

2015

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 to six 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. Other fiber properties, such as leaf, trash and color grades, can be influenced by defoliation, ginning and seed cotton storage in modules. Official variety trial results may not be representative of commercial operations for those fiber properties. Therefore, those properties are not reported in this publication.

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 2015 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 2015 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: Phylogenetic varieties with the designation "W" or "WS2" 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 Phylogenetic varieties.

Root-knot nematode. During 2015, several companies are 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: Delta Pine varieties with the designation "XF" 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.

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 cultivated across locations during 2013-2014.

Variety	2013						2014												Average across locations
	Alexandria			Bossier City			St. Joseph			Winnsboro			Bossier City		St. Joseph		Winnsboro		
	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Total		
Lint yield (pounds/acre)																			
PY3122B51WRF	1792	1761	1454	1579	2319	1786	2879	1938	1309	1198	1639	1725	1759	1668	1547	1759			
PHY333WRF	1741	1602	1370	1608	1808	1595	2664	1770	1197	1259	1789	1721	1629	1660	1535	1665			
PHY499WRF	1675	1410	1686	1750	2051	1413	2524	1787	1148	1251	1643	1712	1531	1699	1493	1653			
NG1511B2RF	1595	1526	1625	1589	2035	1734	2557	1809	1206	1218	1307	1624	1400	1531	1339	1611			
ST4946GLB2	1727	1633	1413	1260	2071	1458	2753	1759	1271	1491	1195	1488	1642	1546	1444	1611			
ST5288B2F	1570	1403	1620	1067	2290	1656	2567	1739	1222	1286	1291	1858	1352	1622	1395	1600			
PHY339WRF	1578	1603	1424	1607	1929	1460	2443	1725	1432	1347	1188	1645	1438	1675	1462	1598			
DP0912B2RF	1699	1575	1112	1597	2093	1517	2572	1738	1226	1379	1167	1522	1586	1711	1445	1597			
DP1321B2RF	1365	1576	1282	1618	2063	1846	2464	1745	1306	1298	1234	1539	1455	1702	1431	1596			
DP1311B2RF	1555	1490	1522	1344	1788	1361	2401	1637	1364	1380	1317	1575	1407	1720	1465	1556			
DP1137B2RF	1302	1599	1884	1445	1884	1384	2372	1696	1188	1300	1183	1492	1371	1683	1375	1545			
NG5315B2RF	1441	1580	1858	1622	1653	956	2254	1623	1298	1321	1361	1658	1375	1589	1433	1536			
FM1944GLB2	1471	1528	1457	1316	1920	1314	2330	1619	1159	1320	1391	1660	1261	1546	1390	1513			
DP1133B2RF	1439	1382	1546	1263	1774	906	2552	1556	1197	1375	1272	1598	1480	1647	1396	1495			
ST6448GLB2	1513	1279	1657	940	2135	1199	2433	1594	1335	1301	1322	1292	1281	1680	1370	1490			
PHY427WRF	1696	1552	1029	1138	1692	1543	2150	1543	1243	1241	1241	1749	1470	1470	1412	1478			
SSGUA22	1594	1649	1160	1089	2018	1397	2500	1630	1207	1154	814	1355	1339	804	1120	1391			
SSGHQ210CT	1662	1279	1098	1495	1500	1225	2044	1472	1145	1089	980	1033	1059	1001	1053	1278			
Overall mean	1592	1524	1510	1393	1931	1395	2461	1690	1244	1273	1287	1611	1444	1601	1412	1559			

Table 2. One-year performance of cotton varieties cultivated at six locations during 2014.

Variety	Alexandria		Bossier City		St. Joseph	Winnsboro	Average across locations
	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	
	Lint yield (pounds/acre)						
PX49907W3RF	1339	1168	1491	2034	1768	1795	1606
PX554010WRF	1497	1209	1340	2104	1697	1584	1578
PHY495W3RF	1249	1124	1505	1929	1568	1828	1560
ST4747GLB2	1461	1459	1341	1703	1508	1778	1547
PX3122B51WRF	1309	1198	1639	1725	1759	1668	1547
PX49936W3RF	1280	1096	1519	1879	1673	1731	1543
PHY333WRF	1197	1259	1789	1721	1629	1660	1535
PX554063WRF	1321	1193	1449	1730	1669	1665	1506
PX554057WRF	1358	1249	1335	1767	1534	1715	1498
PHY499WRF	1148	1251	1643	1712	1531	1699	1493
DP1311B2RF	1364	1380	1317	1575	1407	1720	1465
PHY339WRF	1432	1347	1188	1645	1438	1675	1462
M12R224B2R2	1388	1337	1184	1587	1589	1600	1455
ST6182GLT	1075	1257	1412	1725		1740	1450
PX444413WRF	1223	1234	1198	1734	1689	1578	1450
DP0912B2RF	1226	1379	1167	1522	1586	1711	1445
ST4946GLB2	1271	1491	1195	1488	1642	1546	1444
PX37508W3RF	1190	1235	1323	1653	1492	1652	1443
M13R352B2R2	1439	1344	1150	1355	1407	1842	1439
PX37520	1163	1197	1446	1559	1646	1620	1438
NG5315B2RF	1298	1321	1361	1658	1375	1589	1433
DP1321B2RF	1306	1298	1234	1539	1455	1702	1431
DG2285	1247	1361	1279	1597	1467	1505	1415
DGCT14515	1538	1342	798	1639	1383	1666	1412
PHY427WRF	1243	1241	1241	1749	1470	1470	1412
CG3787	1217	1341	1292	1680	1177	1735	1410
PX300310WRF	1122	1278	1186	1654	1355	1740	1398
DP1133B2RF	1197	1375	1272	1598	1480	1647	1396
ST5288B2F	1222	1286	1291	1858	1352	1622	1395
FM1944GLB2	1159	1320	1391	1660	1261	1546	1390
ST5115GLT	1288	1454	1007	1549	1338	1568	1388
BX1532GLT	1071	1205	1408	1511	1365	1745	1383
DP1137B2RF	1188	1300	1183	1492	1371	1683	1375
BX1533GLT	1240	1461	1211	1401	1397	1522	1373
ST6448GLB2	1335	1301	1322	1292	1281	1680	1370
ST5032GLT	1130	1359	1287	1496	1402	1488	1362
BX1531GLT	1084	1359	1227	1416	1371	1682	1360
ST5289GLT	1164	1266	1271	1522	1276	1521	1341
NG1511B2RF	1206	1218	1307	1624	1400	1531	1339
BX1536GLT	1237	1232	1271	1434	1211	1559	1325
AllTexNitro	1080	953	1356	1555	1243	1459	1281
BX1535GLT	1159	1239	1188	1497	1213	1287	1266
DG2355	1064	1077	1075	1556	1224	1508	1256
SSGUA222	1207	1154	814	1355	1339	804	1120
SSGHQ210CT	1145	1089	980	1033	1059	1001	1053
Overall Mean	1244	1273	1287	1611	1444	1601	1412
LSD(0.05)	166	241	327	318	272	200	
C.V. (%)	11.9	16.0	20.1	17.3	16.4	10.9	

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

Table 3. Yield performance and fiber characteristics of cotton varieties cultivated on a nonirrigated Latanier clay at the Dean Lee Research Station during 2014.

Variety	Lint yield	Lint %	Length	Uniformity	Strength	Elongation	Short fiber index	Micronaire
	(pounds/acre)	(%)	(inches)	(%)	(g/tex)			
DGCT14515	1538	46.57	1.14	83.7	29.7	7.5	8.5	4.5
PX554010WRF	1497	44.61	1.16	84.1	30.3	6.5	7.8	3.9
ST4747GLB2	1461	47.02	1.18	82.1	25.5	6.1	8.7	4.5
M13R352B2R2	1439	47.68	1.16	83.3	30.9	6.9	8.4	4.4
PHY339WRF	1432	44.54	1.16	82.9	28.2	7.8	7.9	4.1
M12R224B2R2	1388	44.26	1.18	84.1	29.0	7.0	7.2	4.3
DP1311B2RF	1364	47.56	1.12	82.6	27.9	8.7	8.7	4.6
PX554057WRF	1358	42.88	1.19	84.2	28.3	6.8	7.6	3.9
PX49907W3RF	1339	46.30	1.12	82.8	29.7	7.5	8.5	4.5
ST6448GLB2	1335	41.92	1.19	82.5	28.4	5.9	8.1	4.5
PX554063WRF	1321	45.04	1.17	84.0	29.4	7.1	7.2	4.0
PX3122B51WRF	1309	45.08	1.16	83.4	28.8	7.6	7.9	4.2
DP1321B2RF	1306	44.34	1.15	83.4	29.1	8.9	8.0	4.8
NG5315B2RF	1298	45.40	1.15	83.5	27.7	8.8	7.9	4.4
ST5115GLT	1288	44.17	1.14	82.6	29.3	7.1	8.2	4.0
PX49936W3RF	1280	46.58	1.09	82.5	27.7	8.4	9.6	4.2
ST4946GLB2	1271	42.91	1.12	84.0	28.5	7.8	7.7	4.5
PHY495W3RF	1249	45.52	1.11	84.2	31.1	7.9	8.1	4.5
DG2285	1247	42.55	1.16	83.4	27.9	8.2	7.7	4.5
PHY427WRF	1243	45.37	1.12	83.5	28.4	8.1	8.3	4.2
BX1533GLT	1240	42.39	1.19	82.4	29.9	7.4	8.9	4.3
BX1536GLT	1237	44.73	1.13	83.4	29.2	7.0	7.6	4.2
DP0912B2RF	1226	42.82	1.12	83.3	29.0	7.5	8.0	4.9
PX444413WRF	1223	46.59	1.22	84.1	27.3	7.3	8.0	3.9
ST5288B2F	1222	43.35	1.14	83.1	27.3	7.6	7.9	4.8
CG3787	1217	46.30	1.16	83.7	29.1	7.7	7.7	4.5
SSGUA222	1207	43.26	1.18	83.5	30.0	9.1	7.8	4.3
NG1511B2RF	1206	44.41	1.14	83.8	29.5	8.3	7.7	4.6
DP1133B2RF	1197	45.90	1.15	83.7	29.9	7.9	7.6	4.6
PHY333WRF	1197	44.18	1.16	82.7	26.4	7.5	8.3	4.1
PX37508W3RF	1190	44.28	1.12	83.2	27.9	6.6	8.5	4.1
DP1137B2RF	1188	44.76	1.13	83.1	28.6	8.3	7.8	4.5
ST5289GLT	1164	42.58	1.13	82.2	27.0	6.8	8.9	4.4
PX37520	1163	42.83	1.12	82.5	26.0	8.2	9.3	4.2
BX1535GLT	1159	42.05	1.21	82.5	28.0	6.6	8.1	3.9
FM1944GLB2	1159	40.88	1.20	83.4	29.1	5.5	7.9	4.3
PHY499WRF	1148	45.48	1.14	83.9	29.5	7.8	7.9	4.5
SSGHQ210CT	1145	42.15	1.12	83.1	29.5	6.4	8.3	4.8
ST5032GLT	1130	41.22	1.16	82.4	28.8	8.0	8.9	3.9
PX300310WRF	1122	44.12	1.10	82.6	27.5	8.4	9.2	4.4
BX1531GLT	1084	46.68	1.12	82.9	27.6	7.4	9.2	4.4
AllTexNitro	1080	42.01	1.19	83.5	29.9	7.2	7.8	3.8
ST6182GLT	1075	48.81	1.12	82.7	27.6	7.4	8.2	4.5
BX1532GLT	1071	49.29	1.14	82.3	26.9	7.1	8.7	4.3
DG2355	1064	40.63	1.13	83.1	28.5	7.8	8.5	4.3
Overall Mean	1244	44.49	1.15	83.2	28.6	7.5	8.1	4.3
LSD(0.05)	166	1.15	0.03	1.3	1.6	1.0	1.1	0.2
C.V.(%)	11.9	2.3	2.1	1.1	4	9.2	9.7	4.1

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

Table 4. Yield performance and fiber characteristics of cotton varieties cultivated on a nonirrigated Coushatta silt loam at the Dean Lee Research Station during 2014.

Variety	Lint yield	Lint %	Length	Uniformity	Strength	Elongation	Short fiber index	Micronaire
	(pounds/acre)	(%)	(inches)	(%)	(g/tex)			
ST4946GLB2	1491	42.39	1.14	83.4	30.0	8.1	7.9	4.3
BX1533GLT	1461	41.93	1.20	83.0	30.2	7.7	8.0	4.1
ST4747GLB2	1459	43.71	1.19	82.6	26.6	6.3	8.4	4.3
ST5115GLT	1454	41.96	1.10	81.3	29.2	7.7	9.9	4.1
DP1311B2RF	1380	46.67	1.13	83.1	26.6	8.9	8.8	4.3
DP0912B2RF	1379	42.72	1.09	83.4	28.2	8.1	7.8	4.9
DP1133B2RF	1375	46.28	1.14	83.7	30.8	7.6	7.9	4.5
DG2285	1361	43.44	1.14	83.0	27.8	8.8	8.2	4.3
BX1531GLT	1359	47.28	1.12	82.7	27.7	7.9	8.8	4.4
ST5032GLT	1359	41.85	1.18	83.1	28.7	8.1	8.1	3.8
PHY339WRF	1347	43.59	1.15	82.4	28.5	8.0	8.7	4.0
M13R352B2R2	1344	48.50	1.14	82.5	28.7	7.2	8.4	4.5
DGCT14515	1342	46.13	1.13	81.9	29.1	7.5	9.2	4.6
CG3787	1341	45.95	1.14	82.7	29.0	8.3	8.0	4.4
M12R224B2R2	1337	44.21	1.12	83.5	27.4	7.5	8.2	4.2
NG5315B2RF	1321	45.88	1.09	83.4	28.2	9.1	8.9	4.5
FM1944GLB2	1320	40.78	1.20	83.3	29.5	6.2	8.0	4.2
ST6448GLB2	1301	41.34	1.16	82.1	27.6	6.7	8.9	4.3
DP1137B2RF	1300	46.36	1.09	82.4	28.4	8.0	9.3	4.5
DP1321B2RF	1298	42.79	1.14	83.6	30.0	8.4	7.2	4.7
ST5288B2F	1286	42.25	1.12	81.9	27.7	8.1	8.9	4.6
PX300310WRF	1278	44.60	1.09	81.7	28.5	8.6	9.1	4.3
ST5289GLT	1266	41.49	1.14	81.8	27.7	7.8	9.4	4.1
PHY333WRF	1259	44.13	1.17	83.2	27.3	7.2	8.6	4.0
ST6182GLT	1257	48.53	1.15	83.1	28.3	7.5	8.1	4.2
PHY499WRF	1251	45.53	1.11	83.4	30.3	8.1	8.4	4.3
PX554057WRF	1249	42.90	1.19	83.8	28.5	7.1	8.0	3.8
PHY427WRF	1241	42.23	1.12	82.6	29.2	8.4	9.0	4.0
BX1535GLT	1239	41.17	1.18	82.9	28.7	6.5	8.5	4.0
PX37508W3RF	1235	44.56	1.14	82.7	28.4	6.5	7.7	3.9
PX444413WRF	1234	45.81	1.21	83.3	27.9	7.3	8.4	3.6
BX1536GLT	1232	44.30	1.11	83.2	29.8	6.7	7.8	4.1
NG1511B2RF	1218	44.89	1.12	81.9	28.3	8.8	8.5	4.6
PX554010WRF	1209	44.54	1.14	83.8	30.1	6.9	8.4	3.9
BX1532GLT	1205	48.29	1.13	82.9	27.3	7.5	8.5	4.2
PX3122B51WRF	1198	43.87	1.17	84.3	29.0	6.6	7.8	4.0
PX37520	1197	44.30	1.10	82.0	26.0	8.1	9.5	3.9
PX554063WRF	1193	45.54	1.16	83.2	29.8	6.8	8.4	3.9
PX49907W3RF	1168	46.09	1.13	82.9	29.2	8.2	8.1	4.2
SSGUA222	1154	42.79	1.17	83.7	29.9	9.1	7.5	4.3
PHY495W3RF	1124	46.00	1.11	83.1	28.7	8.3	8.5	4.3
PX49936W3RF	1096	47.02	1.11	82.0	28.2	8.4	8.8	4.2
SSGHQ210CT	1089	41.60	1.12	83.2	29.6	6.9	8.3	4.7
DG2355	1077	40.67	1.13	83.2	29.2	8.1	8.4	4.2
AllTexNitro	953	44.08	1.18	82.5	29.2	7.4	8.7	3.8
Overall Mean	1273	44.25	1.14	82.8	28.6	7.7	8.4	4.2
LSD(0.05)	241	1.00	0.03	1.4	1.6	1.0	1.1	0.2
C.V.(%)	16	1.9	2.1	1.1	3.8	8.7	9.0	2.9

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

Table 5. Yield performance and fiber characteristics of cotton varieties cultivated on an irrigated clay at the Red River Research Station during 2014.

Variety	Lint yield	Lint %	Length	Uniformity	Strength	Elongation	Short fiber index	Micronaire
	(pounds/acre)	(%)	(inches)	(%)	(g/tex)			
PHY333WRF	1789	43.03	1.16	84.2	30.4	7.1	8.0	4.8
PHY499WRF	1643	43.70	1.13	84.8	33.6	8.2	7.5	5.0
PX3122B51WRF	1639	39.92	1.16	85.4	32.5	7.0	7.2	4.6
PX49936W3RF	1519	38.59	1.11	84.2	33.6	8.1	7.5	4.6
PHY495W3RF	1505	40.76	1.10	84.2	34.4	8.2	7.6	4.7
PX49907W3RF	1491	41.09	1.13	83.4	32.9	8.1	8.1	4.6
PX554063WRF	1449	41.69	1.15	84.6	33.2	7.0	7.1	4.7
PX37520	1446	39.83	1.12	82.7	28.5	7.5	9.3	4.4
ST6182GLT	1412	42.60	1.15	83.7	29.4	7.2	7.6	5.0
BX1532GLT	1408	43.46	1.17	83.4	30.0	7.2	7.1	4.9
FM1944GLB2	1391	38.92	1.18	85.2	30.7	5.9	7.2	4.8
NG5315B2RF	1361	40.40	1.18	84.9	32.5	8.6	6.8	4.9
AlliTExNitro	1356	37.00	1.20	84.7	34.7	7.3	6.7	4.3
ST4747GLB2	1341	39.04	1.14	82.7	27.9	6.5	9.2	4.6
PX554010WRF	1340	40.56	1.16	83.8	31.1	7.7	7.6	4.6
PX554057WRF	1335	39.24	1.19	85.1	32.4	6.9	6.7	4.8
PX37508W3RF	1323	38.82	1.14	83.7	30.8	6.2	7.9	4.4
ST6448GLB2	1322	37.60	1.20	84.1	29.5	5.6	7.4	4.8
DP1311B2RF	1317	41.90	1.14	83.6	31.7	8.0	7.7	4.9
NG1511B2RF	1307	40.74	1.10	83.8	33.2	8.0	7.5	5.0
CG3787	1292	40.96	1.17	84.5	31.7	8.1	7.1	4.9
ST5288B2F	1291	38.58	1.12	83.8	30.6	7.5	7.9	5.2
ST5032GLT	1287	40.29	1.16	83.6	32.3	7.6	7.8	4.3
DG2285	1279	38.91	1.14	84.1	31.1	7.6	7.5	4.7
DP1133B2RF	1272	38.85	1.14	84.8	33.1	7.2	7.1	5.1
ST5289GLT	1271	39.03	1.12	83.2	29.6	6.9	8.4	4.8
BX1536GLT	1271	38.86	1.12	84.5	33.7	6.5	7.1	4.6
PHY427WRF	1241	38.23	1.12	84.0	32.3	7.9	7.9	4.8
DP1321B2RF	1234	39.16	1.16	84.4	33.0	8.5	7.0	4.8
BX1531GLT	1227	43.05	1.16	84.2	30.9	7.2	7.1	5.1
BX1533GLT	1211	38.04	1.19	83.8	34.4	7.4	7.1	4.7
PX444413WRF	1198	40.71	1.20	84.9	32.3	6.9	7.2	4.5
ST4946GLB2	1195	37.30	1.14	84.0	34.0	7.3	7.0	4.8
PHY339WRF	1188	39.17	1.19	84.7	32.5	7.8	7.0	4.7
BX1535GLT	1188	37.56	1.21	84.6	32.2	5.8	6.9	4.8
PX300310WRF	1186	37.87	1.12	83.6	32.4	7.3	8.1	4.9
M12R224B2R2	1184	39.74	1.12	83.9	30.8	6.9	8.2	4.7
DP1137B2RF	1183	39.70	1.15	84.1	30.9	7.5	7.4	4.9
DP0912B2RF	1167	36.69	1.12	84.0	31.7	7.4	7.2	5.1
M13R352B2R2	1150	41.87	1.19	85.5	33.3	7.2	6.7	4.9
DG2355	1075	38.57	1.13	84.2	32.5	7.7	7.4	4.7
ST5115GLT	1007	38.30	1.14	83.8	33.5	7.3	7.4	4.8
SSGHQ210CT	980	38.15	1.12	84.1	33.3	7.7	8.0	4.9
SSGUA222	814	40.29	1.22	84.5	33.5	8.3	6.8	4.9
DGCT14515	798	39.28	1.19	84.5	32.3	7.7	7.0	5.0
Overall Mean	1287	39.73	1.15	84.2	32.0	7.4	7.5	4.8
LSD(0.05)	327	2.62	0.04	1.2	1.5	0.8	0.8	0.3
C.V.(%)	20.1	5.3	2.4	1.1	3.4	7.8	8.0	4.0

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

Table 6. Yield performance and fiber characteristics of cotton varieties cultivated on an irrigated silt loam at the Red River Research Station during 2014.

Variety	Lint yield	Lint %	Length	Uniformity	Strength	Elongation	Short fiber index	Micronaire
	(pounds/acre)	(%)	(inches)	(%)	(g/tex)			
PX554010WRF	2104	43.35	1.14	83.8	31.0	7.2	8.1	4.4
PX49907W3RF	2034	42.97	1.11	83.7	32.2	7.6	8.7	4.5
PHY495W3RF	1929	41.31	1.10	83.7	32.9	7.8	7.8	4.7
PX49936W3RF	1879	43.49	1.11	83.6	32.0	7.4	8.1	4.4
ST5288B2F	1858	41.45	1.13	83.8	29.4	7.1	7.8	5.0
PX554057WRF	1767	40.96	1.17	83.2	30.3	7.0	8.2	4.4
PHY427WRF	1749	44.33	1.13	83.4	31.7	7.6	8.3	4.3
PX444413WRF	1734	41.26	1.23	84.9	30.6	7.0	7.2	4.3
PX554063WRF	1730	41.60	1.18	84.4	32.5	6.1	7.3	4.4
PX3122B51WRF	1725	41.79	1.16	83.8	29.3	7.9	7.9	4.6
ST6182GLT	1725	44.75	1.13	83.8	29.6	6.8	8.2	4.8
PHY333WRF	1721	40.96	1.15	83.6	30.2	7.0	8.5	4.6
PHY499WRF	1712	40.04	1.12	84.4	31.9	7.9	7.6	4.9
ST4747GLB2	1703	39.07	1.16	82.9	27.2	6.2	8.7	4.6
CG3787	1680	41.13	1.14	84.1	30.4	8.6	7.6	4.9
FM1944GLB2	1660	36.79	1.18	83.2	29.8	6.0	8.6	4.5
NG5315B2RF	1658	41.74	1.13	84.5	31.3	7.9	7.7	5.0
PX300310WRF	1654	39.48	1.11	83.0	30.5	8.2	8.4	4.7
PX37508W3RF	1653	39.21	1.11	83.1	28.4	8.0	8.7	4.1
PHY339WRF	1645	39.71	1.17	83.8	31.5	7.3	7.5	4.4
DGCT14515	1639	38.32	1.16	83.7	31.5	7.5	7.9	4.7
NG1511B2RF	1624	40.34	1.13	83.3	31.2	8.6	7.5	5.0
DP1133B2RF	1598	40.16	1.15	84.3	32.7	7.7	7.2	4.9
DG2285	1597	37.89	1.15	84.0	29.4	8.1	7.6	4.6
M12R224B2R2	1587	40.04	1.12	83.0	28.3	7.8	8.8	4.5
DP1311B2RF	1575	39.58	1.14	83.7	30.0	8.0	7.9	4.8
PX37520	1559	40.00	1.10	82.8	28.0	7.6	9.4	4.4
DG2355	1556	40.76	1.12	83.4	32.0	7.3	8.2	4.7
AllTexNitro	1555	36.55	1.20	84.5	32.8	7.8	7.0	4.3
ST5115GLT	1549	38.70	1.12	82.9	30.9	6.5	8.5	4.8
DP1321B2RF	1539	37.30	1.14	83.8	31.7	8.2	7.4	4.9
ST5289GLT	1522	39.32	1.13	83.4	28.7	6.6	8.1	4.7
DP0912B2RF	1522	37.24	1.12	83.4	30.3	7.3	7.9	5.0
BX1532GLT	1511	42.51	1.12	82.6	28.1	7.6	9.2	4.7
BX1535GLT	1497	38.38	1.17	83.9	31.2	6.2	7.7	4.6
ST5032GLT	1496	39.30	1.16	83.0	31.3	7.2	8.4	4.3
DP1137B2RF	1492	38.37	1.13	83.2	29.6	8.2	8.2	4.9
ST4946GLB2	1488	39.85	1.13	83.7	32.3	7.3	7.9	4.6
BX1536GLT	1434	38.10	1.12	83.3	32.2	6.1	7.7	4.4
BX1531GLT	1416	41.28	1.13	83.4	30.0	7.3	8.4	5.0
BX1533GLT	1401	38.69	1.19	84.0	33.1	7.3	7.6	4.7
M13R352B2R2	1355	39.93	1.15	84.4	32.9	7.2	7.8	4.8
SSGUA222	1355	40.17	1.19	84.5	32.1	8.4	7.2	4.9
ST6448GLB2	1292	35.70	1.18	84.1	29.2	6.2	8.0	4.8
SSGHQ210CT	1033	37.74	1.12	84.4	32.5	6.8	7.6	5.2
Overall Mean	1611	40.04	1.14	83.7	30.8	7.4	8.0	4.6
LSD(0.05)	318	2.69	0.04	1.15	1.53	0.94	0.94	0.25
C.V.(%)	17.3	5.9	2.3	1.0	3.5	9.3	8.4	3.8

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

Table 7. Yield performance and fiber characteristics of cotton varieties cultivated on an nonirrigated Sharkey clay at the Northeast Research Station during 2014.

Variety	Lint yield	Lint %	Length	Uniformity	Strength	Elongation	Short fiber index	Micronaire
	(pounds/acre)	(%)	(inches)	(%)	(g/tex)			
PX49907W3RF	1768	46.85	1.12	83.8	32.2	7.7	8.0	4.9
PX3122B51WRF	1759	45.41	1.17	84.6	30.5	7.4	7.2	4.8
PX554010WRF	1697	49.51	1.14	84.0	30.9	7.0	7.3	4.6
PX444413WRF	1689	47.18	1.25	85.6	30.7	6.8	7.0	4.2
PX49936W3RF	1673	47.16	1.10	84.4	32.9	7.7	8.0	4.9
PX554063WRF	1669	49.52	1.15	84.1	31.3	7.0	7.5	4.6
PX37520	1646	44.66	1.11	82.9	27.4	7.5	8.8	4.6
ST4946GLB2	1642	44.42	1.13	84.4	31.7	7.8	7.2	5.1
PHY333WRF	1629	45.61	1.18	84.1	30.0	6.7	7.6	4.7
M12R224B2R2	1589	45.10	1.14	83.9	29.5	6.8	7.8	4.7
DP0912B2RF	1586	44.64	1.09	83.4	30.4	7.2	8.4	5.4
PHY495W3RF	1568	45.34	1.12	84.7	33.3	7.7	7.5	4.9
PX554057WRF	1534	45.45	1.19	84.6	31.2	6.8	7.0	4.6
PHY499WRF	1531	46.96	1.14	84.4	32.9	7.7	7.2	5.1
ST4747GLB2	1508	45.72	1.16	82.3	27.2	5.9	9.2	4.8
PX37508W3RF	1492	44.52	1.16	84.2	28.8	6.7	7.3	4.5
DP1133B2RF	1480	46.83	1.16	83.7	31.9	7.6	7.3	5.0
PHY427WRF	1470	44.13	1.12	84.5	30.2	8.3	7.6	4.8
DG2285	1467	44.96	1.16	84.0	29.4	8.6	7.4	4.7
DP1321B2RF	1455	45.20	1.13	84.2	31.4	9.0	7.7	5.2
PHY339WRF	1438	45.21	1.18	84.1	30.4	7.2	7.1	4.8
M13R352B2R2	1407	49.27	1.15	83.2	31.5	7.0	8.4	5.0
DP1311B2RF	1407	46.68	1.13	83.2	29.7	8.1	7.9	4.9
ST5032GLT	1402	42.37	1.19	83.2	30.3	7.2	7.8	4.5
NG1511B2RF	1400	47.06	1.11	84.0	31.3	8.8	7.4	5.0
BX1533GLT	1397	44.14	1.19	84.1	32.2	7.7	7.7	4.9
DGCT14515	1383	45.73	1.15	83.0	30.4	7.7	8.2	5.0
NG5315B2RF	1375	46.48	1.15	83.9	30.2	8.4	7.6	5.0
BX1531GLT	1371	49.26	1.15	83.3	28.6	7.4	7.9	5.0
DP1137B2RF	1371	46.33	1.13	83.8	29.4	7.7	7.9	5.0
BX1532GLT	1365	50.25	1.15	83.5	28.3	7.4	7.8	4.9
PX300310WRF	1355	47.42	1.09	82.8	29.7	7.7	8.5	5.3
ST5288B2F	1352	45.14	1.13	83.2	28.6	7.3	8.0	5.2
SSGUA222	1339	43.27	1.18	84.2	31.7	8.2	7.3	5.0
ST5115GLT	1338	44.28	1.14	83.1	31.2	6.7	8.0	4.6
ST6448GLB2	1281	44.21	1.18	82.7	28.6	6.4	8.4	5.0
ST5289GLT	1276	44.22	1.12	82.9	28.1	7.2	8.4	4.9
FM1944GLB2	1261	43.13	1.18	83.2	29.2	5.8	8.0	4.9
AllTexNitro	1243	43.76	1.21	83.4	31.7	7.1	7.1	4.4
DG2355	1224	40.83	1.14	84.0	32.0	7.9	7.2	4.6
BX1535GLT	1213	41.67	1.23	83.6	31.3	5.6	6.9	4.7
BX1536GLT	1211	45.10	1.15	83.7	30.6	6.5	6.9	4.7
CG3787	1177	46.82	1.14	84.4	29.5	8.4	7.4	5.0
SSGHQ210CT	1059	42.72	1.11	83.4	31.1	6.4	8.2	5.5
Overall Mean	1444	45.56	1.15	83.8	30.4	7.3	7.7	4.8
LSD(0.05)	272	0.76	0.04	1.2	1.4	0.8	1.0	0.2
C.V.(%)	16.4	1.2	2.2	1.0	3.2	7.6	9.2	3.2

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

Table 8. Yield performance and fiber characteristics of cotton varieties cultivated on an irrigated Giger silt loam at the Macon Ridge Research Station during 2014.

Variety	Lint yield	Lint %	Length	Uniformity	Strength	Elongation	Short fiber index	Micronaire
	(pounds/acre)	(%)	(inches)	(%)	(g/tex)			
M13R352B2R2	1842	50.18	1.14	83.2	31.4	7.3	7.9	4.4
PHY495W3RF	1828	47.44	1.10	84.8	31.7	8.2	7.3	4.2
PX49907W3RF	1795	48.02	1.13	83.1	30.9	8.1	8.4	4.3
ST4747GLB2	1778	46.59	1.15	82.5	26.4	6.4	9.1	4.4
BX1532GLT	1745	50.44	1.13	83.3	28.2	6.8	8.6	4.4
ST6182GLT	1740	49.27	1.12	83.1	28.2	8.6	8.2	4.4
PX300310WRF	1740	50.03	1.08	83.1	29.4	7.9	8.2	4.5
CG3787	1735	46.99	1.14	84.0	29.7	9.1	7.7	4.6
PX49936W3RF	1731	47.59	1.11	83.3	31.9	8.2	8.3	4.5
DP1311B2RF	1720	48.89	1.11	82.7	28.3	8.8	9.0	4.5
PX554057WRF	1715	47.02	1.18	84.3	29.1	7.5	7.5	4.1
DP0912B2RF	1711	44.82	1.10	83.1	29.8	7.8	8.3	5.0
DP1321B2RF	1702	47.08	1.13	83.7	30.0	8.8	7.0	4.9
PHY499WRF	1699	46.78	1.12	84.7	32.7	8.4	7.5	4.5
DP1137B2RF	1683	47.12	1.11	83.7	29.5	7.9	8.2	4.7
BX1531GLT	1682	49.67	1.11	82.9	28.4	7.9	9.0	4.3
ST6448GLB2	1680	46.27	1.18	83.2	28.1	6.6	8.0	4.4
PHY339WRF	1675	47.16	1.16	83.9	30.1	7.9	7.7	4.2
PX3122B51WRF	1668	47.05	1.16	83.8	29.9	7.4	7.6	4.3
DGCT14515	1666	46.64	1.13	83.8	30.4	8.1	7.8	4.4
PX554063WRF	1665	47.86	1.17	83.9	31.6	6.3	7.5	4.3
PHY333WRF	1660	47.60	1.17	83.1	27.3	7.3	8.0	4.3
PX37508W3RF	1652	44.63	1.12	83.8	28.7	7.2	8.4	4.1
DP1133B2RF	1647	46.98	1.14	84.6	31.1	8.0	7.0	4.6
ST5288B2F	1622	45.04	1.11	82.9	27.4	7.7	8.7	4.7
PX37520	1620	45.33	1.10	82.8	26.8	8.5	9.4	4.1
M12R224B2R2	1600	44.14	1.14	83.8	28.5	7.4	7.9	4.2
NG5315B2RF	1589	47.47	1.14	83.9	30.8	8.6	7.6	4.5
PX554010WRF	1584	48.57	1.14	83.7	29.2	7.3	7.6	4.3
PX444413WRF	1578	48.55	1.22	84.8	29.6	7.4	7.3	3.9
ST5115GLT	1568	44.74	1.13	82.8	29.7	7.4	8.4	4.1
BX1536GLT	1559	45.49	1.13	83.7	31.0	6.9	7.6	4.1
FM1944GLB2	1546	43.06	1.17	83.5	28.5	6.4	8.4	4.2
ST4946GLB2	1546	45.18	1.11	84.4	30.8	8.0	7.6	4.7
NG1511B2RF	1531	46.98	1.10	83.6	30.8	9.1	7.9	4.9
BX1533GLT	1522	46.83	1.17	82.6	32.1	7.4	8.4	4.2
ST5289GLT	1521	44.00	1.12	83.2	28.1	6.8	8.4	4.4
DG2355	1508	43.13	1.14	83.4	29.4	8.0	8.3	4.3
DG2285	1505	45.04	1.14	84.2	28.2	8.7	8.1	4.5
ST5032GLT	1488	43.39	1.19	83.4	28.5	8.6	8.3	3.9
PHY427WRF	1470	44.87	1.12	83.8	31.3	7.9	7.9	4.1
AllTexNitro	1459	43.24	1.17	84.0	31.7	7.5	7.0	3.8
BX1535GLT	1287	43.44	1.17	83.5	29.6	6.1	7.5	4.1
SSGHQ210CT	1001	43.83	1.13	83.5	31.6	6.7	7.7	4.9
SSGUA222	804	44.19	1.18	83.8	31.3	8.5	7.3	4.7
Overall Mean	1601	46.41	1.14	83.6	29.7	7.7	8.0	4.4
LSD(0.05)	200	1.23	0.03	1.2	1.5	0.8	1.0	0.3
C.V.(%)	10.9	2.3	2.0	1.0	3.5	7.3	9.1	4.2

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

Table 9. Dates of agronomically important events for cotton variety trials managed at LSU AgCenter Research Stations during 2014.

Event	Alexandria		Bossier City		St. Joseph	Winnsboro
	Silt loam	Clay	Silt loam	Clay	Clay	Silt loam
Planting Date	4/29/2014	4/29/2014	5/8/2014	6/9/2014	5/22/2014	5/6/2014
Emergence	5/6/2014	5/6/2014			5/28/2014	
Nitrogen Application	5/21/2014	5/21/2014	6/20/2014	6/23/2014	6/23/2014	5/14/2014
Pre- Herbicide App.	5/2/2014	5/2/2014	5/9/2014		5/24/2014	5/6/2014
Early Herbicide	6/16/2014	6/16/2014	6/16/2014	6/16/2014	6/25/2014	5/14/2014 6/12/2014
Lay-by Herbicide	7/8/2014	7/8/2014	7/2/2014	7/8/2014 7/28/2014	7/23/2014	7/3/2014
Early Insecticide		5/26/2014	6/18/2014	7/2/2014	6/25/2014	5/26/2014
Mid Insecticide	7/8/2014	7/8/2014	7/2/2014	7/9/2014	8/7/2014	6/6/2014
Late Insecticide	7/22/2014	7/22/2014	7/29/2014	7/29/2014	8/21/2014	7/12/2014
	8/5/2014	8/5/2014	8/28/2014	8/28/2014		7/23/2014
	8/13/2014	8/13/2014				8/12/2014 8/20/2014 8/29/2014
PGR	6/24/2014 7/8/2014	6/24/2014 7/8/2014				7/12/2014 7/23/2014 8/12/2014
Harvest Aid	9/23/2014 10/6/2014	9/23/2014 10/9/2014	10/8/2014	10/28/2014	9/30/2014 10/6/2014	9/15/14
Harvest	10/20/2014	10/24/2014	10/22/2014	11/10/2014	10/12/2014	29-Sep-14
Irrigations			two times	one time		two times

Table 10. 2014 Louisiana Cotton Core Block Trial Results-Summary of Lint Yield Across Locations.

Variety	Avoyelles	Caddo	Catahoula	Rapides, DLRS	Franklin	Ouachita	Pointe Coupee	Rapides North	Rapides, South	Lint-lbs/acre		
										Richland	Tensas	Average
DP1321B2RF	1362	1612	1819	1129	1391	1390	679	1764	1401	940	1614	1373
NG1511B2RF	1274	1687	1784	1013	1442	1468	715	1733	1454	913	1436	1356
DP1133B2RF	1423	1435	1873	1178	1660	1176	696	1647	1420	764	1451	1338
ST4946GLB2	1294	1793	1682	1258	1570	1596	593	1614	1142	981	1332	1350
ST6448GLB2	1386	1426	1643	1308	1417	1289	676	1583	1023	879	1331	1269
PHY499WRF	1250	1581	1856	1104	1358	1183	626	1578	1396	833	1470	1294
ST5032GLT	1197	1730	1663	893	1599	1513	564	1570	1092	816	1468	1282
NG5315B2RF	1399	1304	1807	1213	1644	1082	706	1511	1083	941	1304	1272
ST5289GLT	1280	1600	1748	1156	1449	1363	573	1506	1158	881	1480	1290
PHY333WRF	1408	1769	1793	1306	1623	1466	688	1461	1430	824	1529	1391
PHY339WRF	1350	1446	1729	1341	1574	1324	610	1455	1160	757	1616	1306

Table 11. 2014 Louisiana Cotton Core Block Trial Results-Summary of Fiber Quality Across Locations.

Variety	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire
DP1321B2RF	44.2	1.15	84.1	30.6	4.8
NG1511B2RF	45.2	1.12	83.9	30.4	4.8
DP1133B2RF	46	1.15	84	30.8	4.7
ST4946GLB2	43.1	1.14	83.9	30.1	4.7
ST6448GLB2	42.9	1.19	83.6	28.4	4.5
PHY499WRF	45.3	1.14	84.5	31.5	4.7
ST5032GLT	42.1	1.19	83.5	29.7	4.1
NG5315B2RF	45.2	1.15	83.8	29.6	4.6
ST5289GLT	42.8	1.14	83	28.1	4.4
PHY333WRF	44.8	1.18	84	28.4	4.3
PHY339WRF	43.5	1.18	83.9	29.6	4.3

Table 12. Yield Performance and fiber characteristics of core block (on-farm) variety trials across Louisiana, during 2014.

Location: Avoyelles	Seed Rate: 44,000/A	Plant Date: 5/16/2014				
Grower: Trent Clark	Row Width: 36"	Harvest Date: 10/23/2014				
County Agent: Justin Dufour	Soil Type: Sandy Loam					
	Yield (Lint,lb/A)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire
PHY333WRF	1408	45	1.16	83.8	30.1	4.2
ST4946GLB2	1294	44	1.13	83.2	28.9	5
NG1511B2RF	1274	44.1	1.09	83.6	31.3	5.1
DP1321B2RF	1362	44.4	1.12	84.6	31.9	5
PHY339WRF	1350	43.5	1.19	84.1	29.4	4.4
DP1133B2RF	1423	46.3	1.14	84.8	31	4.6
PHY499WRF	1250	45.8	1.13	84.6	31.2	4.6
ST6448GLB2	1386	42.7	1.17	83.6	28.5	4.6
ST5032GLT	1197	41.7	1.2	83.8	31.6	4
NG5315B2RF	1399	44.6	1.12	83.3	29.8	4.5
ST5289GLT	1280	42.2	1.14	82.3	28.7	4.3

Location: Caddo	Seed Rate: 36,000/A	Plant Date: 4/24/2014				
Grower: Ryan Kirby	Row Width: 30"	Harvest Date: 10/27/2014				
County Agent: John Terrell	Soil Type: Coushatta Silt Loam					
	Yield (Lint,lb/A)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire
DP1133B2RF	1435	43.4	1.2	84	32.4	4.7
DP1321B2RF	1612	43	1.16	82.9	30.9	4.9
PHY333WRF	1769	43.4	1.22	84.2	27.6	4.5
PHY339WRF	1446	40.8	1.21	83.5	31.3	4.3
PHY499WRF	1581	44.5	1.18	84.1	33.2	4.8
NG5315B2RF	1304	43.3	1.18	84.3	28.9	4.5
NG1511B2RF	1687	44.6	1.16	85.2	31.3	4.9
ST5289GLT	1600	41.5	1.15	84	28.8	4.5
ST6448GLB2	1426	40.9	1.2	83.5	27.8	4.6
ST4946GLB2	1793	42	1.17	83.7	31.4	4.7
ST5032GLT	1730	41	1.22	84.6	30.4	4.3

Table 12 continued

Location: Catahoula	Seed Rate: 41,700/A	Plant Date: 4/24/2014				
Grower: Matt Myers	Row Width: 38"	Harvest Date: 10/8/2104				
County Agent: Lucas Stamper	Soil Type: Clay					
	Yield (Lint,lb/A)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire
Variety						
DP1133B2RF	1873	47.8	1.17	85.1	31.8	5.3
PHY499WRF	1856	47.5	1.14	85.8	32.7	5.2
DP1321B2RF	1819	47.1	1.17	84.7	31.4	5.3
NG5315B2RF	1807	45.7	1.19	85.2	30.5	5
PHY333WRF	1793	46.3	1.19	85.9	29.5	4.9
NG1511B2RF	1784	47.4	1.13	84.7	31.1	5.2
ST5289GLT	1748	45.1	1.12	83.3	29.1	4.8
PHY339WRF	1729	45	1.19	85.5	30.2	4.8
ST4946GLB2	1682	44.8	1.16	84.8	33.2	5.1
ST5032GLT	1663	44	1.21	85	30.2	4.6
ST6448GLB2	1643	44.7	1.23	85.2	29	4.9

Location: Morehouse	Seed Rate: 41,700/A	Plant Date: 5/5/2014				
Grower: Jeff Dixon	Row Width: 38"	Harvest Date: 10/24/2014				
County Agent: Terry Erwin	Soil Type: Silt Loam					
	Yield (Lint,lb/A)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire
Variety						
333	1793	42.94	1.22	84.9	32.7	4.1
1321	1489	45.03	1.19	82.8	33.4	4.7
5032	1462	43.17	1.18	83.8	32.5	3.8
4946	1685	43.08	1.15	82.9	32.1	4.6
5315	1240	46.08	1.21	82.4	30.7	4.5

Table 12 continued

Location: Ouachita	Seed Rate: 41,700/A	Plant Date: 5/7/2014				
Grower: Tripp Faulk	Row Width: 38"	Harvest Date: 10/31/2014				
County Agent: Richard Letlow	Soil Type: Sterlington Silt Loam					
	Yield	Lint	Length	Uniformity	Strength	Micronaire
Variety	(Lint,lb/A)	(%)	(inches)	(%)	(g/tex)	
ST5032GLT	1513	41	1.19	82.3	30.7	4.3
PHY499WRF	1183	44.2	1.13	84.5	32.5	4.8
ST4946GLB2	1596	41.5	1.1	82.2	30.4	4.7
ST6448GLB2	1289	42.2	1.18	81.8	27.9	4.7
PHY339WRF	1324	42.6	1.16	83.5	29.2	4.3
ST5289GLT	1363	41.5	1.13	81.5	28	4.6
NG5315B2RF	1082	43.7	1.18	82.3	30	4.9
DP1321B2RF	1390	42.4	1.14	84.3	30.9	4.8
DP1133B2RF	1176	45	1.1	83.9	31.8	4.7
NG1511B2RF	1468	43.8	1.12	83.4	29.3	5
PHY333WRF	1466	45.2	1.15	84.2	27.9	4.5

Location: Rapides North	Seed Rate: 49,780/A	Plant Date: 5/1/2014				
Grower: Justin Dekeyzer	Row Width: 40"	Harvest Date: 9/23/2014				
County Agent: Donna Morgan	Soil Type: Silt Loam					
	Yield	Lint	Length	Uniformity	Strength	Micronaire
Variety	(Lint,lb/A)	(%)	(inches)	(%)	(g/tex)	
DP0912B2RF	1866	43.1	1.2	84.1	30.7	3.9
DP1321B2RF	1764	44	1.16	84.8	30.6	4.7
NG1511B2RF	1733	44.3	1.15	83.4	29.9	5.1
DP1133B2RF	1647	46.7	1.18	83	27.8	4.4
ST4946GLB2	1614	42.6	1.15	84.6	29.4	4.6
ST6448GLB2	1583	42.8	1.17	84.5	30.4	4.7
PHY499WRF	1578	45.3	1.13	84.8	31.7	4.8
ST5032GLT	1570	42.8	1.16	83.4	28.1	4.4
NG5315B2RF	1511	45.7	1.16	84.3	30.2	4.3
ST5289GLT	1506	42.2	1.16	84.6	29.4	4.6
PHY333WRF	1461	44.4	1.19	83.7	27.8	4.3
PHY339WRF	1455	43.8	1.18	83.6	29.5	4.3

Table 12 continued

Location: Rapides South	Seed Rate: 36,000/A	Plant Date: 5/13/2014				
Grower: Fred Collins	Row Width: 38"	Harvest Date: 10/21/2014				
County Agent: Donna Morgan	Soil Type: Sandy Silt Loam					
	Yield Variety	Lint (Lint,lb/A)	Length (%)	Uniformity (inches)	Strength (%)	Micronaire
NG1511B2RF	1454	43.8	1.16	84.7	34	4.8
PHY333WRF	1430	43.2	1.19	84.2	30.4	4.2
DP1133B2RF	1420	43.1	1.21	84.2	33.5	4.5
DP1321B2RF	1401	43.1	1.19	84.4	31.5	4.8
PHY499WRF	1396	44	1.18	85.6	34.3	4.7
PHY339WRF	1160	42	1.2	84.5	30.6	4.2
ST5289GLT	1158	42.4	1.17	84.2	29.4	4.5
ST4946GLB2	1142	42.4	1.2	84.5	31.9	4.5
ST5032GLT	1092	41.1	1.22	84.5	32.6	4.2
NG5315B2RF	1083	44.6	1.18	84.6	31.9	4.4
ST6448GLB2	1023	41.2	1.23	84.3	29.6	4.3

Location: Richland	Seed Rate: 41,500/A	Plant Date: 5/23/2014				
Grower: Scott Crawford	Row Width: 38"	Harvest Date: 10/21/2014				
County Agent: Keith R. Collins	Soil Type: Gilbert-Necessity-Egypt silt loam loess soil of the Macon Ridge					
	Yield Variety	Lint (Lint,lb/A)	Length* (%)	Uniformity* (inches)	Strength* (%)	Micronaire*
NG5315B2RF	941	41.7				
NG1511B2RF	913	33.7				
ST5032GLT	816	35.07				
ST4946GLB2	981	31.33				
ST6448GLB2	879	42.45				
ST5289GLT	881	34.51				
PHY499WRF	833	43.46				
PHY339WRF	757	39.12				
PHY333WRF	824	30.55				
DP1133B2RF	764	39.28				
DP1321B2RF	940	35.52				
PHY495WS3R	844	37.75				
* not available						

Table 12 continued

Location: Tensas	Seed Rate: 41,500/A	Plant Date: 5/1/2014				
Grower: Chuck Tucker	Row Width: 38"	Harvest Date: 10/4/2014				
County Agent: Dennis Burns	Soil Type: Dundee Silt Loam					
	Yield (Lint,lb/A)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire
Variety						
ST5288B2RF	1780	44.4	1.1	83.1	27.3	4.9
PHY339WRF	1616	45.3	1.15	84.5	29.9	4.6
DP1321B2RF	1614	45.8	1.15	83.7	31.4	4.9
PHY333WRF	1529	44.7	1.16	83.3	28.1	4.2
ST5289GLT	1480	43.2	1.14	83.1	27.7	4.5
PHY499WRF	1470	44	1.13	84.1	29.6	4.3
ST5032GLT	1468	42	1.17	83.2	29.2	3.8
DP1133B2RF	1451	46.7	1.16	84.2	30.8	5
NG1511B2RF	1436	46.1	1.1	83.6	29.4	4.5
ST4946GLB2	1332	43.6	1.14	84.5	28.6	4.9
ST6448GLB2	1331	42.6	1.21	84	27.6	4.6
NG5315B2RF	1304	45.9	1.16	84.9	29.6	4.9

Table 12 continued

Location: Dean Lee RS, Rapides		Seed Rate: 41,500/A	Plant Date: 5/1/2014
Grower: Darrell Franks		Row Width: 38"	Harvest Date: 10/24/2014
County Agent: Donna Morgan		Soil Type: Clay	
No.	VAR.	lbs lint/acre	Gin Turnout
1	ST5032GLT	893 d	38.1 d
2	ST4946GLB2	1258 ab	41.7 bc
3	ST6448GLB2	1308 ab	42.2 bc
4	STS289GLT	1156 abc	41.7 c
5	NG1511B2RF	1013 cd	44.3 ab
6	NG5315B2RF	1213 abc	44.2 abc
7	PHY499WRF	1104 bcd	44.9 a
8	PHY339WRF	1341 a	42.2 bc
9	PHY333WRF	1306 ab	43.6 abc
10	DP1321B2RF	1129 abc	42.8 abc
11	DP1133B2RF	1178 abc	45.1 a
LSD (P=.05)		230.83	2.577
CV		13.63	4.17
Treatment Prob(F)		0.0122	0.0003
			0.003
			0.084
			0.0007
			0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Table 12 *continued*

Measures will be taken by the Ministry of Health to ensure that the quality of medical services provided to patients is maintained at a high standard.

Non-significant interactions between $\text{Age} \times \text{Treatment}$ and Dose are significant at $p < 0.05$.

Table 12 continued

Location: Point Coupee		Seed Rate: 38,000/A		Plant Date: 5/5/2014	
Grower: George LaCour, Jr.		Row Width: 38"		Harvest Date: 10/5/2014	
County Agent: Miles Brashier		Soil Series: Silt Loam			
No.	Var.	Lint-lbs./acre	gin turnout	length	uniformity
1	ST6448GB2	676 abc	46.7 def	1.16	82.8 a
2	NG5315B2RF	706 ab	49.3 b	1.12	83.1 a
3	PHY3333WRF	688 abc	49.2 b	1.12	83.8 a
4	DP1133B2RF	696 ab	48.9 bc	1.1	83.9 a
5	STS032GLT	564 d	45.6 f	1.13	83.2 a
6	PHY4999WRF	626 bcd	48.9 bc	1.1	84 a
7	NG1511B2RF	715 a	48.8 bc	1.08	83.8 a
8	STS5289GLT	573 d	46.3 ef	1.09	82.4 a
9	DP1321B2RF	679 abc	48 bcd	1.11	83.9 a
10	PHY3339WRF	610 cd	47.6 cde	1.15	83.9 a
11	ST4946GB2	593 d	45.9 f	1.1	84.7 a
12	DP13R352	713 a	51.2 a	1.11	84.1 a
LSD (P=.05)		80.33	1.372	0.0283	1.531
CV		7.26	1.69	1.5	1.08
Treatment Prob(F)		0.0019	0.0001	0.0001	0.0018
				0.202	0.0001
					0.0001

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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