363	41.2	31.4	1.18	38	82.9	3.8	27.7	9.2
DG 2383 RF	1343	39.3	28.6	1.19	38	85.3	4.5	30.0	8.0
ST 4596 B2RF	1333	39.5	30.9	1.21	39	83.2	4.9	28.2	9.1
DP 445 BG/RR	1330	40.8	31.7	1.05	34	81.7	5.0	31.0	10.3
ST 4554 B2RF	1329	40.6	31.1	1.14	37	83.7	5.1	33.1	9.6
DP 161 B2RF	1321	39.6	29.9	1.19	38	83.0	5.0	33.5	8.2
CTO 7343 RF	1314	41.5	32.6	1.15	37	82.9	4.1	26.4	9.1
FM 988 LLB2	1308	39.4	30.1	1.14	37	81.5	5.2	29.8	7.2
ST 5458 B2RF	1306	41.5	33.3	1.12	36	81.5	5.1	30.2	8.3
FM 1880 B2F	1290	38.3	29.2	1.23	39	83.1	4.1	26.8	8.7
CG 4020 B2RF	1287	39.5	29.2	1.12	36	82.0	5.0	27.8	9.2
ST 5327 B2RF	1283	40.6	30.6	1.16	37	84.2	4.8	30.0	9.0
CG 3220 B2RF	1223	40.4	30.6	1.11	36	82.0	4.9	27.4	9.6
ST 4357 B2RF	1166	40.0	29.2	1.13	36	83.0	4.8	25.1	8.7
DG 2520 B2RF	1158	38.9	28.2	1.16	37	81.5	4.5	26.0	7.8
CG 3020 B2RF	1155	38.1	28.6	1.13	36	83.6	4.7	25.8	9.1
DG 2490 B2RF	1130	37.9	28.2	1.09	35	82.8	4.2	28.0	9.2
All-Tex Summit B2/RF	1101	37.4	27.8	1.09	35	82.2	4.5	25.8	8.6
DG 2100 B2RF	1091	39.5	30.3	1.10	35	83.1	5.0	25.3	8.9
CG 3520 B2RF	1090	38.9	28.8	1.17	37	84.4	5.0	25.3	8.8
DG 2242 B2RF	1086	39.1	29.0	1.14	37	83.7	4.8	28.1	8.8
All-Tex Marathon B2/RF	1060	36.3	27.4	1.16	37	83.0	4.3	26.3	9.0
Experimental Average	1357	40.1	30.5	1.15	37	82.8	4.8	28.8	8.6

\* LSD (0.05) = 135 lbs.; LSD (0.01) = 179 lbs.



# Dryland Test Results in 2007

Table 5. Dryland Cotton Variety Test Results near Chickasha, 2007.

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
FM 9058 F	1244*	42.6	36.4	1.15	37	83.2	4.9	26.5	7.1
CG 3220 B2RF	1170	41.5	30.6	1.17	37	81.8	4.6	27.6	9.0
CTO 7550 B2RF	1137	43.0	32.9	1.18	38	85.0	4.7	30.2	9.3
DG 2242 B2RF	1102	42.3	31.5	1.15	37	82.8	4.7	27.0	9.2
CG 3035 RF	1098	44.0	33.3	1.07	34	81.1	5.0	29.1	9.3
FM 958	1095	43.0	32.3	1.20	38	83.2	4.8	31.6	7.3
AM 1532 B2RF	1054	42.7	31.4	1.14	37	80.8	4.8	29.0	8.3
DG 2490 B2RF	1043	39.8	30.2	1.08	35	82.6	4.2	27.3	9.5
AFD 5064 F	1038	39.9	30.5	1.02	33	83.2	5.1	29.4	9.0
PHY 375 WRF	1030	44.7	34.3	1.11	36	81.0	4.9	30.1	8.1
PHY 310 R	1015	43.6	34.5	1.04	33	82.3	5.0	30.4	8.6
ST 4892 BR	1001	42.7	32.4	1.19	38	83.9	5.1	31.9	8.1
DG 2100 B2RF	997	43.0	32.6	1.15	37	84.3	4.6	28.8	8.4
CG 4020 B2RF	984	40.4	31.0	1.21	39	83.4	4.7	28.2	8.5
PHY 425 RF	980	42.4	32.4	1.16	37	83.4	5.0	31.8	8.5
PM 2326 RR	977	39.4	30.2	1.10	35	85.2	5.2	32.3	8.3
PM 3535 BG/RR	977	43.6	33.8	1.18	38	82.0	4.8	32.9	7.6
All-Tex Marathon B2/RF	975	39.1	29.6	1.13	36	81.5	4.5	27.2	8.3
CTO 7343 RF	970	44.3	33.6	1.13	36	84.4	4.7	29.1	9.4
DP 147 RF	963	41.5	32.5	1.21	39	82.2	4.6	29.4	7.6
DG 2520 B2RF	958	41.6	31.3	1.15	37	81.8	4.7	24.4	8.3
FM 955 LLB2	949	40.7	31.4	1.09	35	81.3	5.5	33.0	7.2
All-Tex Atlas RR	948	40.3	31.3	1.06	34	82.8	4.9	32.5	8.9
FM 960 B2R	945	44.6	27.5	1.11	36	79.4	4.9	28.9	7.2
CG 3520 B2RF	945	41.8	31.0	1.17	37	81.3	4.7	28.4	8.3
AFD 5065 B2F	937	38.9	29.6	1.07	34	80.4	4.9	30.3	8.4
PHY 480 WR	937	41.1	31.2	1.15	37	83.9	4.7	30.2	9.0
BCG 24R	933	40.2	31.4	1.13	36	83.3	4.9	32.1	8.1
DP 455 BG/RR	930	45.4	35.4	1.09	35	80.7	4.7	30.4	7.4
AM 1622 B2RF	928	40.4	30.1	1.18	38	82.9	4.4	27.9	8.6
DP 555 BG/RR	924	41.4	30.9	1.19	38	84.0	4.5	33.3	6.8
DP 161 B2RF	921	41.6	31.5	1.16	37	82.4	4.6	34.8	7.7
PHY 370 WR	915	44.3	33.6	1.12	36	82.7	5.1	30.4	8.5
AFD 3511 RR	904	39.3	30.2	1.07	34	81.1	5.1	30.3	8.0
NG 2448 R	902	40.1	31.4	1.10	35	85.2	5.0	32.1	8.2
PM 2266 RR	901	38.8	29.7	1.08	35	83.4	5.0	32.2	9.2
All-Tex Arid B2/RF	900	38.4	29.7	1.06	34	83.6	4.9	31.1	8.7
FM 5044 RR	897	39.9	30.1	1.07	34	81.6	4.5	30.1	8.9
PHY 485 WRF	892	42.4	31.4	1.09	35	84.1	4.8	30.4	10.1
PHY 315 RF	883	44.9	33.8	1.09	35	81.4	4.6	27.7	8.4
FM 9063 B2F	878	40.1	30.6	1.12	36	81.5	4.6	30.8	7.4
CG 3020 B2RF	878	40.9	30.9	1.10	35	83.2	4.5	28.7	8.9
PHY 72	874	41.6	31.1	1.14	37	82.9	4.9	34.3	8.5
DP 141 B2RF	863	40.1	30.3	1.25	40	81.7	4.3	30.9	7.3
DG 2383 RF	860	42.1	32.1	1.18	38	83.0	4.8	30.6	7.6
DP 164 B2RF	834	40.7	31.1	1.15	37	82.3	4.8	31.5	7.2
PM 2167 RR	782	39.9	30.4	1.02	33	83.6	5.1	30.9	8.3
All-Tex 65016 RF	761	40.2	30.1	1.19	38	82.3	5.0	31.4	8.6
DP 143 B2RF	749	40.8	31.4	1.18	38	80.5	4.3	30.0	8.0
All-Tex Excess RR	715	37.7	29.0	1.07	34	81.8	4.8	31.9	9.0
Experimental Average	950	41.5	31.5	1.13	36	82.5	4.8	30.2	8.3

\* LSD (0.05) = 191 lbs.; LSD (0.01) = 253 lbs.

**Table 6. Dryland Cotton Variety Test Results near Tipton, 2007.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
FM 9058 F	1141*	44.8	33.3	1.10	35	78.7	5.2	24.6	6.6
PHY 370 WR	1109	45.7	35.0	1.03	33	81.3	5.4	29.2	7.9
PM 3535 BG/RR	1107	47.2	36.5	1.10	35	80.4	5.5	26.4	7.0
DP 174 RF	1076	45.8	33.8	1.08	35	79.8	5.0	29.7	7.4
CG 3035 RF	1075	48.7	37.3	1.08	35	81.2	5.3	27.4	9.2
ST 5458 B2RF	1071	43.5	33.7	1.03	33	78.7	5.1	28.8	7.1
PHY 315 RF	1053	45.8	34.2	1.04	33	82.6	5.8	28.4	7.9
FM 958	1046	43.5	32.7	1.08	35	81.0	5.5	30.6	6.0
BCG 24R	1036	40.3	31.5	1.01	32	81.7	4.9	28.8	8.1
ST 5283 RF	1030	44.5	33.9	1.02	33	78.5	4.9	31.8	8.1
NG 3410 RF	1027	43.7	33.6	1.09	35	80.1	4.7	26.2	7.1
ST 5327 B2RF	1020	45.7	35.7	0.95	30	82.2	5.3	28.1	8.3
DP 141 B2RF	1008	41.8	31.1	1.11	36	79.0	4.7	28.3	8.1
AFD 3511 RR	998	41.6	32.0	0.98	31	78.6	5.6	27.6	7.4
NG 3348 B2RF	996	43.8	34.6	1.04	33	79.1	4.9	26.6	7.3
CG 3220 B2RF	994	42.9	33.4	0.99	32	80.6	5.8	27.6	8.0
DP 555 BG/RR	988	47.3	37.2	1.01	32	78.8	5.5	27.6	7.0
NG 3550 RF	983	42.9	33.2	1.01	32	78.8	5.2	29.7	8.0
DP 455 BG/RR	981	43.5	34.9	1.10	35	80.4	4.8	30.5	7.1
ST 4892 BR	979	44.8	34.2	0.99	32	80.4	5.5	25.7	7.6
ST 4427 B2RF	974	46.3	35.8	0.97	31	79.3	5.5	27.8	7.6
FM 5044 RR	971	40.2	31.2	1.01	32	80.6	5.0	28.4	9.0
FM 960 B2R	963	43.7	33.2	1.05	34	82.0	5.6	30.4	6.6
FM 9063 B2F	958	43.3	32.5	1.10	35	80.2	5.1	30.4	7.3
PM 2326 RR	949	40.8	31.8	1.00	32	82.8	5.5	31.1	7.8
AFD 5064 F	949	43.4	33.6	0.99	32	82.3	5.3	27.8	8.1
PM 2266 RR	941	40.8	31.5	0.98	31	78.4	5.3	29.3	8.1
ST 6351 B2RF	941	43.5	33.0	1.05	34	81.6	5.3	29.6	7.8
PHY 375 WRF	939	44.5	33.0	1.01	32	78.3	5.0	28.5	7.5
FM 955 LLB2	939	41.3	31.0	1.06	34	81.0	5.5	26.7	6.6
ST 4664 RF	935	44.0	35.6	1.11	36	82.6	5.3	32.3	9.2
All-Tex Atlas RR	935	41.3	31.9	0.90	29	78.4	4.8	28.6	8.3
CTO 7550 B2RF	927	42.7	32.2	1.09	35	80.1	5.3	29.5	8.1
CTO 7343 RF	926	45.4	34.4	0.98	31	80.8	5.1	29.5	8.9
All-Tex Marathon B2/RF	924	41.9	32.0	1.04	33	80.6	5.0	22.7	8.2
CG 3020 B2RF	924	43.3	33.2	0.99	32	81.1	5.1	25.9	7.6
NG 3273 B2RF	919	43.3	31.9	1.02	33	77.1	5.1	24.1	8.2
AFD 5065 B2F	918	39.3	29.9	1.07	34	80.5	5.3	25.5	8.6
ST 4498 B2RF	918	44.8	34.1	1.01	32	81.3	5.1	31.4	9.1
PHY 485 WRF	916	43.0	32.4	1.00	32	82.2	5.4	30.8	8.7
NG 2448 R	912	40.0	31.5	1.02	33	80.8	4.6	31.6	8.1
ST 4357 B2RF	910	41.6	30.9	1.04	33	81.4	5.2	26.2	8.0
PHY 480 WR	904	40.3	31.1	1.02	33	81.5	5.1	30.3	9.2
AM 1532 B2RF	901	43.4	32.6	1.04	33	79.7	5.3	23.1	8.6
PHY 310 R	899	43.1	32.7	1.09	35	80.8	5.4	29.2	7.2
DP 143 B2RF	887	40.2	31.0	1.16	37	82.3	5.0	28.7	7.2
DG 2383 RF	885	41.2	31.5	1.01	32	81.7	4.7	30.9	7.9
All-Tex Excess RR	882	40.1	30.6	1.00	32	82.4	5.2	31.2	7.6
ST 4678 B2RF	880	39.5	29.9	1.02	33	80.9	5.1	27.8	7.6
DG 2520 B2RF	879	42.4	32.0	1.04	33	79.8	5.1	25.8	7.6
DP 161 B2RF	879	40.1	30.1	1.15	37	83.1	4.9	30.2	7.5

(Table 6. continued on next page)

**Table 6. (continued)**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
PHY 425 RF	877	42.4	31.1	1.07	34	80.0	5.7	26.6	9.0
AM 1622 B2RF	877	39.4	29.3	1.07	34	82.2	5.0	25.9	8.1
DG 2100 B2RF	876	41.0	31.1	1.01	32	79.3	4.8	28.4	7.9
CG 4020 B2RF	875	42.5	32.2	1.07	34	80.8	5.0	28.2	7.5
DP 164 B2RF	859	39.2	29.8	1.16	37	82.4	5.1	29.0	6.9
CG 3520 B2RF	851	39.8	29.8	1.09	35	81.6	4.4	26.5	7.9
ST 4554 B2RF	850	41.7	30.7	1.11	36	82.2	5.3	34.6	8.8
DP 147 RF	848	41.7	31.7	1.08	35	77.2	5.2	29.1	7.3
DG 2242 B2RF	842	41.6	29.9	1.10	35	81.3	4.9	25.8	8.4
PM 2167 RR	835	38.0	29.2	0.96	31	81.9	4.7	24.6	7.3
ST 4596 B2RF	821	41.1	31.2	1.04	33	80.0	5.2	31.8	8.6
All-Tex 65016 RF	792	39.4	28.9	1.09	35	81.8	4.6	30.8	8.2
DG 2490 B2RF	745	36.8	27.0	1.05	34	79.5	4.2	31.1	8.7
All-Tex Arid B2/RF	737	36.7	27.8	1.00	32	81.1	4.3	26.3	7.9
PHY 72	649	39.8	27.9	1.10	35	84.0	4.4	38.6	8.0
Experimental Average	934	42.4	32.2	1.04	33	80.6	5.1	28.6	7.9

\* LSD (0.05) = 160 lbs.; LSD (0.01) = 210 lbs.

# Irrigated Test Results over Years

Table 7. Irrigated Cotton Variety Test Results near Altus, 2006-2007.

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
ST 5599 BR	1927*	41.1	33.3	1.06	34	81.0	5.4	28.5	7.1
DP 455 BG/RR	1796	43.5	33.8	1.14	37	83.1	4.7	32.0	6.6
DP 515 BG/RR	1785	41.9	33.2	1.10	35	81.5	5.4	27.9	6.7
ST 4892 BR	1771	42.7	32.8	1.10	35	83.1	5.6	28.9	7.4
DP 143 B2RF	1770	40.1	31.2	1.21	39	82.2	4.4	30.4	6.5
PHY 310 R	1766	43.7	33.6	1.07	34	82.1	5.2	28.6	7.8
ST 5327 B2RF	1765	43.1	32.9	1.12	36	83.6	4.9	30.1	8.2
FM 960 B2R	1748	41.0	31.5	1.16	37	82.3	5.0	31.9	5.8
PHY 480 WR	1744	40.7	31.4	1.13	36	84.3	5.2	32.1	8.5
DP 555 BG/RR	1730	45.5	35.4	1.11	36	81.0	5.0	29.5	6.3
PHY 425 RF	1717	40.9	31.2	1.18	38	84.2	5.1	31.1	8.2
PHY 485 WRF	1715	41.7	31.8	1.12	36	83.9	5.3	32.8	8.1
FM 9058 F	1711	40.7	30.2	1.19	38	82.3	4.7	30.1	5.9
ST 4427 B2RF	1699	40.6	30.9	1.11	36	82.4	4.6	30.4	6.8
ST 4554 B2RF	1698	40.7	31.2	1.16	37	84.1	5.0	32.1	8.7
DP 445 BG/RR	1696	43.5	33.8	1.13	36	83.0	5.1	30.9	8.1
PHY 370 WR	1672	41.4	32.0	1.11	36	82.6	5.0	30.6	7.6
FM 9063 B2F	1671	39.8	29.9	1.18	38	83.3	4.7	31.3	6.8
FM 958	1660	41.4	30.8	1.14	37	83.9	4.9	34.1	6.0
CG 4020 B2RF	1626	39.6	29.3	1.19	38	83.6	4.5	26.5	7.6
DG 2520 B2RF	1624	40.4	30.0	1.16	37	81.7	4.7	25.9	7.1
DP 164 B2RF	1618	39.4	30.2	1.19	38	83.0	4.6	31.2	6.9
ST 4357 B2RF	1603	39.6	29.5	1.18	38	83.2	4.9	27.7	7.4
DG 2100 B2RF	1602	40.7	30.6	1.08	35	83.3	4.8	27.0	7.8
BCG 24R	1591	39.8	31.4	1.14	37	83.0	4.7	29.1	7.5
CG 3020 B2RF	1575	40.1	30.2	1.10	35	82.7	4.9	25.6	7.3
All-Tex Apex B2/RF	1568	39.8	29.2	1.20	38	83.2	4.5	27.7	7.2
PM 2326 RR	1553	38.2	30.0	1.07	34	84.9	5.1	32.8	7.4
DG 2242 B2RF	1540	40.3	30.0	1.16	37	84.3	5.0	27.9	7.5
PM 2266 RR	1530	38.3	28.9	1.08	35	84.3	5.2	33.2	7.5
All-Tex Summit B2/RF	1530	39.7	29.8	1.05	34	82.6	5.0	24.6	8.2
All-Tex Marathon B2/RF	1525	39.5	29.5	1.11	36	82.6	4.8	27.5	7.6
CG 3520 B2RF	1508	40.1	29.8	1.13	36	83.4	4.9	28.3	8.0
FM 955 LLB2	1507	38.4	28.5	1.21	39	82.9	5.2	27.0	6.4
PM 2167 RR	1497	39.0	29.6	1.03	33	83.8	5.0	30.6	7.1
PM 2280 BG/RR	1497	38.6	30.4	1.06	34	82.3	4.7	33.0	7.2
All-Tex 55066 B2/RF	1460	39.1	28.9	1.15	37	83.7	4.8	26.5	7.9
FM 5044 RR	1449	36.4	27.8	1.15	37	83.3	4.4	29.0	8.0
AFD 3511 RR	1444	37.0	28.6	1.07	34	82.3	5.1	28.2	7.5
PHY 72	1409	38.1	28.7	1.22	39	84.4	4.3	37.6	7.4
NG 2448 R	1393	37.1	28.1	1.13	36	82.4	4.7	32.2	7.5
All-Tex Atlas RR	1390	37.8	28.4	1.10	35	83.9	4.5	30.4	7.2
All-Tex Excess RR	1245	35.9	26.6	1.11	36	84.0	4.6	33.9	7.4
Experimental Average	1612	40.2	30.6	1.13	36	83.1	4.9	29.9	7.3

\* LSD (0.05) = 153 lbs.; LSD (0.01) = 201 lbs.

**Table 8. Irrigated Cotton Variety Test Results near Altus, 2005-2007.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
ST 5599 BR	2015*	42.2	34.1	1.07	34	81.5	5.3	28.3	6.2
DP 455 BG/RR	1895	44.7	34.9	1.13	36	82.8	4.6	30.7	6.3
DP 515 BG/RR	1890	43.2	33.6	1.10	35	82.2	5.2	27.6	6.0
ST 4892 BR	1881	43.8	33.3	1.08	35	83.2	5.4	28.2	7.1
FM 960 B2R	1863	41.7	32.0	1.14	37	82.5	4.8	31.2	5.1
DP 143 B2RF	1825	41.1	31.7	1.19	38	82.2	4.4	29.2	6.3
PHY 310 R	1820	44.1	34.0	1.07	34	82.5	5.1	28.0	7.5
DP 555 BG/RR	1808	45.7	35.4	1.10	35	81.5	4.9	29.1	5.8
PHY 485 WRF	1805	42.3	31.7	1.10	35	83.9	5.2	31.2	8.1
ST 4554 B2RF	1788	41.4	31.6	1.12	36	83.4	5.0	30.4	8.8
DP 445 BG/RR	1782	43.5	33.5	1.12	36	83.2	4.9	30.2	8.3
CG 4020 B2RF	1750	41.3	30.4	1.16	37	83.2	4.6	26.2	7.3
PHY 370 WR	1740	42.3	32.2	1.12	36	83.2	4.9	31.0	7.1
DG 2520 B2RF	1731	40.8	30.2	1.13	36	81.5	4.7	25.1	7.2
CG 3020 B2RF	1711	40.8	31.1	1.10	35	82.7	4.8	25.2	7.0
DG 2242 B2RF	1700	41.0	30.2	1.17	37	84.1	4.8	27.0	7.0
DG 2100 B2RF	1697	40.7	30.7	1.09	35	83.6	4.6	26.9	7.5
FM 958	1688	41.0	30.9	1.16	37	84.4	4.8	33.3	5.4
DP 164 B2RF	1683	40.1	30.3	1.17	37	82.7	4.6	30.1	6.2
ST 4357 B2RF	1677	40.3	29.8	1.17	37	83.1	4.6	26.6	7.0
CG 3520 B2RF	1639	40.4	30.2	1.14	37	83.8	4.9	27.7	7.9
All-Tex 55066 B2/RF	1595	39.6	29.3	1.12	36	83.5	4.7	26.2	7.8
BCG 24R	1590	40.4	31.4	1.12	36	83.2	4.7	28.4	7.5
PM 2266 RR	1543	38.3	29.4	1.08	35	84.6	5.1	32.4	7.3
PM 2167 RR	1532	39.9	30.5	1.02	33	83.3	5.1	29.2	6.8
FM 5044 RR	1488	37.2	28.5	1.14	37	83.1	4.6	27.2	8.1
PM 2326 RR	1482	39.3	30.6	1.06	34	84.5	5.3	31.1	7.3
AFD 3511 RR	1445	37.2	28.8	1.07	34	82.6	5.1	28.0	7.0
NG 2448 R	1409	38.3	29.0	1.11	36	82.8	4.8	32.0	6.9
PHY 72	1404	39.3	29.4	1.20	38	84.0	4.5	36.0	7.1
All-Tex Atlas RR	1401	38.0	28.8	1.09	35	83.1	4.7	29.8	6.9
All-Tex Excess RR	1345	36.9	27.3	1.11	36	83.8	4.7	33.0	7.0
Experimental Average	1676	40.8	31.1	1.12	36	83.1	4.9	29.3	7.0

\* LSD (0.05) = 146 lbs.; LSD (0.01) = 192 lbs.

**Table 9. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2006-2007.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
ST 5599 BR	1501*	41.5	33.4	1.05	34	80.8	5.3	28.6	7.0
DP 164 B2RF	1398	39.7	30.4	1.18	38	82.3	4.8	30.4	6.7
PHY 425 RF	1398	40.8	30.6	1.13	36	84.0	5.0	31.6	8.4
PHY 480 WR	1382	40.3	31.0	1.14	37	83.9	5.2	30.7	8.6
PHY 310 R	1381	43.0	33.7	1.07	34	83.3	5.2	30.1	8.2
PHY 370 WR	1370	41.8	31.9	1.14	37	83.2	5.0	31.2	7.0
DP 445 BG/RR	1367	42.3	32.7	1.06	34	82.3	4.8	32.8	9.0
DP 143 B2RF	1364	40.2	30.9	1.18	38	81.7	4.6	28.6	6.8
DP 455 BG/RR	1346	42.8	33.5	1.11	36	81.4	4.7	32.5	6.6
ST 4554 B2RF	1339	41.6	32.1	1.12	36	83.2	5.1	31.5	9.1
PHY 485 WRF	1330	40.6	30.3	1.12	36	83.8	4.9	29.6	9.2
ST 4427 B2RF	1326	41.4	31.5	1.15	37	82.7	4.9	28.0	6.6
FM 960 B2R	1316	40.3	30.9	1.11	36	82.1	5.0	30.8	6.2
ST 5327 B2RF	1301	42.3	32.1	1.13	36	84.5	5.0	32.2	8.0
CG 4020 B2RF	1259	39.8	29.6	1.14	37	82.9	4.6	27.9	7.6
ST 4357 B2RF	1232	40.6	29.9	1.14	37	81.9	4.6	25.9	7.6
FM 988 LLB2	1222	41.5	31.5	1.12	36	81.7	5.2	30.7	6.2
FM 9063 B2F	1210	38.6	29.0	1.21	39	83.8	4.7	33.5	6.3
DG 2242 B2RF	1170	39.7	29.3	1.14	37	82.6	4.6	28.1	7.8
CG 3020 B2RF	1166	38.6	28.9	1.10	35	82.4	4.6	26.3	7.8
FM 1880 B2F	1155	38.4	29.6	1.20	38	82.6	4.4	31.3	7.4
CG 3520 B2RF	1149	38.8	29.2	1.17	37	84.5	4.8	26.4	8.1
DG 2520 B2RF	1128	39.4	29.0	1.16	37	82.2	4.4	27.2	7.1
DG 2100 B2RF	1077	38.8	29.1	1.09	35	83.4	4.5	26.1	7.6
Experimental Average	1287	40.5	30.8	1.13	36	82.8	4.8	29.7	7.5

\* LSD (0.05) = 134 lbs.; LSD (0.01) = 177 lbs.

**Table 10. Irrigated Picker-Harvested Cotton Variety Test Results near Altus, 2005-2007.**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
ST 5599 BR	1648*	42.1	33.8	1.07	34	81.3	5.3	28.0	6.2
ST 4554 B2RF	1549	42.7	33.1	1.10	35	83.1	5.2	30.4	8.9
DP 164 B2RF	1523	40.5	31.0	1.17	37	82.5	4.6	30.3	6.1
PHY 485 WRF	1522	42.0	31.5	1.10	35	84.3	5.1	29.0	9.0
FM 960 B2R	1515	41.1	31.6	1.11	36	81.8	4.9	30.8	5.4
PHY 370 WR	1505	42.5	32.3	1.12	36	82.8	5.0	30.7	7.2
DP 143 B2RF	1503	41.0	31.3	1.18	38	82.0	4.6	28.6	6.8
DP 445 BG/RR	1491	43.0	33.0	1.08	35	83.3	4.9	31.2	8.9
DP 455 BG/RR	1482	43.7	34.3	1.11	36	81.7	4.7	31.9	6.2
CG 4020 B2RF	1455	41.0	30.5	1.14	37	82.2	4.5	27.1	7.5
PHY 310 R	1421	43.5	33.6	1.06	34	83.6	5.2	28.7	7.9
DG 2242 B2RF	1420	40.8	30.3	1.15	37	82.8	4.4	27.5	7.7
ST 4357 B2RF	1398	40.9	30.1	1.14	37	81.8	4.5	26.0	7.2
CG 3020 B2RF	1385	40.0	30.2	1.10	35	83.1	4.6	26.1	7.7
CG 3520 B2RF	1383	40.1	30.1	1.18	38	84.7	4.8	26.5	8.1
DG 2520 B2RF	1375	40.2	29.9	1.15	37	83.3	4.5	26.4	7.2
DG 2100 B2RF	1334	40.2	30.6	1.09	35	84.0	4.6	26.0	7.6
Experimental Average	1465	41.5	31.6	1.12	36	82.8	4.8	28.5	7.4

\* LSD (0.05) = 139 lbs.; LSD (0.01) = 185 lbs.

## Dryland Test Results over Years

**Table 11. Dryland Cotton Variety Test Results near Chickasha, 2005 and 2007.<sup>1</sup>**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
FM 958	871*	42.1	31.9	1.17	37	83.0	4.6	30.6	5.5
NG 2448 R	803	39.8	30.3	1.06	34	83.2	4.4	31.6	6.4
ST 4892 BR	791	42.7	32.1	1.12	36	82.6	4.7	29.2	6.4
PHY 370 WR	776	43.4	32.4	1.09	35	82.4	4.5	29.2	6.8
FM 960 B2R	770	42.8	28.6	1.12	36	80.2	4.3	29.2	5.1
PHY 480 WR	765	40.4	30.1	1.12	36	82.8	4.2	30.7	7.7
PHY 310 R	749	42.8	33.2	1.06	34	82.1	4.7	28.9	7.0
AFD 3511 RR	742	39.1	29.6	1.06	34	80.2	4.5	28.5	6.1
PM 2326 RR	741	39.1	29.4	1.09	35	83.5	4.7	29.8	6.4
All-Tex Atlas RR	732	39.7	30.1	1.05	34	82.6	4.5	29.8	7.1
PM 2167 RR	727	40.3	31.1	1.03	33	83.7	4.9	29.3	6.7
PM 2266 RR	674	38.6	29.0	1.08	35	83.5	4.6	32.2	7.2
FM 5044 RR	655	39.1	29.5	1.10	35	82.9	4.3	28.3	7.4
BCG 24R	637	40.6	31.4	1.11	36	83.4	4.7	30.0	6.5
All-Tex Excess RR	634	37.5	28.9	1.07	34	81.8	4.6	30.9	7.1
DP 555 BG/RR	609	41.7	31.2	1.14	37	81.8	4.2	31.4	5.1
PHY 72	554	40.1	29.7	1.15	37	83.0	4.5	32.7	6.9
Experimental Average	719	40.6	30.5	1.09	35	82.5	4.5	30.1	6.5

\* LSD (0.05) = 185 lbs.; LSD (0.01) = 245 lbs.

<sup>1</sup> This test was not harvested in 2006 due to a severe drought.

**Table 12. Dryland Cotton Variety Test Results near Tipton, 2005 and 2007.<sup>1</sup>**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
PHY 370 WR	938*	45.6	34.9	1.01	32	80.6	5.2	27.9	6.5
BCG 24R	908	41.0	31.6	1.01	32	82.5	4.9	29.6	6.9
FM 958	895	42.9	32.1	1.07	34	81.6	5.0	28.8	4.5
DG 2520 B2RF	882	41.7	31.4	1.05	34	81.2	4.8	24.7	6.6
AFD 3511 RR	876	41.5	31.7	0.98	31	79.5	5.2	28.2	6.0
ST 4892 BR	872	45.0	33.9	1.00	32	81.3	5.3	27.1	6.1
CG 3020 B2RF	856	42.3	32.0	1.01	32	81.0	4.6	24.7	6.6
NG 3550 RF	855	40.5	31.2	1.05	34	80.1	4.7	28.9	6.7
PM 2266 RR	852	40.1	30.5	0.99	32	80.2	5.0	29.6	6.7
DG 2100 B2RF	849	40.9	30.7	1.01	32	80.8	4.5	27.6	6.9
FM 5044 RR	845	39.8	30.4	1.02	33	81.5	4.7	28.2	7.7
FM 960 B2R	844	42.4	32.1	1.05	34	82.2	5.1	28.7	5.0
DP 555 BG/RR	835	45.7	35.7	1.02	33	79.4	5.3	26.2	5.5
PHY 310 R	833	43.9	33.5	1.04	33	80.8	5.2	29.8	6.4
DP 455 BG/RR	832	42.9	33.8	1.08	35	82.2	4.6	29.0	6.0
PM 2326 RR	824	40.0	30.7	1.00	32	83.4	5.3	30.9	6.3
CG 3520 B2RF	822	40.1	29.7	1.10	35	82.3	4.3	26.4	6.9
CG 4020 B2RF	817	41.9	31.3	1.06	34	80.2	4.5	26.3	6.7
NG 2448 R	813	39.1	30.3	1.05	34	81.7	4.4	32.1	6.9
ST 4664 RF	811	42.0	32.8	1.05	34	82.0	4.8	30.6	8.4
All-Tex Atlas RR	808	38.8	29.8	0.97	31	81.2	4.7	29.5	7.0
PHY 485 WRF	804	42.1	31.7	1.03	33	83.2	5.3	30.6	7.9
DP 143 B2RF	802	40.7	31.3	1.13	36	81.8	4.8	28.5	5.9
PM 2167 RR	787	38.8	29.9	0.96	31	81.3	4.7	25.1	6.3
DG 2242 B2RF	787	39.9	29.1	1.08	35	80.8	4.1	26.1	7.1
All-Tex Excess RR	772	38.2	28.9	1.03	33	82.5	4.6	32.5	6.8
DP 147 RF	771	41.6	31.5	1.09	35	79.3	4.7	29.4	5.7
DP 164 B2RF	757	40.6	30.9	1.10	35	82.1	4.8	27.1	5.5
PHY 72	590	40.6	28.8	1.10	35	83.8	4.3	36.8	6.9
Experimental Average	825	41.4	31.5	1.04	33	81.4	4.8	28.6	6.5

\* LSD (0.05) = 117 lbs.; LSD (0.01) = 153 lbs.

<sup>1</sup> This test was not harvested in 2006 due to a severe drought.**Table 13. Dryland Cotton Variety Test Results near Perkins, 2005-2006.<sup>1</sup>**

Variety	Lint Yield (lbs./A)	Lint Percentage		Fiber Length	32's	Uniformity		Fiber Strength	Elongation
		Picked	Pulled			Ratio	Micronaire		
PM 2266 RR	407*	37.9	29.1	1.04	33	83.7	4.9	30.6	7.1
PM 2167 RR	404	39.5	30.3	1.00	32	82.9	4.9	29.5	6.3
PM 2326 BG/RR	366	37.9	29.1	1.04	33	84.3	5.1	30.8	7.2
All-Tex Atlas RR	341	37.7	29.1	1.03	33	83.2	4.9	31.0	6.8
PM 2326 RR	287	37.9	28.7	1.06	34	83.1	5.0	31.1	6.6
Tamcot Luxor	283	39.5	29.0	1.06	34	84.4	4.8	29.8	5.9
FM 5013	275	38.0	27.8	1.09	35	85.2	4.9	31.7	6.8
Experimental Average	338	38.3	29.0	1.05	34	83.8	4.9	30.6	6.7

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

<sup>1</sup> This test was not planted in 2007 due to excessive rainfall at planting time.

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert E. Whitson, Director of Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of \$1.20 per copy. 0408 Revised.