

2016

Cotton Varieties for Louisiana

Variety Trials and On-Farm Demonstrations



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Introduction

Scientists with the LSU AgCenter annually evaluate cotton varieties at four locations that are representative of Louisiana's cotton-producing regions.

Those are the LSU AgCenter's Red River Research Station at Bossier City, Dean Lee Research Station at Alexandria, Macon Ridge Research Station at Winnsboro and Northeast Research Station at St. Joseph.

Cotton varieties are managed using practices that follow LSU AgCenter recommendations and demonstrate commercial operations as closely as possible. All entries in the trials are replicated four times, and results are compiled for average performance after one or two years of testing.

Choosing Varieties

Variety selection is one of the most important decisions a cotton producer will make for the entire growing season. The variety and its associated traits set the stage for harvest at the time of planting. All other input decisions affect the performance of the variety selected.

Variety selection has become increasingly important since the introduction of transgenic cottons and the accompanying increases in seed costs and associated technology fees. Moreover, variety selection is the one decision a producer makes that is not influenced by environmental factors. Therefore, choosing a high-yielding variety with acceptable fiber quality that is adapted to local growing conditions should be considered carefully because of the tremendous importance the decision plays for the entire season.

Choosing a cotton variety can be difficult, and the availability of different transgenic traits often complicates the process. The more informed the decision the better. This publication therefore strives to provide growers as much information as possible concerning cotton variety performance over a range of soil textures and conditions. The information reported concerning measured performance of cotton varieties in Louisiana should be useful as a primary source of information for choosing varieties.

Producers should be mindful that these LSU AgCenter official variety trials can never identify the best single variety for soils and conditions. As such, producers should plant multiple varieties that are selected from the top performers in the variety trials closest to their production region. This strategy will help mitigate risks from adverse environmental conditions.

There are always differences in performance of individual varieties from one year to the next. In most years, however, those among the top 10 percent of the highest-yielding varieties generally remain there for several seasons. The best variety for a particular farm likely resides among the top yielders in the official variety trials, but no one can be certain which of those top-yielding varieties will be the highest yielder for the

upcoming year. This actually is a good thing because it gives producers the option to select from as many as five to 10 varieties with different traits, knowing that one of those may be the best for next year's crop.

The majority of a grower's acreage should be devoted to proven varieties. Newer varieties should be evaluated on limited acreage until further testing is completed.

Fiber Properties

Fiber quality has become a more important consideration in marketing cotton and choosing varieties. Because the domestic textile industry has become very limited, most U.S. cotton is exported to foreign mills that generally demand cotton with the most consistent and highest fiber quality properties.

The quality of Louisiana cotton has been a concern in recent years, particularly with regard to high micronaire. While premiums are small, discounts for high micronaire and other factors can be significant. Variety selection plays the largest role in fiber properties and is increasingly important for U.S. cotton to maintain and increase presence in the world market.

Fiber parameters in the LSU AgCenter's official variety trials were determined with the same high-volume-instrumentation classing system used by the U.S. Department of Agriculture's classing offices. Physical properties, including staple length (reported as the upper half mean length), fiber strength, uniformity index and micronaire were evaluated and are reported for each variety. Seed cotton samples were ginned with small plot research gins that do not have lint cleaners. This method will produce higher lint percentages than you would normally receive from a commercial gin. A 41-4 color and leaf grade was used on all fiber samples to determine loan values.

Using the Data

Yield should be the primary factor when selecting a variety, followed by fiber quality and maturity. Top-yielding varieties should be considered first.

There often is no statistical difference between the top-yielding varieties in a given trial. The least significant difference reported below each table is the smallest difference in yield that can be considered a "true" difference.

The most important factor is not the absolute number reported for a cotton variety's yield or fiber quality. The most important question to consider is "How did a variety yield in relation to other varieties in the same trial?" Another important number to look for is the average yield from the variety trials. Considering a variety's performance compared to the average for the entire trial will help identify varieties that are above average for a given location.

Cotton varieties should be chosen by considering their performance across several locations and multiple years of testing. Superior performance in one year often can indicate a good variety, but superior performance over multiple years indicates consistency and reliability. Varieties currently are introduced at a rapid pace and have shorter life spans than in the past, so information about some of the newest varieties often is not available for multiple years. For those new varieties that do not have multiyear performance records, it is best to consider performance averaged across several locations during a variety's first year of testing.

Grower experience with a variety is important for several reasons. Cotton varieties have different growth habits and can be locally adapted to a small area. Experience with a variety should be considered, but newer varieties that perform well in the official variety trials also should be considered.

Selecting Varieties

The LSU AgCenter identifies the top tier of high-yielding varieties at each location by the use of a statistical test called the "least significant difference." A probability level of 5 percent is used, which means the test correctly identifies variety performance for that location with 95 percent certainty.

The group of varieties that is statistically the highest yielding is shown in each table in bold print. To identify promising varieties that are new to the market and have only one year of testing in the LSU AgCenter's official variety trials, a multilocation analysis should be performed. Producers should review the data tables for variety performance at the closest location that is most representative of their individual farms and also review statewide multilocation yield averages for consistency of performance over a range of environments.

Transgenic Traits

Roundup Ready: Transgenic traits are available for glyphosate tolerance, usually indicated by Roundup Ready Flex (sometimes shown simply as "RF" or "F"). The Flex varieties have been available commercially since 2006 and completely replaced the older Roundup Ready ("R" or "RR") varieties. Roundup Ready Flex varieties exhibit increased tolerance, particularly in the fruiting stage, to glyphosate applications.

Roundup Ready Flex labeling allows over-the-top applications of glyphosate to Flex varieties into the bloom stage and does not restrict contact with the stem for directed applications. Read and follow the label closely for specific restrictions, and be sure to consult the label for the specific glyphosate formulations permitted for use on Roundup Ready Flex varieties.

Weed control is a major factor in producing high-yielding, high-quality cotton. Because of the increased flexibility of applying glyphosate over the top to

Roundup Ready Flex varieties, some growers may opt to wait until weeds emerge and gain some size before making applications. This is not recommended, however, particularly for early season weed control. Early weed competition can severely reduce yield.

Glyphosate is very effective on a wide range of species, particularly when they are small. Applications should be timed to weed size and not other factors. Even more, reliance on one mode of action for weed control is not recommended and has led to herbicide-resistant weeds.

Due to the concerns with glyphosate-resistant weeds, the use of other herbicides in addition to glyphosate is strongly encouraged. Growers should note that glyphosate-resistant Palmer amaranth was identified in Louisiana in 2009, and resistant Johnson grass in 2010. Consult the LSU AgCenter's 2016 Louisiana Suggested Chemical Weed Management Guide for more information.

Liberty Link: Varieties with the designation "LL" in their brand names are transgenic varieties tolerant to over-the-top application of Liberty (glufosinate). These varieties can be managed in a Liberty Link weed control program, which is covered in more detail in the LSU AgCenter's 2016 Louisiana Suggested Chemical Weed Management Guide publication.

Liberty Link cotton is tolerant to Liberty herbicide but will be injured by applications or drift from glyphosate. On farms or in areas where Liberty Link cotton is grown near Roundup Ready Flex cotton, care should be taken to avoid confusion of the herbicide systems and to reduce the potential for mistaken applications or drift.

Glytol Liberty Link: Varieties with the designation "GL" in their brand names are transgenic varieties tolerant to over-the-top application of both glyphosate and glufosinate. These varieties offer potential to alternate from one class of chemistry to another, particularly where producers are concerned about herbicide-resistant weed populations.

In any case, weeds still should be controlled early, when weeds are small and actively growing. Producers are cautioned to avoid late, low-dose applications of these nonselective herbicides when existing weeds are large and well developed.

Bollgard 2: Varieties with the designation "B2" or "BG2" in their brand names are cotton lines that are tolerant to the Louisiana caterpillar pest known as the tobacco budworm. After the successful introduction of Bollgard 2 technology into the market, the U.S. Environmental Protection Agency in 2010 required that all Bollgard-only technology be prohibited from future planting due to its single-gene-site activity.

Varieties that include Bollgard 2 technology should not need any supplemental insecticide sprays for control of tobacco budworms. They also are tolerant to the bollworm, soybean looper, fall armyworm and beet

armyworm. For those and other caterpillar pests, note that supplemental chemical control strategies will be necessary to provide satisfactory management with high and persistent populations. In addition, the insecticidal traits in Bollgard 2 varieties have no activity against noncaterpillar pests such as thrips, aphids, plant bugs, stink bugs and spider mites. Those pests must be managed with conventional integrated pest management practices.

Widestrike: Phytogen varieties with the designation “W” or “W3” in their brand names are cotton lines that are tolerant to the Louisiana caterpillar pests known as tobacco budworms and fall armyworms. These varieties should not need any supplemental insecticidal sprays for control of those pests. The characteristics and insect management recommendations previously mentioned for Bollgard 2 traits remain the same for the Widestrike trait in Phytogen varieties.

Root-knot nematode. Since 2015, several companies have been marketing cotton varieties with tolerance to the root-knot nematode. This is not transgenic technology. Planting of these varieties on sandier soils with known root-knot nematode populations is a new option, especially with the loss of Temik.

XTendFlex: In 2015, Delta Pine varieties with the designation “XF” became available and they are transgenic cotton lines that are tolerant to over-the-top applications of dicamba, glyphosate, and glufosinate. This is the only cotton technology with tolerance to three herbicides. These varieties offer the potential of alternating from one class of chemistry to another, particularly where producers are concerned about herbicide-resistant weed populations.

Weeds should still be controlled early, when they are small and actively growing. Producers are cautioned to avoid late, low-dose applications of these non-selective herbicides when existing weeds are large and well developed.

Twinlink: In 2014, Stoneville varieties with the designation “T” in their brand names became available which are tolerant to the tobacco budworm. Also, they provide reduced bollworm damage through superior bollworm protection comparable to Bollgard II and significant reduction in damage caused by armyworms when compared to non-Bt cotton. Under high and persistent populations of bollworms and armyworms, supplemental chemical control strategies will be necessary for satisfactory management practices.

Seeding Rate and Stand

Two to three plants per foot of row is the ideal final plant population in 30- to 40-inch rows. To achieve this “stand,” seeding rates should be slightly higher based on the actual stated germination.

Seed sizes vary, and the number of cotton seeds per pound ranges from a low of 3,700 up to a high of 5,800. Therefore, seeding rates have to be based on seed numbers per acre and not pounds of seed per acre.

To ensure the best seedling emergence, planting should be scheduled during the most favorable conditions possible based on existing and forecast temperatures and soil moisture levels.

Being aware of the cool germination test results is more important than determining what actually is a good or bad cool germination rate, however. For example, a seed lot with 85 percent cool germination is more vigorous than one with a 65 percent cool germination test result. If the 65 percent cool germination lot is planted in warm and otherwise good conditions, however, overall germination is likely to be as high as the 85 percent lot. Under adverse conditions, the 85 percent cool germination lot is likely to germinate at a much higher rate than the 65 percent cool germination lot. A somewhat arbitrary division of the cool germination test results is shown in the following table:

| Cool Germination % | Vigor |
|--------------------|--|
| >80 | Excellent |
| 65-80 | Good |
| 50-65 | Acceptable – plant under good conditions |
| <50 | Poor – most seed companies will not sell this seed |

Most planting date studies indicate the ideal planting window in Louisiana for cotton is between April 15 and May 15. Earlier plantings are possible without causing significant yield loss, but there is the risk of cold damage or reduced ability of the plants to recover from thrip pressure. Two LSU AgCenter planting date studies have demonstrated that planting after June 1 can reduce yield potential significantly.

Most cotton seed sold will have at least an 80 percent germination reported on the bag. This is the result of the warm germination test. Field conditions, however, typically are more adverse than laboratory tests. The cool germination test can approximate adverse field conditions and is a measure of seed vigor. Results from the cool germination test are not reported on the bag but can be obtained from the seed company. Growers are encouraged to request this information

Remember, a cotton seed is a living organism that is used as a delivery mechanism for genetic traits, transgenic technology and even pesticide seed treatments. Care should be taken to preserve and plant high-quality seed to ensure adequate plant stands.

Table 1. Two-year yield performance of cotton varieties planted across locations, 2014-2015.

| Variety | 2014 | | | | | | | | | | | | 2015 | | | | | | Average across locations | | | | |
|--------------|------------|-----------|------|--------------|-----------|------|------------|-----------|---------|-----------|-----------|---------|------------|-----------|------|------------|-------------|-------------|--------------------------|-----------|------|-----------|---------|
| | Alexandria | | | Bossier City | | | St. Joseph | | | Winnsboro | | | Alexandria | | | St. Joseph | | | | Winnsboro | | | |
| | Clay | Silt loam | Clay | Clay | Silt loam | Clay | Clay | Silt loam | Average | Clay | Silt loam | Average | Clay | Silt loam | Clay | Clay | Silt loam-1 | Silt loam-2 | | Silt loam | Clay | Silt loam | Average |
| PHY333WRF | 1197 | 1259 | 1789 | 1721 | 1629 | 1660 | 1543 | 1057 | 1365 | 1135 | 1231 | 1632 | 1668 | 1445 | | | | | | | | | |
| PHY312WRF | 1309 | 1198 | 1639 | 1725 | 1759 | 1668 | 1550 | 926 | 1054 | 1555 | 1205 | 1560 | 1636 | 1436 | | | | | | | | | |
| PHY495W3RF | 1249 | 1124 | 1505 | 1929 | 1568 | 1828 | 1534 | 1128 | 1182 | 1334 | 1309 | 1427 | 1472 | 1421 | | | | | | | | | |
| PHY496W3RF | 1280 | 1096 | 1519 | 1879 | 1673 | 1731 | 1530 | 941 | 1290 | 1240 | 1205 | 1540 | 1443 | 1403 | | | | | | | | | |
| PHY339WRF | 1432 | 1347 | 1188 | 1645 | 1438 | 1675 | 1454 | 986 | 1260 | 1400 | 1105 | 1841 | 1438 | 1396 | | | | | | | | | |
| ST4946GLB2 | 1271 | 1491 | 1195 | 1488 | 1642 | 1546 | 1439 | 1162 | 1287 | 1305 | 964 | 1796 | 1460 | 1384 | | | | | | | | | |
| PHY552WRF | 1321 | 1193 | 1449 | 1730 | 1669 | 1665 | 1505 | 1155 | 1116 | 1429 | 1288 | 1287 | 1289 | 1383 | | | | | | | | | |
| ST4747GLB2 | 1461 | 1459 | 1341 | 1703 | 1508 | 1778 | 1542 | 987 | 1115 | 1108 | 1266 | 1403 | 1362 | 1374 | | | | | | | | | |
| PHY499WRF | 1148 | 1251 | 1643 | 1712 | 1531 | 1699 | 1497 | 943 | 1275 | 1477 | 1205 | 1256 | 1271 | 1368 | | | | | | | | | |
| PHY444WRF | 1223 | 1234 | 1198 | 1734 | 1689 | 1578 | 1443 | 972 | 1079 | 1356 | 1166 | 1658 | 1523 | 1368 | | | | | | | | | |
| DP1555B2RF | 1439 | 1344 | 1150 | 1355 | 1407 | 1842 | 1423 | 1076 | 1242 | 1321 | 1101 | 1572 | 1534 | 1365 | | | | | | | | | |
| PHY487WRF | 1122 | 1278 | 1186 | 1654 | 1355 | 1740 | 1389 | 1055 | 1260 | 1532 | 1307 | 1561 | 1170 | 1352 | | | | | | | | | |
| DG2285B2RF | 1247 | 1361 | 1279 | 1597 | 1467 | 1505 | 1409 | 733 | 1134 | 1358 | 1186 | 1812 | 1447 | 1344 | | | | | | | | | |
| PHY427WRF | 1243 | 1241 | 1241 | 1749 | 1470 | 1470 | 1402 | 905 | 1409 | 1355 | 1227 | 1283 | 1392 | 1332 | | | | | | | | | |
| ST6182GLT | 1075 | 1257 | 1412 | 1725 | 1402 | 1442 | 1442 | 1004 | 899 | 1411 | 1079 | 1600 | 1261 | 1325 | | | | | | | | | |
| ST5032GLT | 1130 | 1359 | 1287 | 1496 | 1402 | 1488 | 1360 | 1004 | 1369 | 1054 | 1435 | 1336 | 1392 | 1313 | | | | | | | | | |
| ST6448GLB2 | 1335 | 1301 | 1322 | 1292 | 1281 | 1680 | 1369 | 1075 | 1039 | 1334 | 1195 | 1607 | 1222 | 1307 | | | | | | | | | |
| ST5289GLT | 1164 | 1266 | 1271 | 1522 | 1276 | 1521 | 1337 | 990 | 1192 | 1290 | 1109 | 1720 | 1192 | 1293 | | | | | | | | | |
| BX1531GLT | 1084 | 1359 | 1227 | 1416 | 1371 | 1682 | 1357 | 772 | 901 | 1183 | 1082 | 1890 | 1279 | 1271 | | | | | | | | | |
| BX1532GLT | 1071 | 1205 | 1408 | 1511 | 1365 | 1745 | 1384 | 811 | 926 | 967 | 1354 | 1721 | 1139 | 1269 | | | | | | | | | |
| ST5115GLT | 1288 | 1454 | 1007 | 1549 | 1338 | 1568 | 1367 | 733 | 759 | 1104 | 1154 | 1604 | 1330 | 1241 | | | | | | | | | |
| UA222 | 1207 | 1154 | 814 | 1355 | 1339 | 804 | 1112 | 1029 | 1153 | 1267 | 1408 | 1067 | 738 | 1111 | | | | | | | | | |
| HQ210CT | 1145 | 1089 | 980 | 1033 | 1059 | 1001 | 1051 | 829 | 1076 | 1201 | 1120 | 1187 | 627 | 1029 | | | | | | | | | |
| Overall mean | 1237 | 1275 | 1307 | 1588 | 1465 | 1592 | 1410 | 968 | 1147 | 1292 | 1204 | 1537 | 1317 | 1327 | | | | | | | | | |

Table 2. One-year performance of cotton varieties planted at six locations, 2015.

| | St. Joseph | | | Winnsboro | Alexandria | | Average across locations |
|---------------|--------------------------|-------------|-------------|-------------|-------------|-------------|--------------------------|
| | Clay | Silt Loam-1 | Silt Loam-2 | Silt Loam | Silt Loam | Clay | |
| | Lint yield (pounds/acre) | | | | | | |
| DP1518B2XF | 1500 | 1335 | 1738 | 1489 | 1465 | 963 | 1415 |
| PHY333WRF | 1135 | 1231 | 1632 | 1668 | 1365 | 1057 | 1348 |
| BX1633GLT | 1262 | 1345 | 1728 | 1441 | 1354 | 945 | 1346 |
| PHY339WRF | 1400 | 1105 | 1841 | 1438 | 1260 | 986 | 1338 |
| MON14R913B2XF | 1068 | 1289 | 1689 | 1613 | 1325 | 1000 | 1330 |
| DP1522B2XF | 1241 | 1156 | 1682 | 1531 | 1293 | 1076 | 1330 |
| ST4946GLB2 | 1305 | 964 | 1796 | 1460 | 1287 | 1162 | 1329 |
| DG2285B2RF | 1358 | 1186 | 1812 | 1447 | 1134 | 1004 | 1323 |
| PHY312WRF | 1555 | 1205 | 1560 | 1636 | 1054 | 926 | 1323 |
| PHY487WRF | 1532 | 1307 | 1561 | 1170 | 1260 | 1055 | 1314 |
| PHY495W3RF | 1334 | 1309 | 1427 | 1472 | 1182 | 1128 | 1309 |
| MON15R551B2XF | 1580 | 1036 | 1812 | 1400 | 1160 | 830 | 1303 |
| DP1555B2RF | 1321 | 1101 | 1572 | 1534 | 1242 | 1030 | 1300 |
| MON15R513B2XF | 1015 | 1385 | 1550 | 1455 | 1368 | 1002 | 1296 |
| PHY444WRF | 1356 | 1166 | 1658 | 1523 | 1079 | 972 | 1292 |
| NG3406B2XF | 1275 | 1404 | 1556 | 1462 | 1009 | 1031 | 1289 |
| NG3405B2XF | 1395 | 1034 | 1658 | 1434 | 1215 | 964 | 1283 |
| PHY496W3RF | 1240 | 1205 | 1540 | 1443 | 1290 | 941 | 1276 |
| ST5032GLT | 1054 | 1435 | 1336 | 1392 | 1369 | 1004 | 1265 |
| PHY427WRF | 1355 | 1227 | 1283 | 1392 | 1409 | 905 | 1262 |
| PHY552WRF | 1429 | 1288 | 1287 | 1289 | 1116 | 1155 | 1261 |
| NG5007B2XF | 1342 | 1094 | 1547 | 1479 | 1151 | 914 | 1254 |
| ST5289GLT | 1290 | 1109 | 1720 | 1192 | 1192 | 990 | 1249 |
| ST6448GLB2 | 1334 | 1195 | 1607 | 1222 | 1039 | 1075 | 1245 |
| PHY499WRF | 1477 | 1205 | 1256 | 1271 | 1275 | 943 | 1238 |
| PHY222WRF | 989 | 1230 | 1661 | 1373 | 1199 | 938 | 1232 |
| DP1558NRB2RF | 1146 | 1229 | 1501 | 1322 | 1208 | 943 | 1225 |
| MON15R515B2XF | 916 | 1438 | 1569 | 1235 | 1246 | 939 | 1224 |
| DG3385B2XF | 1260 | 1207 | 1319 | 1465 | 1188 | 857 | 1216 |
| ST4747GLB2 | 1108 | 1266 | 1403 | 1362 | 1115 | 987 | 1207 |
| BX1638GLT | 1230 | 1111 | 1525 | 1203 | 1178 | 951 | 1200 |
| BX1531GLT | 1183 | 1082 | 1890 | 1279 | 901 | 772 | 1184 |
| BX1634GLT | 1237 | 1115 | 1449 | 1394 | 1092 | 814 | 1183 |
| CT13464B2RF | 1090 | 1149 | 1618 | 1154 | 1171 | 882 | 1177 |
| DP1538B2XF | 1271 | 1031 | 1488 | 1034 | 1209 | 1022 | 1176 |
| ST6182GLT | 1411 | 1079 | 1600 | 1261 | 899 | 760 | 1168 |
| CT15557B2XF | 1096 | 1131 | 1484 | 1351 | 882 | 1022 | 1161 |
| BX1532GLT | 967 | 1354 | 1721 | 1139 | 926 | 811 | 1153 |
| MON14R934B2XF | 797 | 1310 | 1517 | 1105 | 1232 | 855 | 1136 |
| ST5115GLT | 1104 | 1154 | 1604 | 1330 | 759 | 733 | 1114 |
| DP1553B2XF | 1092 | 1007 | 1449 | 977 | 1051 | 1087 | 1110 |
| UA222 | 1267 | 1408 | 1067 | 738 | 1153 | 1029 | 1110 |
| CT14515B2RF | 853 | 1213 | 1221 | 1203 | 1065 | 851 | 1068 |
| HQ210CT | 1201 | 1120 | 1187 | 627 | 1076 | 829 | 1006 |
| Overall mean | 1236 | 1203 | 1548 | 1327 | 1168 | 958 | |
| LSD (0.05) | 375 | ns | 349 | 219 | 193 | 231 | |
| C.V. (%) | 22 | 20 | 16 | 12 | 12 | 15 | |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 3. Yield performance, fiber characteristics, and loan values of cotton varieties grown on a non-irrigated Latanier clay at the Dean Lee Research Station, 2015.

| Variety | Lint Yield (lbs./ac.) | Lint (%) | Length (inches) | Uniformity (%) | Strength (g/tex) | Micronaire | Loan Value (¢/lb) |
|---------------|--------------------------|--------------|--------------------|-------------------|---------------------|------------|----------------------|
| ST4946GLB2 | 1162 | 43.57 | 1.11 | 84.6 | 35.9 | 5.0 | 52.93 |
| PHY552WRF | 1155 | 44.31 | 1.10 | 84.3 | 33.3 | 4.8 | 53.64 |
| PHY495W3RF | 1128 | 45.34 | 1.11 | 84.4 | 35.2 | 4.7 | 53.23 |
| DP1553B2XF | 1087 | 45.04 | 1.13 | 83.7 | 32.1 | 4.9 | 53.66 |
| DP1522B2XF | 1076 | 43.55 | 1.09 | 84.5 | 34.9 | 4.9 | 52.20 |
| ST6448GLB2 | 1075 | 42.36 | 1.13 | 82.8 | 28.0 | 4.7 | 53.56 |
| PHY333WRF | 1057 | 44.90 | 1.12 | 83.5 | 30.8 | 4.5 | 53.26 |
| PHY487WRF | 1055 | 43.50 | 1.11 | 83.3 | 32.3 | 4.9 | 52.53 |
| NG3406B2XF | 1031 | 43.39 | 1.10 | 84.3 | 31.9 | 4.6 | 53.84 |
| DP1555B2RF | 1030 | 44.36 | 1.13 | 84.6 | 36.6 | 5.0 | 53.20 |
| UA222 | 1029 | 42.28 | 1.16 | 83.4 | 35.2 | 4.7 | 54.01 |
| CT15557B2XF | 1022 | 45.86 | 1.12 | 84.0 | 31.8 | 5.0 | 52.38 |
| DP1538B2XF | 1022 | 45.90 | 1.07 | 82.7 | 30.5 | 5.0 | 51.21 |
| DG2285B2RF | 1004 | 42.41 | 1.12 | 83.1 | 31.7 | 4.6 | 53.51 |
| ST5032GLT | 1004 | 43.33 | 1.12 | 83.0 | 32.5 | 4.4 | 54.38 |
| MON15R513B2XF | 1002 | 44.14 | 1.13 | 84.1 | 31.4 | 4.8 | 53.83 |
| MON14R913B2XF | 1000 | 41.99 | 1.14 | 83.6 | 34.0 | 4.4 | 54.60 |
| ST5289GLT | 990 | 42.91 | 1.08 | 81.7 | 27.8 | 4.6 | 52.28 |
| ST4747GLB2 | 987 | 41.48 | 1.16 | 83.2 | 27.2 | 4.7 | 53.80 |
| PHY339WRF | 986 | 44.19 | 1.14 | 83.8 | 33.0 | 4.5 | 53.54 |
| ST5288B2F | 973 | 43.25 | 1.12 | 83.0 | 31.0 | 5.1 | 52.19 |
| PHY444WRF | 972 | 45.24 | 1.17 | 84.7 | 32.0 | 4.4 | 53.98 |
| NG3405B2XF | 964 | 43.20 | 1.09 | 83.9 | 30.5 | 4.7 | 52.89 |
| DP1518B2XF | 963 | 42.51 | 1.12 | 82.8 | 29.0 | 4.5 | 53.94 |
| BX1638GLT | 951 | 42.74 | 1.13 | 83.6 | 33.5 | 4.6 | 54.09 |
| BX1633GLT | 945 | 45.85 | 1.13 | 84.4 | 31.9 | 5.0 | 52.03 |
| DP1558NRB2RF | 943 | 43.65 | 1.14 | 84.6 | 34.6 | 5.1 | 52.70 |
| PHY499WRF | 943 | 44.70 | 1.12 | 83.5 | 35.4 | 4.9 | 52.79 |
| PHY496W3RF | 941 | 44.66 | 1.11 | 83.9 | 33.0 | 4.7 | 54.36 |
| MON15R515B2XF | 939 | 44.71 | 1.13 | 83.9 | 31.0 | 4.8 | 53.83 |
| PHY222WRF | 938 | 42.31 | 1.09 | 84.0 | 33.3 | 4.6 | 52.91 |
| PHY312WRF | 926 | 44.48 | 1.14 | 84.9 | 33.2 | 4.6 | 54.14 |
| NG5007B2XF | 914 | 44.80 | 1.13 | 83.2 | 30.3 | 4.8 | 54.26 |
| PHY427WRF | 905 | 43.24 | 1.10 | 83.6 | 33.6 | 4.8 | 53.43 |
| CT13464B2RF | 882 | 41.09 | 1.18 | 84.6 | 37.3 | 4.3 | 54.85 |
| DG3385B2XF | 857 | 42.97 | 1.14 | 84.5 | 32.3 | 4.8 | 53.98 |
| MON14R934B2XF | 855 | 46.38 | 1.15 | 84.4 | 33.9 | 5.2 | 51.51 |
| CT14515B2RF | 851 | 42.82 | 1.13 | 84.3 | 35.1 | 5.0 | 53.01 |
| MON15R551B2XF | 830 | 43.87 | 1.22 | 84.5 | 31.9 | 4.8 | 54.73 |
| HQ210CT | 829 | 38.39 | 1.07 | 82.7 | 30.7 | 4.8 | 50.51 |
| BX1634GLT | 814 | 42.95 | 1.10 | 84.5 | 30.8 | 4.7 | 53.26 |
| BX1532GLT | 811 | 45.62 | 1.13 | 84.9 | 31.6 | 4.9 | 53.09 |
| BX1531GLT | 772 | 46.50 | 1.09 | 83.4 | 29.4 | 4.8 | 52.93 |
| ST6182GLT | 760 | 45.22 | 1.14 | 83.7 | 30.2 | 4.8 | 53.04 |
| ST5115GLT | 733 | 42.40 | 1.11 | 82.9 | 32.3 | 5.0 | 52.70 |
| Overall Mean | 958 | 43.7413 | 1.122 | 83.78 | 32.296 | 4.80 | 53.2593 |
| LSD(0.05) | 231.12 | 1.5866 | 0.0417 | 1.18 | 2.649 | 0.366 | 1.7939 |
| C.V. (%) | 14.87 | 2.24 | 2.66 | 1.01 | 5.86 | 5.51 | 2.41 |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 4. Yield performance, fiber characteristics, and loan values of cotton varieties grown on a non-irrigated Coushatta silt loam at the Dean Lee Research Station, 2015.

| | Lint Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
|---------------|-------------|--------------|-------------|-------------|-------------|------------|--------------|
| Variety | (lbs./ac.) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| DP1518B2XF | 1465 | 41.83 | 1.16 | 83.4 | 29.7 | 4.6 | 54.28 |
| PHY427WRF | 1409 | 40.09 | 1.19 | 85.5 | 35.4 | 4.8 | 54.80 |
| ST5032GLT | 1369 | 39.37 | 1.22 | 84.9 | 34.1 | 4.6 | 54.83 |
| MON15R513B2XF | 1368 | 41.69 | 1.18 | 85.3 | 32.6 | 5.1 | 52.25 |
| PHY333WRF | 1365 | 42.13 | 1.23 | 85.3 | 31.0 | 4.4 | 54.68 |
| BX1633GLT | 1354 | 44.15 | 1.18 | 85.3 | 33.3 | 5.1 | 53.55 |
| MON14R913B2XF | 1325 | 39.90 | 1.22 | 85.0 | 33.9 | 4.8 | 54.81 |
| DP1522B2XF | 1293 | 41.50 | 1.18 | 84.8 | 34.3 | 5.1 | 52.81 |
| PHY496W3RF | 1290 | 41.76 | 1.19 | 84.7 | 34.7 | 4.8 | 54.79 |
| ST4946GLB2 | 1287 | 40.89 | 1.16 | 84.7 | 36.0 | 5.1 | 52.13 |
| PHY499WRF | 1275 | 43.68 | 1.19 | 85.4 | 39.3 | 5.1 | 52.25 |
| PHY487WRF | 1260 | 41.36 | 1.17 | 84.1 | 34.5 | 5.1 | 52.76 |
| PHY339WRF | 1260 | 41.16 | 1.21 | 85.7 | 34.8 | 4.5 | 54.86 |
| MON15R515B2XF | 1246 | 44.06 | 1.22 | 85.3 | 34.5 | 5.2 | 52.25 |
| DP1555B2RF | 1242 | 43.24 | 1.24 | 84.4 | 36.7 | 4.9 | 53.50 |
| MON14R934B2XF | 1232 | 45.53 | 1.18 | 84.8 | 36.2 | 5.4 | 51.13 |
| NG3405B2XF | 1215 | 41.76 | 1.15 | 84.3 | 29.2 | 4.8 | 54.09 |
| DP1538B2XF | 1209 | 44.18 | 1.15 | 84.5 | 32.7 | 5.0 | 53.35 |
| DP1558NRB2RF | 1208 | 43.45 | 1.21 | 85.0 | 35.6 | 5.2 | 51.93 |
| PHY222WRF | 1199 | 40.11 | 1.17 | 84.6 | 33.8 | 4.6 | 54.71 |
| ST5289GLT | 1192 | 40.77 | 1.18 | 83.7 | 30.7 | 4.7 | 54.40 |
| DG3385B2XF | 1188 | 40.54 | 1.18 | 85.3 | 33.3 | 5.0 | 52.23 |
| PHY495W3RF | 1182 | 43.66 | 1.16 | 84.8 | 37.9 | 4.9 | 54.10 |
| BX1638GLT | 1178 | 40.67 | 1.22 | 84.8 | 36.0 | 4.7 | 54.83 |
| CT13464B2RF | 1171 | 40.70 | 1.21 | 84.0 | 35.8 | 4.3 | 54.79 |
| MON15R551B2XF | 1160 | 43.81 | 1.25 | 85.4 | 32.6 | 4.7 | 54.83 |
| UA222 | 1153 | 39.64 | 1.25 | 85.7 | 36.2 | 5.0 | 53.63 |
| NG5007B2XF | 1151 | 43.40 | 1.19 | 84.4 | 32.5 | 4.6 | 54.78 |
| DG2285B2RF | 1134 | 39.21 | 1.20 | 85.1 | 32.2 | 4.7 | 54.76 |
| ST5288B2F | 1120 | 40.33 | 1.16 | 83.4 | 32.2 | 5.1 | 51.78 |
| PHY552WRF | 1116 | 42.41 | 1.17 | 84.4 | 34.9 | 4.7 | 54.73 |
| ST4747GLB2 | 1115 | 40.34 | 1.22 | 83.9 | 28.3 | 4.8 | 54.31 |
| BX1634GLT | 1092 | 40.76 | 1.16 | 84.1 | 31.6 | 5.0 | 52.35 |
| PHY444WRF | 1079 | 42.39 | 1.27 | 86.3 | 34.2 | 4.3 | 55.03 |
| HQ210CT | 1076 | 37.73 | 1.15 | 83.9 | 34.5 | 5.1 | 52.45 |
| CT14515B2RF | 1065 | 41.24 | 1.25 | 85.2 | 36.1 | 5.1 | 52.95 |
| PHY312WRF | 1054 | 41.87 | 1.22 | 85.7 | 33.7 | 4.7 | 54.88 |
| DP1553B2XF | 1051 | 43.68 | 1.22 | 85.3 | 33.4 | 4.8 | 54.88 |
| ST6448GLB2 | 1039 | 39.53 | 1.23 | 84.0 | 29.6 | 4.9 | 53.73 |
| NG3406B2XF | 1009 | 39.53 | 1.19 | 85.4 | 33.9 | 4.8 | 54.88 |
| BX1532GLT | 926 | 46.11 | 1.20 | 85.2 | 32.3 | 4.9 | 54.16 |
| BX1531GLT | 901 | 44.67 | 1.16 | 83.1 | 31.5 | 4.9 | 53.11 |
| ST6182GLT | 899 | 43.80 | 1.19 | 84.8 | 31.6 | 4.7 | 54.70 |
| CT15557B2XF | 882 | 44.12 | 1.17 | 84.4 | 32.7 | 4.9 | 53.41 |
| ST5115GLT | 759 | 39.00 | 1.16 | 83.2 | 33.9 | 4.8 | 54.61 |
| | | | | | | | |
| Overall Mean | 1168 | 41.8152 | 1.19 | 84.71 | 33.627 | 4.84 | 53.7781 |
| LSD(0.05) | 193.49 | 1.2062 | 0.0352 | 1.226 | 1.828 | 0.169 | 1.151 |
| C.V.(%) | 11.84 | 2.06 | 2.11 | 1.0 | 3.890 | 2.50 | 1.53 |
| | | | | | | | |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 5. Yield performance, fiber characteristics, and loan values of cotton varieties grown on a irrigated Sharkey clay at the Northeast Research Station, 2015.

| | Lint Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
|---------------|-------------|--------------|-------------|-------------|-------------|------------|--------------|
| Variety | (lbs./ac.) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| MON15R551B2XF | 1580 | 43.26 | 1.25 | 85.7 | 31.3 | 5.1 | 52.50 |
| PHY312WRF | 1555 | 43.46 | 1.18 | 85.4 | 32.3 | 5.4 | 51.19 |
| PHY487WRF | 1532 | 43.94 | 1.09 | 82.3 | 30.2 | 5.8 | 48.99 |
| DP1518B2XF | 1500 | 41.06 | 1.16 | 84.2 | 28.9 | 5.0 | 52.41 |
| PHY499WRF | 1477 | 43.47 | 1.13 | 84.3 | 35.6 | 5.5 | 50.66 |
| PHY552WRF | 1429 | 44.73 | 1.15 | 85.5 | 32.7 | 5.3 | 51.45 |
| ST6182GLT | 1411 | 44.41 | 1.20 | 84.5 | 30.1 | 5.3 | 51.25 |
| PHY339WRF | 1400 | 41.75 | 1.17 | 84.7 | 34.4 | 5.2 | 51.80 |
| NG3405B2XF | 1395 | 41.05 | 1.12 | 84.5 | 28.2 | 5.0 | 52.28 |
| DG2285B2RF | 1358 | 40.68 | 1.15 | 84.6 | 31.0 | 5.2 | 51.61 |
| PHY444WRF | 1356 | 43.93 | 1.25 | 85.7 | 33.3 | 4.9 | 54.26 |
| PHY427WRF | 1355 | 41.55 | 1.14 | 84.0 | 33.5 | 5.4 | 50.96 |
| NG5007B2XF | 1342 | 43.66 | 1.20 | 84.2 | 29.8 | 4.9 | 53.86 |
| ST6448GLB2 | 1334 | 40.08 | 1.20 | 84.0 | 29.3 | 5.3 | 50.76 |
| PHY495W3RF | 1334 | 42.95 | 1.11 | 84.7 | 36.4 | 5.3 | 50.54 |
| DP1555B2RF | 1321 | 43.66 | 1.17 | 84.2 | 32.7 | 5.3 | 51.39 |
| ST4946GLB2 | 1305 | 40.28 | 1.17 | 84.9 | 35.5 | 5.5 | 50.78 |
| ST5289GLT | 1290 | 40.55 | 1.16 | 83.3 | 29.4 | 5.1 | 52.30 |
| NG3406B2XF | 1275 | 41.59 | 1.14 | 85.5 | 31.2 | 5.2 | 51.35 |
| DP1538B2XF | 1271 | 42.46 | 1.15 | 84.1 | 32.4 | 5.3 | 51.36 |
| UA222 | 1267 | 39.93 | 1.22 | 85.8 | 34.2 | 5.3 | 51.64 |
| BX1633GLT | 1262 | 44.33 | 1.14 | 84.9 | 32.3 | 5.6 | 50.68 |
| DG3385B2XF | 1260 | 41.59 | 1.17 | 84.8 | 31.4 | 5.3 | 51.40 |
| DP1522B2XF | 1241 | 41.94 | 1.14 | 84.4 | 33.1 | 5.3 | 50.80 |
| PHY496W3RF | 1240 | 42.91 | 1.15 | 84.5 | 34.3 | 5.2 | 51.59 |
| BX1634GLT | 1237 | 40.21 | 1.16 | 85.0 | 32.5 | 5.6 | 50.73 |
| BX1638GLT | 1230 | 42.52 | 1.21 | 85.0 | 33.1 | 5.4 | 50.86 |
| HQ210CT | 1201 | 37.94 | 1.10 | 82.7 | 31.6 | 5.9 | 49.80 |
| BX1531GLT | 1183 | 44.80 | 1.18 | 84.9 | 31.0 | 5.4 | 50.59 |
| DP1558NRB2RF | 1146 | 41.89 | 1.17 | 83.9 | 34.0 | 5.4 | 50.64 |
| PHY333WRF | 1135 | 43.27 | 1.19 | 85.1 | 30.8 | 5.0 | 53.33 |
| ST4747GLB2 | 1108 | 39.01 | 1.20 | 84.5 | 28.4 | 5.2 | 51.40 |
| ST5115GLT | 1104 | 40.58 | 1.16 | 84.3 | 33.9 | 5.2 | 51.38 |
| CT15557B2XF | 1096 | 42.35 | 1.17 | 84.5 | 31.6 | 5.3 | 50.64 |
| DP1553B2XF | 1092 | 40.94 | 1.22 | 85.7 | 31.9 | 5.0 | 53.48 |
| CT13464B2RF | 1090 | 38.80 | 1.21 | 85.3 | 33.6 | 4.8 | 53.83 |
| MON14R913B2XF | 1068 | 39.29 | 1.17 | 84.8 | 34.2 | 5.1 | 52.44 |
| ST5032GLT | 1054 | 40.71 | 1.17 | 84.0 | 33.1 | 5.2 | 52.08 |
| MON15R513B2XF | 1015 | 42.22 | 1.17 | 84.4 | 31.1 | 5.4 | 50.65 |
| PHY222WRF | 989 | 42.02 | 1.13 | 84.8 | 33.8 | 5.3 | 50.46 |
| BX1532GLT | 967 | 46.00 | 1.19 | 84.7 | 31.3 | 5.2 | 51.38 |
| MON15R515B2XF | 916 | 43.47 | 1.18 | 85.3 | 34.2 | 5.6 | 50.85 |
| CT14515B2RF | 853 | 38.72 | 1.21 | 84.3 | 34.1 | 5.2 | 51.85 |
| MON14R934B2XF | 797 | 42.93 | 1.19 | 85.3 | 36.8 | 5.5 | 50.88 |
| | | | | | | | |
| Overall mean | 1236 | 41.97 | 1.1689 | 84.61 | 32.36 | 5.27 | 51.4778 |
| LSD(0.05) | 375 | 1.73 | 0.0358 | 1.369 | 1.587 | 0.192 | 1.3135 |
| C.V.(%) | 22 | 2.94 | 2.19 | 1.16 | 3.5 | 2.61 | 1.82 |
| | | | | | | | |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 6. Yield performance, fiber characteristics, and loan values of cotton varieties grown on an irrigated Commerce silt loam (May planting) at the Northeast Research Station, 2015

| | Lint Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
|---------------|-------------|--------------|-------------|-------------|-------------|------------|--------------|
| Variety | (lbs./ac.) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| MON15R515B2XF | 1438 | 41.76 | 1.14 | 83.5 | 30.2 | 5.1 | 52.03 |
| ST5032GLT | 1435 | 42.49 | 1.12 | 83.6 | 30.9 | 5.4 | 50.33 |
| UA222 | 1408 | 43.52 | 1.14 | 83.9 | 30.6 | 5.3 | 51.49 |
| NG3406B2XF | 1404 | 42.71 | 1.18 | 84.5 | 32.1 | 5.1 | 52.66 |
| MON15R513B2XF | 1385 | 42.73 | 1.19 | 84.2 | 30.4 | 5.1 | 52.48 |
| BX1532GLT | 1354 | 44.89 | 1.15 | 84.3 | 30.4 | 5.1 | 52.19 |
| BX1633GLT | 1345 | 44.16 | 1.21 | 84.2 | 31.7 | 5.1 | 52.98 |
| DP1518B2XF | 1335 | 42.85 | 1.13 | 83.2 | 30.6 | 5.5 | 50.46 |
| MON14R934B2XF | 1310 | 40.83 | 1.17 | 85.2 | 33.1 | 5.1 | 52.48 |
| PHY495W3RF | 1309 | 43.35 | 1.16 | 83.6 | 30.4 | 5.2 | 51.41 |
| PHY487WRF | 1307 | 42.07 | 1.17 | 84.0 | 33.3 | 4.8 | 54.61 |
| MON14R913B2XF | 1289 | 42.76 | 1.15 | 83.7 | 31.4 | 5.3 | 51.19 |
| PHY552WRF | 1288 | 42.78 | 1.13 | 83.7 | 31.5 | 5.4 | 50.75 |
| ST4747GLB2 | 1266 | 41.84 | 1.19 | 84.7 | 31.2 | 4.9 | 53.63 |
| PHY333WRF | 1231 | 42.34 | 1.15 | 82.6 | 30.0 | 5.1 | 51.45 |
| PHY222WRF | 1230 | 42.11 | 1.22 | 83.8 | 32.4 | 5.2 | 51.31 |
| DP1558NRB2RF | 1229 | 41.93 | 1.15 | 83.9 | 33.5 | 5.1 | 52.38 |
| PHY427WRF | 1227 | 41.54 | 1.17 | 84.2 | 30.9 | 5.4 | 50.49 |
| CT14515B2RF | 1213 | 43.17 | 1.15 | 84.1 | 31.4 | 5.2 | 50.80 |
| DG3385B2XF | 1207 | 41.62 | 1.14 | 84.5 | 32.4 | 5.2 | 52.29 |
| PHY312WRF | 1205 | 42.59 | 1.23 | 84.5 | 32.3 | 5.0 | 53.76 |
| PHY499WRF | 1205 | 41.48 | 1.18 | 83.8 | 29.9 | 5.0 | 53.09 |
| PHY496W3RF | 1205 | 43.50 | 1.14 | 83.2 | 30.4 | 5.1 | 52.13 |
| ST6448GLB2 | 1195 | 38.39 | 1.10 | 82.7 | 31.3 | 5.4 | 50.09 |
| DG2285B2RF | 1186 | 42.83 | 1.17 | 84.4 | 30.6 | 5.1 | 52.68 |
| PHY444WRF | 1166 | 43.44 | 1.13 | 84.1 | 31.9 | 5.2 | 51.59 |
| DP1522B2XF | 1156 | 43.32 | 1.18 | 83.4 | 31.8 | 5.1 | 52.24 |
| ST5115GLT | 1154 | 41.10 | 1.15 | 83.3 | 31.8 | 5.1 | 52.64 |
| CT13464B2RF | 1149 | 39.64 | 1.14 | 83.0 | 31.0 | 5.5 | 50.49 |
| CT15557B2XF | 1131 | 40.36 | 1.23 | 84.3 | 32.0 | 5.0 | 52.34 |
| HQ210CT | 1120 | 41.53 | 1.19 | 84.8 | 32.0 | 5.1 | 52.70 |
| BX1634GLT | 1115 | 45.10 | 1.17 | 84.4 | 31.9 | 5.1 | 51.93 |
| BX1638GLT | 1111 | 43.35 | 1.18 | 84.2 | 31.2 | 5.1 | 52.68 |
| ST5289GLT | 1109 | 40.89 | 1.19 | 84.0 | 32.8 | 5.0 | 53.28 |
| PHY339WRF | 1105 | 41.93 | 1.14 | 83.6 | 29.0 | 4.9 | 52.83 |
| DP1555B2RF | 1101 | 42.60 | 1.19 | 84.0 | 32.6 | 5.2 | 51.74 |
| NG5007B2XF | 1094 | 42.78 | 1.18 | 84.8 | 33.3 | 5.1 | 52.11 |
| BX1531GLT | 1082 | 44.09 | 1.18 | 84.2 | 31.3 | 5.0 | 52.48 |
| ST6182GLT | 1079 | 44.14 | 1.17 | 85.5 | 34.2 | 5.3 | 51.43 |
| MON15R551B2XF | 1036 | 43.13 | 1.16 | 84.0 | 31.9 | 5.1 | 52.33 |
| NG3405B2XF | 1034 | 42.35 | 1.16 | 83.5 | 29.1 | 5.3 | 50.80 |
| DP1538B2XF | 1031 | 41.10 | 1.18 | 83.0 | 30.0 | 5.0 | 51.66 |
| DP1553B2XF | 1007 | 42.17 | 1.14 | 83.7 | 30.8 | 5.3 | 50.56 |
| ST4946GLB2 | 964 | 44.67 | 1.19 | 84.3 | 30.5 | 5.1 | 52.55 |
| | | | | | | | |
| Overall Mean | 1203 | 42.45 | 1.1641 | 83.943 | 31.399 | 5.141 | 51.9877 |
| LSD(0.05) | NS | NS | 0.057 | NS | NS | NS | NS |
| C.V.(%) | 20 | 5.20 | 3.5 | 1.21 | 7.19 | 5.76 | 3.43 |
| | | | | | | | |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 7. Yield performance, fiber characteristics, and loan values of cotton varieties grown on an irrigated Commerce silt loam (June planting) at the Northeast Research Station, 2015.

| Variety | Lint Yield (lbs./ac.) | Lint (%) | Length (inches) | Uniformity (%) | Strength (g/tex) | Micronaire | Loan Value (¢/lb) |
|---------------|--------------------------|-------------|--------------------|-------------------|---------------------|------------|----------------------|
| BX1531GLT | 1890 | 46.0 | 1.18 | 83.3 | 27.5 | 4.3 | 54.23 |
| PHY339WRF | 1841 | 40.9 | 1.24 | 85.5 | 31.2 | 4.1 | 54.84 |
| DG2285B2RF | 1812 | 41.4 | 1.23 | 85.8 | 30.6 | 4.3 | 54.81 |
| MON15R551B2XF | 1812 | 43.6 | 1.27 | 84.3 | 28.7 | 4.3 | 54.39 |
| ST4946GLB2 | 1796 | 39.5 | 1.22 | 85.2 | 32.7 | 4.5 | 54.91 |
| DP1518B2XF | 1738 | 41.7 | 1.23 | 84.7 | 28.4 | 4.1 | 54.50 |
| BX1633GLT | 1728 | 43.5 | 1.20 | 83.9 | 29.8 | 4.5 | 54.51 |
| BX1532GLT | 1721 | 45.6 | 1.22 | 83.8 | 27.8 | 4.2 | 54.35 |
| ST5289GLT | 1720 | 43.3 | 1.22 | 84.4 | 28.5 | 4.4 | 54.38 |
| MON14R913B2XF | 1689 | 40.9 | 1.23 | 84.6 | 31.3 | 4.4 | 54.73 |
| DP1522B2XF | 1682 | 42.6 | 1.23 | 84.3 | 30.8 | 4.6 | 53.98 |
| PHY222WRF | 1661 | 37.8 | 1.20 | 85.1 | 30.9 | 4.6 | 54.65 |
| NG3405B2XF | 1658 | 41.2 | 1.32 | 87.4 | 29.9 | 3.8 | 54.71 |
| PHY444WRF | 1658 | 41.3 | 1.18 | 83.3 | 27.4 | 4.1 | 53.90 |
| PHY333WRF | 1632 | 41.0 | 1.26 | 85.7 | 28.4 | 3.9 | 54.56 |
| CT13464B2RF | 1618 | 39.7 | 1.28 | 85.1 | 31.7 | 3.9 | 54.90 |
| ST6448GLB2 | 1607 | 40.4 | 1.25 | 83.7 | 27.3 | 4.2 | 54.36 |
| ST5115GLT | 1604 | 41.5 | 1.19 | 83.7 | 31.8 | 4.4 | 54.73 |
| ST6182GLT | 1600 | 44.9 | 1.23 | 83.2 | 27.3 | 4.0 | 54.35 |
| DP1555B2RF | 1572 | 42.5 | 1.25 | 85.0 | 29.6 | 4.0 | 54.61 |
| MON15R515B2XF | 1569 | 44.0 | 1.23 | 84.3 | 29.0 | 4.6 | 54.45 |
| PHY487WRF | 1561 | 42.2 | 1.22 | 85.4 | 30.3 | 4.5 | 54.60 |
| PHY312WRF | 1560 | 40.2 | 1.25 | 85.6 | 29.4 | 4.2 | 54.58 |
| NG3406B2XF | 1556 | 41.0 | 1.20 | 83.4 | 29.7 | 4.3 | 54.43 |
| MON15R513B2XF | 1550 | 41.0 | 1.25 | 85.9 | 28.9 | 4.2 | 54.63 |
| NG5007B2XF | 1547 | 40.8 | 1.22 | 83.9 | 28.3 | 3.9 | 53.95 |
| PHY496W3RF | 1540 | 41.6 | 1.21 | 84.6 | 31.2 | 4.5 | 54.63 |
| BX1638GLT | 1525 | 41.1 | 1.27 | 85.6 | 30.3 | 3.9 | 54.26 |
| MON14R934B2XF | 1517 | 43.3 | 1.21 | 84.7 | 30.9 | 4.2 | 54.78 |
| DP1558NRB2RF | 1501 | 42.1 | 1.25 | 85.3 | 31.3 | 4.5 | 54.71 |
| DP1538B2XF | 1488 | 43.2 | 1.16 | 84.3 | 30.6 | 3.9 | 54.15 |
| CT15557B2XF | 1484 | 42.3 | 1.20 | 84.2 | 28.7 | 4.0 | 54.50 |
| BX1634GLT | 1449 | 38.0 | 1.25 | 83.4 | 29.9 | 4.0 | 54.49 |
| DP1553B2XF | 1449 | 41.6 | 1.25 | 83.7 | 30.1 | 3.7 | 54.16 |
| PHY495W3RF | 1427 | 43.4 | 1.16 | 83.9 | 33.3 | 4.4 | 54.64 |
| ST4747GLB2 | 1403 | 40.7 | 1.26 | 83.9 | 27.9 | 4.3 | 54.44 |
| ST5032GLT | 1336 | 39.8 | 1.26 | 85.0 | 32.4 | 4.1 | 54.89 |
| DG3385B2XF | 1319 | 40.6 | 1.23 | 85.1 | 29.1 | 4.2 | 54.48 |
| PHY552WRF | 1287 | 43.5 | 1.22 | 84.5 | 31.1 | 3.9 | 54.31 |
| PHY427WRF | 1283 | 40.6 | 1.21 | 84.6 | 30.1 | 4.1 | 54.59 |
| PHY499WRF | 1256 | 42.5 | 1.18 | 83.6 | 31.5 | 4.2 | 54.65 |
| CT14515B2RF | 1221 | 41.0 | 1.26 | 84.4 | 32.2 | 4.0 | 54.76 |
| HQ210CT | 1187 | 37.9 | 1.20 | 84.4 | 29.9 | 4.1 | 54.60 |
| UA222 | 1067 | 39.1 | 1.29 | 85.6 | 31.2 | 3.7 | 54.38 |
| Overall Mean | 1548 | 41.61 | 1.23 | 84.557 | 29.966 | 4.174 | 54.5094 |
| LSD(0.05) | 349.31 | 2.1975 | 0.0427 | 1.816 | 1.741 | 0.327 | NS |
| C.V.(%) | 16.13 | 3.77 | 2.48 | 1.54 | 4.15 | 5.6 | 0.84 |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 8. Yield performance, fiber characteristics, and loan values of cotton varieties grown on an irrigated Gigger silt loam (May planting) at the Macon Ridge Research Station, 2015.

| | Lint Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
|---------------|-------------|--------------|-------------|-------------|-------------|------------|--------------|
| Variety | (lbs./ac.) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| PHY444WRF | 1611 | 42.89 | 1.17 | 85.0 | 32.6 | 4.7 | 54.79 |
| MON15R513B2XF | 1451 | 41.74 | 1.12 | 83.5 | 29.8 | 5.2 | 51.21 |
| DP1555B2RF | 1352 | 45.14 | 1.10 | 83.2 | 31.9 | 5.4 | 49.88 |
| DP1518B2XF | 1316 | 41.50 | 1.11 | 82.5 | 28.9 | 4.9 | 52.50 |
| DP1553B2XF | 1280 | 42.39 | 1.12 | 82.9 | 28.6 | 5.2 | 51.35 |
| DP1558NRB2RF | 1271 | 42.35 | 1.13 | 82.8 | 32.5 | 5.6 | 49.98 |
| PHY339WRF | 1271 | 41.31 | 1.14 | 84.5 | 32.7 | 4.5 | 54.69 |
| MON15R551B2XF | 1261 | 42.50 | 1.16 | 83.0 | 29.6 | 5.0 | 52.91 |
| BX1531GLT | 1230 | 42.31 | 1.11 | 83.0 | 29.6 | 5.2 | 50.59 |
| PHY427WRF | 1206 | 40.79 | 1.08 | 82.7 | 31.1 | 5.0 | 52.08 |
| DP1538B2XF | 1203 | 42.09 | 1.06 | 82.8 | 28.1 | 5.3 | 48.71 |
| PHY312WRF | 1199 | 42.70 | 1.11 | 84.0 | 31.1 | 4.9 | 52.33 |
| PHY496W3RF | 1198 | 43.29 | 1.07 | 82.2 | 33.2 | 5.1 | 50.65 |
| DP1522B2XF | 1177 | 40.48 | 1.12 | 83.6 | 31.2 | 5.2 | 50.33 |
| PHY495W3RF | 1177 | 43.15 | 1.04 | 83.2 | 35.2 | 5.1 | 48.38 |
| ST4946GLB2 | 1174 | 40.35 | 1.08 | 83.7 | 31.5 | 5.0 | 50.70 |
| PHY552WRF | 1168 | 42.27 | 1.10 | 82.6 | 29.8 | 4.9 | 52.56 |
| PHY499WRF | 1164 | 43.44 | 1.07 | 83.5 | 33.5 | 5.3 | 49.59 |
| BX1638GLT | 1163 | 40.85 | 1.11 | 82.6 | 30.6 | 5.1 | 50.81 |
| DG2285B2RF | 1153 | 40.20 | 1.09 | 83.3 | 29.2 | 4.9 | 51.98 |
| UA222 | 1125 | 40.59 | 1.11 | 82.8 | 31.2 | 4.9 | 52.94 |
| BX1633GLT | 1118 | 43.74 | 1.07 | 82.6 | 27.8 | 5.3 | 48.71 |
| ST5115GLT | 1105 | 39.71 | 1.08 | 82.0 | 30.4 | 4.8 | 52.28 |
| MON15R515B2XF | 1103 | 42.96 | 1.12 | 84.0 | 30.4 | 5.4 | 49.80 |
| PHY487WRF | 1096 | 43.22 | 1.03 | 81.2 | 29.7 | 5.4 | 45.83 |
| MON14R913B2XF | 1091 | 39.15 | 1.11 | 82.3 | 31.3 | 5.1 | 51.93 |
| MON14R934B2XF | 1073 | 43.52 | 1.09 | 83.2 | 33.2 | 5.7 | 49.59 |
| BX1532GLT | 1065 | 45.98 | 1.12 | 82.9 | 28.2 | 5.3 | 50.11 |
| ST5289GLT | 1040 | 40.41 | 1.10 | 82.3 | 29.4 | 5.2 | 50.75 |
| ST6448GLB2 | 1013 | 40.62 | 1.15 | 82.8 | 28.0 | 5.3 | 50.81 |
| PHY222WRF | 1003 | 40.26 | 1.07 | 82.6 | 31.0 | 4.7 | 52.31 |
| CT13464B2RF | 981 | 40.23 | 1.11 | 83.8 | 33.2 | 4.9 | 53.25 |
| CT14515B2RF | 935 | 39.76 | 1.11 | 83.0 | 31.6 | 5.4 | 50.28 |
| BX1634GLT | 923 | 40.33 | 1.07 | 80.9 | 27.0 | 4.8 | 50.26 |
| HQ210CT | 907 | 36.33 | 1.10 | 82.7 | 32.4 | 5.7 | 49.68 |
| ST5032GLT | 886 | 40.73 | 1.09 | 82.0 | 30.8 | 4.5 | 53.11 |
| ST6182GLT | 845 | 42.75 | 1.05 | 81.6 | 27.0 | 5.3 | 47.34 |
| ST4747GLB2 | 822 | 39.19 | 1.09 | 80.9 | 23.4 | 4.7 | 49.97 |
| | | | | | | | |
| Overall Mean | 1136 | 41.6100 | 1.0974 | 82.841 | 30.42 | 5.089 | 50.919 |
| LSD(0.05) | 256.92 | 2.0888 | 0.0487 | 1.501 | 2.274 | 0.334 | 2.3367 |
| C.V.(%) | 16.15 | 3.5800 | 3.17 | 1.29 | 5.33 | 4.68 | 3.27 |
| | | | | | | | |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 9. Yield performance, fiber characteristics, and loan values of cotton varieties grown on an irrigated Gigger silt loam (June planting) at the Macon Ridge Research Station, 2015.

| | Lint Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
|---------------|-------------|--------------|-------------|-------------|-------------|------------|--------------|
| Variety | (lbs./ac.) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| PHY333WRF | 1668 | 44.10 | 1.22 | 85.0 | 32.7 | 4.6 | 54.83 |
| PHY312WRF | 1636 | 43.65 | 1.21 | 85.2 | 32.7 | 4.7 | 53.51 |
| MON14R913B2XF | 1613 | 41.84 | 1.20 | 84.0 | 35.5 | 5.0 | 52.80 |
| DP1555B2RF | 1534 | 44.93 | 1.24 | 84.9 | 34.9 | 4.8 | 54.85 |
| DP1522B2XF | 1531 | 43.30 | 1.16 | 83.6 | 33.8 | 5.0 | 53.34 |
| PHY444WRF | 1523 | 43.60 | 1.27 | 85.9 | 32.9 | 4.6 | 54.93 |
| DP1518B2XF | 1489 | 44.27 | 1.18 | 83.3 | 29.8 | 4.8 | 53.70 |
| NG5007B2XF | 1479 | 42.49 | 1.18 | 83.1 | 30.6 | 4.7 | 54.40 |
| PHY495W3RF | 1472 | 43.11 | 1.16 | 84.3 | 36.4 | 4.7 | 54.08 |
| DG3385B2XF | 1465 | 41.54 | 1.19 | 84.8 | 32.4 | 4.8 | 53.69 |
| NG3406B2XF | 1462 | 42.81 | 1.16 | 83.9 | 32.9 | 4.9 | 53.98 |
| ST4946GLB2 | 1460 | 41.20 | 1.19 | 84.2 | 34.9 | 4.9 | 53.45 |
| MON15R513B2XF | 1455 | 40.85 | 1.25 | 85.5 | 32.7 | 5.0 | 53.56 |
| DG2285B2RF | 1447 | 41.54 | 1.21 | 84.2 | 32.9 | 4.7 | 54.03 |
| PHY496W3RF | 1443 | 42.68 | 1.15 | 83.7 | 34.8 | 5.1 | 52.00 |
| BX1633GLT | 1441 | 44.73 | 1.20 | 84.2 | 32.4 | 5.3 | 52.01 |
| PHY339WRF | 1438 | 41.93 | 1.20 | 84.5 | 33.2 | 4.6 | 54.74 |
| NG3405B2XF | 1434 | 41.23 | 1.14 | 82.7 | 30.1 | 4.7 | 54.23 |
| MON15R551B2XF | 1400 | 43.91 | 1.28 | 85.4 | 32.0 | 4.8 | 54.24 |
| BX1634GLT | 1394 | 41.16 | 1.22 | 84.9 | 32.4 | 5.2 | 52.16 |
| ST5032GLT | 1392 | 40.30 | 1.23 | 85.0 | 35.4 | 4.3 | 54.90 |
| PHY427WRF | 1392 | 41.57 | 1.17 | 83.9 | 34.7 | 4.6 | 54.76 |
| PHY222WRF | 1373 | 41.71 | 1.17 | 84.9 | 33.9 | 4.8 | 53.79 |
| ST4747GLB2 | 1362 | 41.83 | 1.22 | 83.1 | 29.1 | 4.7 | 54.25 |
| CT15557B2XF | 1351 | 44.32 | 1.19 | 84.2 | 32.1 | 4.9 | 54.03 |
| ST5115GLT | 1330 | 40.83 | 1.18 | 82.6 | 35.1 | 4.8 | 53.91 |
| DP1558NRB2RF | 1322 | 43.79 | 1.21 | 84.8 | 36.8 | 5.3 | 51.53 |
| PHY552WRF | 1289 | 43.58 | 1.22 | 84.7 | 34.4 | 4.4 | 54.86 |
| BX1531GLT | 1279 | 43.81 | 1.20 | 84.9 | 31.3 | 4.9 | 53.43 |
| PHY499WRF | 1271 | 43.84 | 1.17 | 84.8 | 35.1 | 4.9 | 53.45 |
| ST6182GLT | 1261 | 45.47 | 1.19 | 83.3 | 30.8 | 4.8 | 53.81 |
| MON15R515B2XF | 1235 | 44.73 | 1.24 | 86.0 | 33.2 | 5.2 | 51.60 |
| ST6448GLB2 | 1222 | 41.09 | 1.25 | 84.5 | 29.9 | 4.6 | 53.89 |
| BX1638GLT | 1203 | 41.68 | 1.26 | 85.3 | 34.9 | 4.9 | 54.23 |
| CT14515B2RF | 1203 | 41.47 | 1.23 | 84.1 | 34.1 | 5.0 | 53.13 |
| ST5289GLT | 1192 | 40.45 | 1.20 | 82.7 | 30.6 | 4.4 | 54.49 |
| PHY487WRF | 1170 | 42.26 | 1.16 | 83.8 | 32.7 | 5.1 | 52.98 |
| CT13464B2RF | 1154 | 41.36 | 1.26 | 85.8 | 37.6 | 4.6 | 54.95 |
| BX1532GLT | 1139 | 45.46 | 1.22 | 84.1 | 30.9 | 4.8 | 53.93 |
| MON14R934B2XF | 1105 | 43.56 | 1.20 | 85.4 | 36.6 | 5.3 | 51.88 |
| DP1538B2XF | 1034 | 43.24 | 1.13 | 83.4 | 32.4 | 5.3 | 50.93 |
| DP1553B2XF | 977 | 42.85 | 1.22 | 84.7 | 32.8 | 5.0 | 53.09 |
| UA222 | 738 | 38.54 | 1.29 | 86.1 | 34.0 | 4.9 | 53.28 |
| HQ210CT | 627 | 38.35 | 1.18 | 83.5 | 34.6 | 5.3 | 52.70 |
| | | | | | | | |
| Overall Mean | 1327 | 42.5200 | 1.2035 | 84.368 | 33.241 | 4.839 | 53.5967 |
| LSD(0.05) | 218.97 | 1.6021 | 0.0399 | 1.332 | 1.508 | 0.342 | 1.8193 |
| C.V.(%) | 11.79 | 2.6900 | 2.37 | 1.13 | 3.24 | 5.05 | 2.43 |
| | | | | | | | |

Numbers in bold type and shaded within a column are not significantly different from the numerically greatest value.

Table 10. Locations and dates of agronomically important events for cotton variety trials managed at the LSU AgCenter Research Stations, 2015.

| | Dean Lee | Alexandria | Northeast St. Joseph | | | Macon Ridge Winnsboro | |
|-------------------------|-----------------------|------------|-------------------------|------------|------------|--------------------------|------------|
| Event | silt loam | clay | silt loam1 | silt loam2 | clay | silt loam1 | silt loam2 |
| Planting date | 5/6 | 5/6 | 5/6 | 6/11 | 5/4 | 5/6 | 6/4 |
| Emergence | 5/11 | 5/11 | 5/12 | 6/15 | 5/11 | 5/12 | 6/8 |
| Row spacing | 38 | 38 | 40 | 40 | 40 | 40 | 40 |
| Seeding rate | 48000 | 48000 | 48000 | 48000 | 48000 | 48000 | 48000 |
| Irrigation | no | no | yes | yes | yes | yes | yes |
| Irrigation | | | 3 times | 3 times | 4 times | 4 times | 4 times |
| N, P, K (lbs) | 90-27-54 | 90-27-54 | 100-40-40 | 55-0-0 | 90-0-0 | 90-60-60 | 90-60-60 |
| Defoliation dates | 9/8 | 9/1 | 9/15, 9/22 | 10/6/10/21 | 9/15, 9/23 | 9/8 | 10/5 |
| Harvest date | 9/16 | 9/11 | 9/30 | 11/13 | 10/5 | 9/22 | 10/19 |
| | | | | | | | |
| Trial | GPS Location | | | | | | |
| Dean Lee-clay | 31.17854N, 092.38775W | | | | | | |
| Dean Lee-silt loam | 31.1749N, 092.40602W | | | | | | |
| Northeast-clay | 31.93828N, 091.23256W | | | | | | |
| Northeast-silt loam-1 | 31.94991N, 091.22926W | | | | | | |
| Northeast-silt loam-2 | 31.94278N, 091.22632W | | | | | | |
| Macon Ridge-silt loam-1 | 32.14200N, 091.69919W | | | | | | |
| Macon Ridge-silt loam-2 | 32.14209N, 091.70013W | | | | | | |

Table 11. Lint yield performance of cotton core block demonstrations across locations, 2015.

| Variety | Avoyelles | Caddo | Catahoula | Franklin | Tensas | Rapides-1 | Rapides-2 | Average |
|------------|-----------|-------|-----------|----------|--------|-----------|-----------|---------|
| PHY333WRF | 1317 | 1385 | 970 | 1544 | 1306 | 1407 | 1395 | 1332 |
| PHY312WRF | 1264 | 1313 | 973 | 1560 | 1190 | 1266 | 1306 | 1267 |
| DP1522B2XF | 1227 | 1227 | 927 | 1459 | 1294 | 1308 | 1280 | 1246 |
| ST4946GLB2 | 1102 | 1211 | 1081 | 1450 | 1183 | 1170 | 1498 | 1242 |
| PHY495W3RF | 1201 | 994 | 1023 | 1411 | 1174 | 1191 | 1486 | 1211 |
| PHY444WRF | 1277 | 868 | 1027 | 1380 | 1084 | 1132 | 1513 | 1183 |
| ST5289GLT | 1049 | 1162 | 925 | 1377 | 1146 | 1047 | 1185 | 1127 |
| DP1553B2XF | 1244 | 630 | 838 | 1156 | 946 | 982 | 1409 | 1029 |
| ST6182GLT | 1196 | 638 | 827 | 1143 | 1100 | 918 | 1208 | 1004 |

Table 12. Fiber characteristics of cotton varieties for cotton core block demonstrations across locations (7), 2015.

| Variety | Lint (%) | Length (inches) | Uniformity (%) | Strength (g/tex) | Micronaire | Loan Value (¢/lb) |
|------------|----------|-----------------|----------------|------------------|------------|-------------------|
| PHY333WRF | 44.80 | 1.19 | 84.77 | 30.66 | 4.76 | 54.18 |
| PHY312WRF | 44.00 | 1.19 | 84.90 | 31.96 | 4.80 | 54.20 |
| DP1522B2XF | 43.10 | 1.15 | 84.00 | 32.81 | 5.19 | 51.65 |
| ST4946GLB2 | 41.90 | 1.16 | 84.20 | 33.96 | 5.16 | 52.29 |
| PHY495W3RF | 44.50 | 1.13 | 83.91 | 35.39 | 4.96 | 52.96 |
| PHY444WRF | 44.40 | 1.24 | 85.39 | 32.01 | 4.34 | 54.83 |
| ST5289GLT | 41.50 | 1.15 | 82.63 | 29.76 | 4.90 | 53.47 |
| DP1553B2XF | 43.40 | 1.20 | 84.36 | 31.63 | 4.90 | 54.18 |
| ST6182GLT | 45.80 | 1.17 | 83.80 | 30.00 | 4.94 | 53.11 |

Table 13. Yield performance, fiber characteristics, and loan values of cotton varieties, Avoyelles Parish, core block demonstration, 2015.

| Location: Avoyelles | | Seeding Rate: 39,000 | | | Planting Date: 5/6/15 | | |
|-------------------------------------|-------------|-----------------------------|----------|------------|-----------------------|------------|------------|
| Grower: Adam Lemoine | | Row Width: 38 | | | Harvest Date: 9/24/15 | | |
| County Agent: Justin Dufour | | Soil Type: Coteau silt loam | | | Irrigation: no | | |
| GPS Location: 31.07408N, 092.04153W | | | | | | | |
| | Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
| Variety | (Lint,lb/A) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| PHY 333WRF | 1317 | 46.1 | 1.17 | 83.5 | 29.6 | 4.8 | 54.20 |
| PHY 444WRF | 1277 | 46.1 | 1.20 | 85.0 | 32.3 | 4.2 | 55.00 |
| PHY 312WRF | 1264 | 44.5 | 1.17 | 84.5 | 32.7 | 4.7 | 54.65 |
| DP 1553B2XF | 1244 | 44.5 | 1.16 | 83.3 | 31.5 | 4.9 | 54.55 |
| DP 1522B2XF | 1227 | 43.7 | 1.12 | 83.7 | 33.5 | 5.2 | 51.95 |
| PHY 495W3RF | 1201 | 45.5 | 1.08 | 83.6 | 34.9 | 4.8 | 53.70 |
| ST 6182GLT | 1196 | 46.4 | 1.15 | 83.2 | 31.2 | 4.8 | 54.55 |
| DP1321B2RF | 1132 | 43.9 | 1.13 | 84.1 | 33.6 | 5.3 | 50.65 |
| ST 4946GLB2 | 1102 | 41.7 | 1.13 | 83.8 | 36.2 | 4.9 | 54.55 |
| ST 5289GLT | 1049 | 42.0 | 1.11 | 83.1 | 28.9 | 4.9 | 54.10 |

Table 14. Yield performance, fiber characteristics, and loan values of cotton varieties, Caddo Parish, core block demonstration, 2015.

| Location: Caddo | | Seeding Rate: 50,000 | | | Planting Date: 5/1/15 | | |
|-------------------------------------|-------------|-------------------------------------|----------|------------|------------------------|------------|------------|
| Grower: Ryan Kirby | | Row Width: 30 | | | Harvest Date: 10/12/15 | | |
| County Agent: John Terrell | | Soil Type: Moreland silty clay loam | | | Irrigation: furrow | | |
| GPS Location: 32.73404N, 093.83728W | | | | | | | |
| | Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
| Variety | (Lint,lb/A) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| PHY333WRF | 1385 | 42.89 | 1.28 | 86.0 | 31.2 | 4.7 | 54.95 |
| PHY312WRF | 1313 | 42.28 | 1.25 | 85.8 | 29.9 | 4.8 | 54.50 |
| DP1522B2XF | 1227 | 40.34 | 1.18 | 84.2 | 30.8 | 5.2 | 51.95 |
| ST4946GLB2 | 1211 | 41.01 | 1.19 | 84.6 | 33.0 | 5.2 | 52.20 |
| ST5289GLT | 1162 | 42.12 | 1.21 | 84.1 | 29.8 | 5.1 | 51.80 |
| PHY495W3RF | 994 | 42.95 | 1.16 | 84.4 | 35.2 | 5.0 | 52.10 |
| PHY444WRF | 868 | 43.52 | 1.27 | 85.2 | 31.5 | 4.5 | 54.85 |
| ST6182GLT | 638 | 44.89 | 1.21 | 84.3 | 30.0 | 4.9 | 54.55 |
| DP1553B2XF | 630 | 41.19 | 1.25 | 85.1 | 30.2 | 4.8 | 54.65 |

Table 15. Yield performance, fiber characteristics, and loan values of cotton varieties, Catahoula parish, core block demonstration, 2015.

| Location: Catahoula | | Seeding Rate: 46,000 | | | Planting Date: 5/14/15 | | |
|-------------------------------------|-------------|-------------------------|----------|------------|------------------------|------------|------------|
| Grower: Matt Myers | | Row Width: 38 | | | Harvest Date: 10/2/15 | | |
| County Agent: Lucas Stamper | | Soil Type: Sharkey clay | | | Irrigation: no | | |
| GPS Location: 31.81657N, 091.59186W | | | | | | | |
| | Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
| Variety | (Lint,lb/A) | (%) | (inches) | (%) | (g/tex) | | (¢/lb) |
| ST 4946GLB2 | 1081 | 42.84 | 1.11 | 82.8 | 31.9 | 5.1 | 51.80 |
| PHY 444WRF | 1027 | 45.46 | 1.18 | 83.2 | 32.2 | 4.4 | 54.65 |
| PHY 495W3RF | 1023 | 45.99 | 1.08 | 83.1 | 35.1 | 5.1 | 51.10 |
| PHY 312WRF | 973 | 44.81 | 1.15 | 84.1 | 31.7 | 5.1 | 52.05 |
| PHY 333WRF | 970 | 46.55 | 1.15 | 84.9 | 29.8 | 5.1 | 51.70 |
| DP 1522B2XF | 927 | 44.01 | 1.13 | 83 | 32.8 | 5.3 | 50.50 |
| ST 5289GLT | 925 | 42.88 | 1.12 | 81.3 | 28.7 | 4.9 | 53.95 |
| DP 1553B2XF | 838 | 44.96 | 1.19 | 84.8 | 32.5 | 4.9 | 54.75 |
| ST 6182GLT | 827 | 47.68 | 1.13 | 82.7 | 27.6 | 5.1 | 51.40 |

Table 16. Yield performance, fiber characteristics, and loan values of cotton varieties, Franklin Parish, core block demonstration, 2015.

| Location: Franklin | | Seeding Rate: | 50,000 | Planting Date: | | 5/7/2015 | Harvest Date: | | 10/1/2015 | Irrigation: | | furrow | Strength | | (g/tx) | Micronaire | | Loan Value | (¢/lb) | |
|--------------------------------------|---------|---------------|---------------------|----------------|----------|---------------------|---------------|-----|-----------|-------------|------------|--------------|----------|--|--------|------------|--|------------|--------|--|
| Grower: Adam Faulk | | Row Width: | 38 | Soil Type: | | Necessity silt loam | Uniformity | | (%) | Length | | (inches) | Strength | | (g/tx) | Micronaire | | Loan Value | (¢/lb) | |
| County Agent: Carol Pinnell-Alison | | Soil Type: | Necessity silt loam | Lint | | (%) | Length | | (inches) | Yield | | (Lint, lb/A) | Strength | | (g/tx) | Micronaire | | Loan Value | (¢/lb) | |
| GPS Location: 32.167317N, 091.83295W | | | | | | | | | | | | | | | | | | | | |
| Variety | Yield | (Lint, lb/A) | Lint | (%) | Length | (inches) | Uniformity | (%) | Strength | (g/tx) | Micronaire | Loan Value | (¢/lb) | | | | | | | |
| PHY312WRF | 1560 a | 45.55 a | 1.16 b | 84.4 a | 31.0 cde | 4.7 bc | 54.53 a | | | | | | | | | | | | | |
| PHY333WRF | 1544 a | 45.74 a | 1.16 b | 84.3 a | 31.8 b-e | 4.7 c | 54.63 a | | | | | | | | | | | | | |
| DP1522B2XF | 1459 ab | 42.44 bc | 1.18 ab | 83.4 a | 32.9 abc | 5.0 b | 52.38 bc | | | | | | | | | | | | | |
| ST4946GLB2 | 1450 ab | 43.48 bc | 1.15 b | 84.3 a | 33.9 ab | 5.4 a | 50.70 c | | | | | | | | | | | | | |
| PHY495W3RF | 1411 ab | 45.09 a | 1.10 c | 83.2 a | 34.4 a | 4.9 bc | 52.22 bc | | | | | | | | | | | | | |
| PHY444WRF | 1380 b | 45.34 a | 1.22 a | 84.6 a | 31.7 cde | 4.2 d | 54.83 a | | | | | | | | | | | | | |
| ST5289GLT | 1377 b | 41.47 c | 1.14 bc | 82.1 a | 29.9 e | 4.7 bc | 53.92 ab | | | | | | | | | | | | | |
| DP1553B2XF | 1156 c | 43.13 bc | 1.17 b | 83.2 a | 32.0 bcd | 4.9 bc | 53.70 ab | | | | | | | | | | | | | |
| ST6182GLT | 1143 c | 46.06 a | 1.16 b | 83.3 a | 30.1 de | 4.9 bc | 53.02 ab | | | | | | | | | | | | | |
| LSD(0.05) | 156.09 | 1.4145 | 0.0465 | NS | 2.151 | 0.285 | 1.8882 | | | | | | | | | | | | | |
| C.V.(%) | 6.5 | 1.85 | 2.32 | 1.61 | 3.89 | 3.42 | 2.05 | | | | | | | | | | | | | |
| Overall Mean | 1387 | 44.26 | 1.1578 | 83.656 | 31.974 | 4.815 | 53.3259 | | | | | | | | | | | | | |
| P>F | 0.0002 | 0.0001 | 0.007 | 0.4106 | 0.0041 | 0.0001 | 0.004 | | | | | | | | | | | | | |

Means followed by same letter do not significantly differ (P= .05, LSD)

Table 17. Yield performance, fiber characteristics, and loan values of cotton varieties, Tensas Parish, core block demonstration, 2015.

| | | | | | | | | |
|---------------------------------------|-------------|-------|-----------------------------|------------|----------|-----------------------|------------|--|
| Location: Tensas | | | Seeding Rate: 38,500 | | | Planting Date: 5/8/15 | | |
| Grower: Chuck Tucker | | | Row Width: 38 | | | Harvest Date: 10/4/15 | | |
| County Agent: Dennis Burns | | | Soil Type: Dundee silt loam | | | Irrigation: pivot | | |
| GPS Location: 31.853942N, 091.502383W | | | | | | | | |
| | Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value | |
| Variety | (Lint,lb/A) | (%) | (inches) | (%) | (g/tex) | | (\$/lb) | |
| PHY 333WRF | 1306 | 43.72 | 1.14 | 84.1 | 28.1 | 4.7 | 54.25 | |
| DP 1522B2XF | 1294 | 44.01 | 1.11 | 84.7 | 31.9 | 5.3 | 50.60 | |
| PHY 312WRF | 1190 | 43.58 | 1.15 | 84.9 | 32.3 | 4.8 | 54.65 | |
| ST 4946GLB2 | 1183 | 41.38 | 1.17 | 84.3 | 33.6 | 5.2 | 52.10 | |
| PHY 495W3RF | 1174 | 44.54 | 1.15 | 83.1 | 35.7 | 4.9 | 54.60 | |
| ST 5289GLT | 1146 | 41.05 | 1.11 | 81.1 | 28.6 | 5.0 | 51.35 | |
| ST 6182GLT | 1100 | 44.51 | 1.17 | 84.2 | 29.6 | 5.1 | 51.70 | |
| PHY 444WRF | 1084 | 43.48 | 1.24 | 84.7 | 30.3 | 4.3 | 54.55 | |
| DP 1553B2XF | 946 | 42.09 | 1.15 | 84.1 | 31.6 | 5.2 | 52.05 | |

Table 18. Yield performance, fiber characteristics, and loan values of cotton varieties, Rapides Parish, core block demonstration, 2015.

| | | | | | | | | |
|------------------------------------|-------------|-------|--------------------------------|------------|----------|-----------------------|------------|--|
| Location: Rapides-2 | | | Seeding Rate: 34,500 | | | Planting Date: 5/9/15 | | |
| Grower: Fred Collins | | | Row Width: 38 | | | Harvest Date: 10/9/15 | | |
| County Agent: Donna Morgan | | | Soil Type: Coushatta silt loam | | | Irrigation: no | | |
| GPS Location: 31.16901N, 09230869W | | | | | | | | |
| | Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value | |
| Variety | (Lint,lb/A) | (%) | (inches) | (%) | (g/tex) | | (\$/lb) | |
| PHY444WRF | 1513 | 44.12 | 1.29 | 88.3 | 32.2 | 4.4 | 54.95 | |
| ST4946GLB2 | 1498 | 42.24 | 1.22 | 84.7 | 33.3 | 5.2 | 52.20 | |
| PHY495W3RF | 1486 | 44.14 | 1.16 | 85.1 | 35.9 | 5.1 | 52.20 | |
| DP1553B2XF | 1409 | 44.28 | 1.24 | 84.8 | 31.3 | 4.9 | 54.75 | |
| PHY333WRF | 1395 | 44.83 | 1.21 | 84.8 | 31.9 | 4.8 | 54.75 | |
| PHY312WRF | 1306 | 43.90 | 1.20 | 84.5 | 32.4 | 4.8 | 54.75 | |
| DP1522B2XF | 1280 | 44.29 | 1.19 | 84.9 | 34.7 | 5.3 | 50.80 | |
| ST6182GLT | 1208 | 46.33 | 1.18 | 84.8 | 30.6 | 5.1 | 51.95 | |
| ST5289GLT | 1185 | 40.18 | 1.18 | 83.5 | 31.2 | 4.8 | 54.65 | |

Table 19. Yield performance, fiber characteristics, and loan values of cotton varieties, Rapides Parish, core block demonstration, 2015.

| Location: Rapides-1 | | Seeding Rate: | 42,500 | Planting Date: | 5/6/15 | | |
|-------------------------------------|-------------|--------------------------------|----------|----------------|-----------|------------|------------|
| Grower: Dean Res. & Ext.Center | | Row Width: 38" | | Harvest Date: | 9/17/2015 | | |
| County Agent: Donna Morgan | | Soil Type: Coushatta silt loam | | Irrigation: No | | | |
| GPS Location: 31.17837N, 092.38629W | | | | | | | |
| | Yield | Lint | Length | Uniformity | Strength | Micronaire | Loan Value |
| Variety | (Lint,lb/A) | (%) | (inches) | (%) | (g/tx) | | (¢/lb) |
| PHY333WRF | 1407 a | 43.6 bc | 1.22 ab | 85.8 ab | 32.2 bcd | 4.5 ef | 54.80 a |
| DP1522B2XF | 1308 ab | 43.0 c | 1.17 de | 84.1 cd | 33.1 bc | 5.0 ab | 53.38 bc |
| PHY312WRF | 1266 bc | 43.6 bc | 1.23 ab | 86.1 ab | 33.7 b | 4.7 cde | 54.25 ab |
| DP0912B2RF | 1255 bc | 39.7 e | 1.12 f | 84.1 cd | 31.6 cd | 5.2 a | 51.70 d |
| PHY495W3RF | 1191 bc | 43.3 bc | 1.15 ef | 84.9 bc | 36.5 a | 4.9 bc | 54.78 a |
| ST4946GLB2 | 1170 cd | 40.8 d | 1.18 cde | 84.9 bc | 35.8 a | 5.1 a | 52.50 cd |
| PHY444WRF | 1132 cd | 42.8 c | 1.26 ab | 86.7 a | 33.9 b | 4.4 f | 55.01 a |
| ST5289GLT | 1047 de | 40.6 d | 1.19 bcd | 83.2 d | 31.2 d | 4.9 bc | 54.55 ab |
| DP1553B2XF | 982 e | 43.9 b | 1.21 bcd | 85.2 bc | 32.3 bcd | 4.7 de | 54.83 a |
| ST6182GLT | 918 e | 44.8 a | 1.19 bcd | 84.1 cd | 30.9 d | 4.7 cd | 54.63 a |
| LSD (0.05) | 135.66 | 0.7918 | 0.0385 | 1.2 | 1.803 | 0.191 | 1.1875 |
| C.V. (%) | 8.01 | 1.28 | 2.23 | 0.97 | 3.75 | 2.75 | 1.51 |
| Overall Mean | 1167.4 | 42.5948 | 1.19 | 84.89 | 33.1 | 4.8 | 54.0413 |
| P>F | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |

Means followed by same letter do not significantly differ (P=.05, LSD)

Prepared and provided by these LSU AgCenter personnel:

Dr. Dan Fromme, Corn and Cotton Extension Specialist, Dean Lee Research & Extension Center

John I. Dickson, Instructor, Cotton Fiber Testing Laboratory

Steve Micinski, Associate Professor, Red River Research Station

Dr. David L. Kerns, Associate Professor, Macon Ridge Research Station

Sebe Brown, Area Pest Management Agent, Northeast Region

Keith Shannon, Research Associate, Dean Lee Research & Extension Center

John Stapp, Research Associate, Macon Ridge Research Station

William Waltman, Research Associate, Red River Research Station

Suzanne Laird, Research Associate, Macon Ridge Research Station

Dustin Ezell, Research Associate, Macon Ridge Research Station



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William B. Richardson, LSU Vice President for Agriculture, Louisiana State University Agricultural Center,
Louisiana Agricultural Experiment Station, Louisiana Cooperative Extension Service, LSU College of Agriculture