2017

Cotton Varieties
for Louisiana

Variety Trials and On-Farm Demonstrations

LSU AgCenter
Research · Extension · Teaching

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Introduction

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

These AgCenter locations are the 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. Therefore, this publication 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 never can 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.

Individual varieties always differ in performance 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 would normally be received 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.

Top-yielding varieties often have no statistical differences between them 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 performances 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 using 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 most represents their individual farms, and they also should 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 Roudup 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 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 to 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 Johnsongrass in 2010. Consult the LSU AgCenter 2017 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 applications 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 2017 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 applications 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.

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 was the first cotton technology with tolerance to three herbicides. These varieties offer the potential of alternating form 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 these weeds are large and well-developed.

Enlist: In 2016, Phytogen varieties with the designation "FE" became available, and they are transgenic cotton lines tolerant to over-the-top applications of 2,4-D, glyphosate and glufosinate. This is the second cotton technology that now offers tolerance to three herbicides. Weeds still should be controlled early, when they are small and actively growing. 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 these weeds are large and well-developed.

Bollgard 2: Varieties with the designation "B2" or "BG2" in their brand names are cotton lines 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, not 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 designation "W" or "W3" in their brand names are cotton lines tolerant to the Louisiana caterpillar pests known as tobacco budworms and fall armyworms. These varieties should not need any supplemental insecticidal sprays for controlling those pests. The characteristics and insect management recommendations previously mentioned for Bollgard 2 traits remain the same for the Widestrike trait in Phytogen varieties.

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.

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 these varieties on sandier soils with known root-knot nematode populations is a new option, especially with the loss of Temik.

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, however, is more important than determining what actually is the good or bad cool germination rate. 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 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 is Louisiana for cotton is between April 15 and May 15. Earlier planting are possible without causing significant yield loss, but there is the risk of cold damage or reduced ability of the plants to recover from thrips 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 lint yield performance of cotton varieties planted across seven locations, 2015-2016.

Variety	2015							2016								Average across locations
	Alexandria		St. Joseph			Winnsboro	2015	Alexandria		Winnsboro	St. Joseph		Bossier City		2016	
	Clay	Silt loam	Clay	Silt loam-1	Silt loam-2	Silt loam	Average	Clay	Silt Loam	Silt loam	Clay	Silt loam	Clay	Sandy loam	Average	
DP1646B2XF	830	1160	1580	1036	1812	1400	1303	1802	1841	1718	1432	1212	1060	1166	1462	1382
PHY495W3RF	1128	1182	1334	1309	1427	1472	1309	1892	1560	1745	1425	982	1382	1118	1443	1376
DP1518B2XF	963	1465	1500	1335	1738	1489	1415	1886	1349	1638	1276	1009	1052	881	1299	1357
DP1555B2RF	1076	1242	1321	1101	1572	1534	1308	1830	1553	1713	1455	1092	1015	1094	1393	1350
PHY339WRF	986	1260	1400	1105	1841	1438	1338	1607	1457	1702	1400	1214	976	1010	1338	1338
PHY333WRF	1057	1365	1135	1231	1632	1668	1348	1766	1585	1624	1308	857	1077	965	1312	1330
DP1522B2XF	1076	1293	1241	1156	1682	1531	1330	1484	1484	1586	1341	1202	1139	936	1310	1320
PHY499WRF	943	1275	1477	1205	1256	1271	1238	1812	1495	1687	1358	1066	1192	1120	1390	1314
PHY312WRF	926	1054	1555	1205	1560	1636	1323	1629	1434	1653	1569	1020	885	877	1295	1309
ST4949GLT	945	1354	1262	1345	1728	1441	1346	1521	1196	1477	1399	1147	1020	1066	1261	1303
PHY444WRF	972	1079	1356	1166	1658	1523	1292	1789	1499	1537	1207	987	1163	1016	1314	1303
PHY496W3RF	941	1290	1240	1205	1540	1443	1277	1723	1565	1651	1318	750	1170	1088	1324	1300
DP1639B2XF	855	1232	797	1310	1517	1105	1136	1891	1529	1711	1249	1212	1281	1257	1447	1292
DP1538B2XF	1022	1209	1271	1031	1488	1034	1176	1841	1610	1648	1370	1263	826	1041	1371	1274
NG3406B2XF	1031	1009	1275	1404	1556	1462	1290	1614	1312	1475	1301	889	1140	1058	1255	1272
NG5007B2XF	914	1151	1342	1094	1547	1479	1255	1888	1471	1495	1055	928	1063	1025	1275	1265
ST4946GLB2	1162	1287	1305	964	1796	1460	1329	1596	1120	1435	1227	882	1158	969	1198	1263
PHY552WRF	1155	1116	1429	1288	1287	1289	1261	1587	1349	1469	1314	944	1225	959	1264	1262
ST4848GLT	814	1092	1237	1115	1449	1394	1184	1591	1241	1724	1290	851	1213	1136	1292	1238
DP1614B2XF	939	1246	916	1438	1569	1235	1224	1634	1332	1752	1366	875	729	884	1224	1224
DG3385B2XF	857	1188	1260	1207	1319	1465	1216	1561	1268	1444	1272	970	972	1007	1213	1215
ST5289GLT	990	1192	1290	1109	1720	1192	1249	1503	1245	1218	1279	975	1002	989	1173	1211
ST6182GLT	1004	899	1411	1079	1600	1261	1209	1698	1419	1441	1141	928	972	889	1212	1211
DG3757B2XF	1022	882	1096	1131	1484	1351	1161	1730	1381	1610	1157	880	770	1077	1229	1195
ST5115GLT	733	759	1104	1154	1604	1330	1114	1696	1270	1347	1224	793	1052	1016	1200	1157
UA222	1029	1153	1267	1408	1067	738	1110	1513	1197	1398	1121	967	517	528	1034	1072
HQ210CT	829	1076	1201	1120	1187	627	1007	1475	1041	1225	1159	694	620	294	930	968
Overall mean	970	1167	1282	1194	1542	1343	1250	1687	1400	1560	1297	985	1025	980	1276	1263

Table 2. One-year lint yield performance of cotton varieties planted at seven locations, 2016.

	Alexandria		Winnsboro	St. Joseph		Bossier City		Average across
	Clay	Silt loam	Silt loam	Clay	Silt loam	Clay	Sandy loam	locations
Variety	**Lint yield (pounds/acre)**							
DP1646B2XF	**1802**	**1841**	**1718**	**1432**	**1212**	1060	**1166**	1462
DP1639B2XF	**1891**	1529	**1711**	1249	**1212**	**1281**	**1257**	1447
PHY495W3RF	**1892**	1560	**1745**	**1425**	**982**	**1382**	**1118**	1443
CPS16654B2XF	**2070**	1582	**1800**	**1513**	**1202**	886	939	1427
DP1555B2RF	**1830**	1553	**1713**	**1455**	**1092**	1015	**1094**	1393
PHY499WRF	**1812**	1495	**1687**	**1358**	**1066**	**1192**	**1120**	1390
DP1538B2XF	**1841**	1610	**1648**	**1370**	**1263**	826	1041	1371
CL3885B2XF	**1919**	1462	**1697**	1200	**947**	**1268**	1045	1363
PHY339WRF	1607	1457	**1702**	**1400**	**1214**	976	1010	1338
15R535B2XF	1531	1379	1616	**1429**	**1235**	1068	1049	1329
PHY496W3RF	**1723**	1565	**1651**	1318	750	**1170**	**1088**	1324
PHY444WRF	**1789**	1499	1537	1207	**987**	**1163**	1016	1314
PHY333WRF	**1766**	1585	1624	1308	857	1077	965	1312
DP1522B2XF	1484	1484	1586	1341	**1202**	**1139**	936	1310
DP1518B2XF	**1886**	1349	**1638**	1276	**1009**	1052	881	1299
PHY312WRF	1629	1434	**1653**	**1569**	**1020**	885	877	1295
AMX1601B2XF	1648	1498	**1875**	1343	929	843	916	1293
ST4848GLT	1591	1241	**1724**	1290	851	**1213**	**1136**	1292
DG3526B2XF	**1760**	1572	**1636**	1188	909	879	1029	1282
NG5007B2XF	**1888**	1471	1495	1055	928	1063	1025	1275
PHY552WRF	1587	1349	1469	1314	**944**	**1225**	959	1264
ST4949GLT	1521	1196	1477	**1399**	**1147**	1020	1066	1261
NG3406B2XF	1614	1312	1475	1301	889	**1140**	1058	1255
16R229B2XF	1549	1374	1525	1251	**1035**	978	972	1240
DG3757B2XF	**1730**	1381	1610	1157	880	770	1077	1229
DP1614B2XF	1634	1332	**1752**	**1366**	875	729	884	1224
DG3385B2XF	1561	1268	1444	1272	**970**	972	1007	1213
BX1737GLT	1504	1357	1477	1228	877	1030	1017	1213
ST6182GLT	1698	1419	1441	1141	928	972	889	1212
BX1738GLT	1605	1223	1289	1270	**1019**	1084	972	1209
ST5115GLT	1696	1270	1347	1224	793	1052	1016	1200
ST4946GLB2	1596	1120	1435	1227	882	**1158**	969	1198
ST5289GLT	1503	1245	1218	1279	**975**	1002	989	1173
BX1776GLTP	1266	1049	1441	1190	**941**	1053	897	1120
BX1775GLTP	1334	1180	1312	1264	695	1009	989	1112
BX1739GLT	1500	1015	1245	1130	608	980	890	1053
AMX1604B2XF	**1715**	1158	1116	1071	811	642	753	1038
UA222	1513	1197	1398	1121	**967**	517	528	1034
DG3445B2XF	1261	1124	1211	1055	561	756	710	954
HQ210CT	1475	1041	1225	1159	694	620	294	930
Overall mean	1587	1369	1534	1279	959	1004	966	
LSD (0.05)	358	219	249	221	323	254	173	
C.V. (%)	16.09	11.42	11.58	12.34	20.74	18.11	12.78	

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

Table 3. Lint yield performance, fiber characteristics, loan values and dollar return per acre of cotton varieties grown on a nonirrigated Latanier clay soil at the Dean Lee Research Station, Alexandria, Louisiana, 2016.

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	**(lb/ac)**	**(%)**	**(inches)**	**(%)**	**(g/tex)**		¢	(acre)
CPS16654B2XF	**2070**	44.75	**1.28**	84.6	32.0	4.1	**55.06**	**1139.48**
CL3885B2XF	**1919**	44.26	1.18	84.8	32.0	4.3	**55.01**	**1055.71**
PHY495W3RF	**1892**	44.30	1.15	**85.8**	**36.4**	4.3	**55.11**	**1042.99**
DP1639B2XF	**1891**	44.40	1.19	**86.2**	**35.7**	**4.5**	**55.13**	**1042.41**
NG5007B2XF	**1888**	44.14	1.19	84.6	29.1	4.3	**54.73**	**1032.95**
DP1518B2XF	**1886**	42.50	1.21	85.5	31.0	3.8	54.58	**1028.12**
DP1538B2XF	**1841**	44.61	1.14	83.3	30.8	4.3	54.69	**1006.74**
DP1555B2RF	**1830**	44.96	1.21	85.1	33.6	**4.4**	**55.08**	**1007.75**
PHY499WRF	**1812**	43.59	1.17	85.0	**35.7**	4.4	**55.08**	**997.78**
DP1646B2XF	**1802**	45.07	**1.30**	**86.1**	31.3	4.3	**55.14**	**993.46**
PHY444WRF	**1789**	42.82	**1.28**	**86.0**	33.9	3.6	54.23	**969.56**
PHY333WRF	**1766**	43.13	1.23	**85.6**	32.5	3.9	**55.15**	**974.18**
DG3526B2XF	**1760**	45.43	1.16	**85.8**	32.0	4.4	**55.06**	**969.10**
DG3757B2XF	**1730**	44.29	1.18	**85.8**	32.6	4.3	**55.14**	**953.73**
PHY496W3RF	**1723**	44.86	1.16	85.3	**35.5**	4.3	**55.08**	**949.12**
AMX1604B2XF	**1715**	42.25	1.19	84.9	32.6	4.1	**55.14**	**945.56**
ST6182GLT	1698	**45.31**	1.18	84.0	30.7	4.0	**54.91**	932.19
ST5115GLT	1696	40.40	1.17	83.8	33.7	3.9	**54.99**	932.69
AMX1601B2XF	1648	44.12	1.20	**86.9**	**36.0**	**4.5**	**55.21**	910.28
DP1614B2XF	1634	43.57	1.23	**86.5**	34.2	**4.7**	**55.14**	900.89
PHY312WRF	1629	43.13	1.21	**86.0**	34.0	3.9	**55.28**	900.28
NG3406B2XF	1614	42.01	1.17	**86.1**	32.0	4.4	**55.10**	889.26
PHY339WRF	1607	42.99	1.22	85.6	34.2	4.3	**55.19**	885.55
BX1738GLT	1605	41.56	1.25	**86.2**	**34.5**	4.0	**55.30**	887.38
ST4946GLB2	1596	41.01	1.19	84.8	**34.5**	3.8	**55.13**	879.77
ST4848GLT	1591	44.01	1.20	85.3	33.7	4.3	**55.08**	876.35
PHY552WRF	1587	43.14	1.20	**86.9**	**34.6**	3.9	**55.30**	877.45
DG3385B2XF	1561	41.36	1.20	**86.3**	31.9	**4.5**	**55.06**	859.63
16R229B2XF	1549	43.65	1.18	84.6	33.5	**4.5**	**55.01**	852.24
15R535B2XF	1531	46.73	1.20	84.8	32.8	4.3	**55.04**	842.86
ST4949GLT	1521	45.12	1.19	84.9	33.6	4.1	**55.14**	838.60
UA222	1513	41.21	1.25	85.2	34.0	3.9	**55.15**	834.35
BX1737GLT	1504	41.69	1.23	**85.7**	32.0	3.9	**55.18**	829.67
ST5289GLT	1503	40.21	1.19	84.6	31.1	4.3	**54.93**	825.41
BX1739GLT	1500	42.47	1.25	85.3	33.1	4.5	**55.05**	826.02
DP1522B2XF	1484	42.74	1.19	85.4	**34.8**	4.5	**55.11**	817.80
HQ210CT	1475	39.09	1.18	84.1	34.1	4.6	54.33	800.65
BX1775GLTP	1334	41.72	1.22	84.4	31.3	3.5	53.58	678.80
BX1776GLTP	1266	39.98	1.22	**86.1**	**34.5**	4.0	**55.24**	696.56
DG3445B2XF	1261	40.62	1.24	84.9	31.8	3.6	54.58	727.08
Overall Mean	1587.441442	43.0783	1.2034	85.301	33.163	4.17	54.9841	872.8698
LSD (0.05)	357.8838946	1.6061	0.0279	1.274	1.873	0.27	0.5782	196.0067
C.V. (%)	16.09	2.66	1.66	1.07	4.03	4.63	0.75	16.02

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

Table 4. Lint yield performance, fiber characteristics, loan values and dollar return per acre of cotton varieties grown on a nonirrigated Coushatta silt loam soil at the Dean Lee Research Station, Alexandria, Louisiana, 2016.

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	**(lb/ac)**	**(%)**	**(inches)**	**(%)**	**(g/tex)**		¢	(acre)
DP1646B2XF	**1841**	**43.58**	1.27	85.0	30.3	4.2	54.84	**1009.66**
DP1538B2XF	1610	**43.07**	1.11	83.2	29.8	4.3	54.00	869.41
PHY333WRF	1585	41.09	1.22	**86.1**	31.4	3.9	**55.15**	874.24
CPS16654B2XF	1582	**42.75**	**1.29**	84.7	32.4	4.0	**55.06**	871.12
DG3526B2XF	1572	41.81	1.16	84.9	32.0	4.2	**54.95**	863.71
PHY496W3RF	1565	**42.82**	1.18	85.4	**36.1**	4.0	**55.12**	835.23
PHY495W3RF	1560	41.81	1.15	85.5	**35.6**	4.3	**55.04**	858.63
DP1555B2RF	1553	41.19	1.22	85.5	34.1	4.3	**55.19**	856.84
DP1639B2XF	1529	**42.75**	1.18	**86.0**	**35.2**	**4.5**	**55.16**	843.43
PHY444WRF	1499	41.52	**1.30**	**86.8**	34.1	3.7	54.84	822.60
AMX1601B2XF	1498	**43.33**	1.21	85.0	35.3	4.3	**55.13**	825.42
PHY499WRF	1495	**42.31**	1.17	85.2	35.5	4.4	**55.10**	823.55
DP1522B2XF	1484	39.82	1.19	85.6	31.7	**4.6**	**54.99**	816.51
NG5007B2XF	1471	41.00	1.18	83.5	29.3	4.0	54.70	804.74
CL3885B2XF	1462	41.12	1.17	84.4	30.1	4.1	54.78	800.70
PHY339WRF	1457	39.97	1.21	85.3	31.8	3.8	55.11	803.15
PHY312WRF	1434	39.69	1.22	85.2	31.5	3.9	55.18	791.31
ST6182GLT	1419	**44.31**	1.19	84.9	29.7	4.0	54.78	777.39
DG3757B2XF	1381	**42.72**	1.18	84.5	31.2	4.4	**54.94**	758.48
15R535B2XF	1379	**44.20**	1.20	84.4	30.0	4.1	**54.85**	756.72
16R229B2XF	1374	**42.32**	1.16	83.6	31.5	4.3	54.75	751.85
BX1737GLT	1357	40.61	1.23	85.6	32.2	4.1	**55.20**	749.04
PHY552WRF	1349	40.96	1.20	85.3	33.9	3.8	**55.19**	744.68
DP1518B2XF	1349	38.87	1.22	85.4	30.6	3.8	**55.04**	742.20
DP1614B2XF	1332	**42.44**	1.24	**86.6**	33.3	**4.7**	**55.18**	734.79
NG3406B2XF	1312	39.67	1.16	84.5	31.7	**4.5**	**54.91**	720.31
ST5115GLT	1270	38.58	1.16	83.8	32.8	4.2	**54.91**	697.36
DG3385B2XF	1268	38.55	1.21	84.6	30.8	4.1	**54.94**	697.30
ST5289GLT	1245	41.67	1.21	86.0	33.0	4.0	**55.27**	683.78
ST4848GLT	1241	40.41	1.25	**86.3**	33.5	3.7	**55.29**	706.07
BX1738GLT	1223	38.87	1.24	**85.8**	32.9	4.2	**55.24**	689.18
UA222	1197	41.96	1.16	84.4	32.4	4.2	**54.98**	661.12
ST4949GLT	1196	38.73	1.22	83.8	30.3	3.9	54.84	657.61
BX1775GLTP	1180	39.00	1.18	84.8	33.1	4.3	**55.05**	647.27
AMX1604B2XF	1158	37.13	1.22	**86.8**	34.8	4.1	**55.29**	637.45
DG3445B2XF	1124	38.71	1.18	84.4	33.8	4.1	**55.05**	621.59
ST4946GLB2	1120	39.77	1.21	84.1	29.6	3.6	54.24	616.24
BX1776GLTP	1049	36.48	1.18	84.5	33.9	4.7	**54.94**	569.32
HQ210CT	1041	40.99	1.26	85.5	32.7	4.4	**55.14**	571.98
BX1739GLT	1015	41.70	1.19	85.4	32.7	**4.7**	**55.04**	559.80
Overall Mean	1369.29	40.9556	1.1779	83.435	31.758	4.071	53.9475	738.8494
LSD (0.05)	218.92	2.23	0.028	1.146	1.779	0.294	0.4073	121.5048
C.V. (%)	11.42	3.89	1.7	0.98	4	5.16	0.54	11.74

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

Table 5. Lint yield performance, fiber characteristics, loan values and dollar return per acre of cotton varieties grown on an irrigated Gigger silt loam soil at the Macon Ridge Research Station, Winnsboro, Louisiana, 2016.

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	(lb/ac)	(%)	(inches)	(%)	(g/tex)		¢	(acre)
AMX1601B2XF	**1875**	**46.58**	1.20	**85.9**	**34.4**	4.7	**54.58**	**1022.36**
CPS16654B2XF	**1800**	**46.52**	**1.28**	85.1	30.6	4.1	**54.91**	**988.44**
DP1614B2XF	**1752**	**45.86**	1.21	**85.7**	32.3	**5.1**	52.40	**917.33**
PHY495W3RF	**1745**	44.60	1.13	85.3	**36.4**	4.3	**54.95**	**958.83**
ST4848GLT	**1724**	44.62	1.19	85.0	32.2	4.3	**55.09**	**949.55**
DP1646B2XF	**1718**	**46.23**	**1.27**	85.2	31.8	4.1	**54.95**	**943.86**
DP1555B2RF	**1713**	**45.71**	1.19	**85.4**	33.6	4.6	**55.05**	**943.01**
DP1639B2XF	**1711**	**45.79**	1.19	84.7	**34.9**	4.4	**55.09**	**942.47**
PHY339WRF	**1702**	43.86	1.19	85.1	32.3	4.2	**55.06**	**937.01**
CL3885B2XF	**1697**	**45.15**	1.17	84.6	31.3	4.2	**54.38**	**923.71**
PHY499WRF	**1687**	**45.09**	1.16	**86.1**	**35.3**	4.3	**55.19**	**930.74**
PHY312WRF	**1653**	43.31	1.21	85.2	32.1	4.2	**55.11**	**911.10**
PHY496W3RF	**1651**	**45.28**	1.15	83.7	**34.5**	4.0	**54.88**	**905.86**
DP1538B2XF	**1648**	44.69	1.13	84.1	30.6	4.1	**54.65**	**900.55**
DP1518B2XF	**1638**	42.60	1.18	84.3	28.1	3.8	**54.21**	**889.51**
DG3526B2XF	**1636**	**45.47**	1.14	84.8	31.4	4.3	**54.76**	**896.23**
PHY333WRF	1624	43.56	1.21	84.9	30.6	4.0	**54.41**	**886.09**
15R535B2XF	1616	**45.91**	1.20	85.1	29.8	4.3	**54.93**	**887.19**
DG3757B2XF	1610	**45.54**	1.17	84.3	30.3	4.5	**54.68**	880.32
DP1522B2XF	1586	42.91	1.19	**85.5**	32.8	4.9	**54.48**	863.76
PHY444WRF	1537	44.27	**1.26**	**85.8**	32.1	3.6	**54.68**	840.52
16R229B2XF	1525	**44.99**	1.11	84.0	29.1	4.6	53.39	814.55
NG5007B2XF	1495	43.28	1.17	83.6	30.5	4.3	**54.71**	817.61
ST4949GLT	1477	**45.55**	1.13	84.0	32.0	4.2	**54.80**	809.77
BX1737GLT	1477	42.66	1.21	84.9	31.6	3.8	**54.53**	806.05
NG3406B2XF	1475	42.96	1.16	85.0	32.5	4.6	**54.85**	808.80
PHY552WRF	1469	44.97	1.20	85.0	33.5	3.8	**54.63**	803.70
DG3385B2XF	1444	42.43	1.20	**86.4**	31.5	4.7	**54.44**	786.25
BX1776GLTP	1441	44.48	1.20	84.4	30.7	3.8	**54.49**	786.16
ST6182GLT	1441	46.12	1.18	84.7	29.6	4.0	**54.85**	790.40
ST4946GLB2	1435	42.25	1.18	85.0	34.0	4.3	**55.06**	790.07
UA222	1398	41.35	1.24	**86.6**	33.3	4.3	**55.19**	771.13
ST5115GLT	1347	40.40	1.17	83.6	32.9	4.0	**54.91**	739.66
BX1775GLTP	1312	42.50	1.21	83.5	30.4	3.4	53.36	701.78
BX1738GLT	1289	41.65	**1.25**	**86.2**	33.9	4.0	**55.26**	711.98
BX1739GLT	1245	**45.41**	1.23	85.0	32.2	4.4	**54.99**	685.45
HQ210CT	1225	39.26	1.17	84.9	31.8	4.5	**54.84**	671.86
ST5289GLT	1218	39.92	1.20	83.9	29.1	4.0	**54.76**	666.85
DG3445B2XF	1211	39.48	1.22	**86.8**	**34.4**	4.0	**55.31**	669.47
AMX1604B2XF	1116	40.77	1.18	85.1	30.5	4.1	**54.93**	613.03
Overall mean	1533.92	43.8485	1.189	84.95	32.008	4.212	54.6925	839.0747
LSD (0.05)	248.64	1.5994	0.031	1.379	2.099	0.413	0.9756	139.5951
C.V. (%)	11.58	2.6	1.86	1.16	4.68	7.01	1.27	11.88

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

Table 6. Lint yield performance, fiber characteristics, loan values and dollar return per acre of cotton varieties grown on an irrigated Sharkey clay soil at the Northeast Research Station, St. Joseph, Louisiana, 2016.

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	**(lb/ac)**	**(%)**	**(inches)**	**(%)**	**(g/tex)**		¢	(acre)
PHY312WRF	**1569**	42.32	1.20	**85.9**	30.5	4.6	**54.95**	**862.34**
CPS16654B2XF	**1513**	41.50	**1.25**	**85.0**	30.4	4.6	**54.78**	**829.08**
DP1555B2RF	**1455**	**44.55**	1.17	84.5	30.9	4.9	**54.75**	**796.87**
DP1646B2XF	**1432**	**43.50**	**1.24**	**85.7**	30.2	4.7	**54.86**	**785.73**
15R535B2XF	**1429**	42.56	1.18	84.4	28.9	4.9	**54.03**	**772.19**
PHY495W3RF	**1425**	**44.47**	1.11	84.8	**34.2**	4.8	**54.38**	**774.65**
PHY339WRF	**1400**	41.65	1.17	84.7	31.8	4.7	**54.90**	**768.47**
ST4949GLT	**1399**	**44.69**	1.14	84.3	30.7	4.8	**54.68**	**764.89**
DP1538B2XF	**1370**	**43.79**	1.12	84.1	29.1	4.8	53.91	738.85
DP1614B2XF	**1366**	42.91	1.20	**85.6**	31.1	**5.2**	52.33	714.15
PHY499WRF	**1358**	**44.63**	1.13	**85.2**	32.9	5.0	53.13	721.10
AMX1601B2XF	**1343**	**43.57**	1.17	**86.2**	**34.1**	5.1	52.79	708.76
DP1522B2XF	1341	42.34	1.17	**85.4**	31.3	5.1	53.18	713.90
PHY496W3RF	1318	**44.24**	1.11	83.6	32.3	4.9	53.88	709.43
PHY552WRF	1314	**43.89**	1.16	85.0	31.5	4.5	**54.89**	721.60
PHY333WRF	1308	41.60	1.19	84.6	29.6	4.5	**54.69**	715.01
NG3406B2XF	1301	41.89	1.14	**85.5**	29.9	4.7	**54.66**	711.27
ST4848GLT	1290	42.43	1.16	**85.0**	30.9	5.0	53.30	687.12
ST5289GLT	1279	40.98	1.12	82.4	27.4	4.7	53.44	683.16
DP1518B2XF	1276	42.11	1.17	84.7	28.6	4.6	**54.53**	695.98
DG3385B2XF	1272	42.40	1.15	**85.5**	29.6	5.0	52.95	672.68
BX1738GLT	1270	41.09	1.21	**86.3**	33.3	4.6	55.18	700.86
BX1775GLTP	1264	40.35	1.17	84.6	29.4	4.6	54.63	690.54
16R229B2XF	1251	**43.95**	1.13	84.4	29.9	**5.2**	52.20	653.98
DP1639B2XF	1249	43.33	1.17	**85.4**	33.1	**5.2**	52.00	649.89
BX1737GLT	1228	41.35	1.17	**85.2**	29.5	4.9	**54.09**	664.11
ST4946GLB2	1227	40.78	1.16	**85.8**	**35.2**	4.9	**55.05**	675.59
ST5115GLT	1224	42.25	1.14	83.9	31.7	4.6	**54.78**	669.96
PHY444WRF	1207	42.50	**1.27**	**86.3**	30.9	4.3	**55.05**	664.18
CL3885B2XF	1200	41.20	1.15	84.3	29.9	4.9	53.95	646.78
BX1776GLTP	1190	41.00	1.16	84.7	29.1	4.6	**54.55**	649.05
DG3526B2XF	1188	**44.27**	1.13	84.4	30.6	4.9	53.46	634.34
HQ210CT	1159	39.26	1.13	83.9	30.6	**5.3**	51.24	593.51
DG3757B2XF	1157	**44.26**	1.14	84.1	28.6	4.9	53.85	623.09
ST6182GLT	1141	**45.50**	1.15	**85.5**	28.7	4.7	**54.53**	622.39
BX1739GLT	1130	43.10	1.23	**85.0**	31.6	5.0	53.79	608.63
UA222	1121	39.89	1.20	**85.1**	31.9	4.9	**54.41**	610.16
AMX1604B2XF	1071	40.19	1.15	84.6	30.9	4.9	**54.11**	580.11
DG3445B2XF	1055	38.69	1.21	**86.3**	32.8	4.7	**55.11**	581.54
NG5007B2XF	1055	42.21	1.18	83.5	28.0	4.7	**54.43**	574.20
Overall mean	1278.71	42.4294	1.1666	84.876	30.781	4.808	54.0338	691.0027
LSD (0.05)	220.88	2.0643	0.0309	1.371	1.518	0.163	1.2114	119.9092
C.V. (%)	12.34	3.47	1.89	1.15	3.52	2.42	1.6	12.39

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

Table 7. Lint yield performance, fiber characteristics, loan values and dollar return per acre of cotton varieties grown on an irrigated Commerce silt loam soil at the Northeast Research Station, St. Joseph, Louisiana, 2016.

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	**(lb/ac)**	**(%)**	**(inches)**	**(%)**	**(g/tex)**		¢	(acre)
DP1538B2XF	**1263**	**43.83**	1.15	84.4	30.7	4.4	**54.75**	**691.66**
15R535B2XF	**1235**	**43.60**	1.19	84.0	31.4	4.4	**54.90**	**678.02**
PHY339WRF	**1214**	40.05	1.21	84.6	31.9	4.3	**55.03**	**667.84**
DP1646B2XF	**1212**	**42.93**	**1.28**	85.1	30.9	4.3	**55.06**	**667.36**
DP1639B2XF	**1212**	41.08	1.19	**85.4**	**34.0**	**4.7**	**54.50**	**660.54**
DP1522B2XF	**1202**	40.27	1.18	85.3	32.4	**4.8**	**54.36**	**653.61**
CPS16654B2XF	**1202**	**42.57**	**1.29**	84.8	31.0	4.0	**55.01**	**661.42**
ST4949GLT	**1147**	**43.11**	1.16	83.9	31.8	4.1	**54.89**	**629.40**
DP1555B2RF	**1092**	**42.60**	1.19	84.6	**34.1**	4.6	**55.04**	**600.85**
PHY499WRF	**1066**	40.71	1.17	**85.7**	**34.9**	4.6	**55.03**	**586.73**
16R229B2XF	**1035**	**42.02**	1.15	84.8	32.2	4.5	**54.89**	**567.93**
PHY312WRF	**1020**	39.58	1.22	**86.6**	31.6	4.3	**55.08**	**561.93**
BX1738GLT	**1019**	39.85	**1.26**	**86.4**	33.1	4.6	**55.16**	**562.28**
DP1518B2XF	**1009**	40.88	1.17	83.5	29.5	3.9	**54.74**	**552.14**
PHY444WRF	**987**	40.47	**1.28**	**86.7**	32.2	3.8	**55.25**	**545.48**
PHY495W3RF	**982**	**43.21**	1.13	85.0	**35.2**	4.5	**54.88**	**538.71**
ST5289GLT	**975**	37.50	1.19	83.6	29.1	4.2	**54.59**	**532.07**
DG3385B2XF	**970**	39.88	1.19	84.3	31.0	4.5	**54.86**	**532.34**
UA222	**967**	38.59	1.25	**85.4**	33.6	4.5	**55.06**	**532.62**
CL3885B2XF	**947**	**41.76**	1.18	85.0	31.8	4.5	**54.95**	520.21
PHY552WRF	**944**	**41.97**	1.22	**85.7**	33.5	4.0	**55.24**	521.45
BX1776GLTP	**941**	40.24	1.21	84.4	31.0	4.6	**54.81**	515.95
AMX1601B2XF	929	**42.12**	1.22	**85.4**	**35.2**	4.7	**54.49**	506.03
NG5007B2XF	928	39.33	1.19	83.7	29.8	4.4	**54.54**	506.11
ST6182GLT	928	**42.99**	1.18	84.7	29.6	4.3	**54.81**	508.50
DG3526B2XF	909	41.08	1.16	84.4	31.4	4.3	**54.91**	499.32
NG3406B2XF	889	38.67	1.17	85.0	30.9	4.4	**54.84**	487.35
ST4946GLB2	882	40.92	1.20	**85.8**	**35.4**	4.6	**55.16**	486.37
DG3757B2XF	880	**42.38**	1.17	84.7	30.5	4.5	**54.81**	482.35
BX1737GLT	877	40.37	1.22	**86.0**	31.6	4.5	**55.08**	482.84
DP1614B2XF	875	**41.62**	1.24	**86.8**	33.2	**4.9**	**54.59**	477.48
PHY333WRF	857	40.86	1.22	**86.2**	31.5	4.3	**55.13**	472.59
ST4848GLT	851	**41.93**	1.19	84.9	32.2	4.6	**54.38**	462.57
AMX1604B2XF	811	37.55	1.19	**85.4**	32.5	4.3	**55.00**	446.22
ST5115GLT	793	39.58	1.17	84.1	33.6	4.4	**54.91**	435.62
PHY496W3RF	750	**42.87**	1.13	84.8	**35.6**	4.6	**54.85**	411.21
BX1775GLTP	695	37.82	1.22	85.2	31.9	4.4	**55.06**	382.52
HQ210CT	694	35.63	1.17	84.7	33.7	**5.0**	**53.81**	373.46
BX1739GLT	608	**44.55**	1.24	84.6	32.2	**4.7**	**53.99**	328.07
DG3445B2XF	561	36.68	1.20	**85.8**	32.9	4.4	**55.13**	309.25
Overall mean	958.92	1.6211t	1.1748	83.449	31.643	4.337	53.8172	499.2194
LSD (0.05)	323.34	2.7139 - 3.1419	0.031	1.439	1.608	0.322	NS	161.6811
C.V. (%)	20.74	1.18t	1.88	1.23	3.63	5.29	1	23.12

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

Table 8. Lint yield performance, fiber characteristics, loan values and dollar return per acre of cotton varieties grown on an irrigated Moreland clay soil at the Red River Research Station, Bossier City, Louisiana, 2016.

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	(lb/ac)	(%)	(inches)	(%)	(g/tex)		¢	(acre)
PHY495W3RF	**1382**	42.84	1.12	84.4	**35.2**	4.7	**54.25**	**749.89**
DP1639B2XF	**1281**	43.45	1.18	**85.8**	**34.2**	**5.1**	52.41	**670.84**
CL3885B2XF	**1268**	42.69	1.19	85.0	30.8	4.9	**54.26**	**688.77**
PHY552WRF	**1225**	41.54	1.19	**86.2**	33.2	4.5	**55.13**	**675.16**
ST4848GLT	**1213**	41.68	1.17	85.1	32.8	4.8	**54.94**	**666.44**
PHY499WRF	**1192**	42.70	1.15	**86.2**	**35.4**	4.9	**53.90**	**644.01**
PHY496W3RF	**1170**	**45.28**	1.13	84.5	**34.3**	4.6	**54.78**	**640.91**
PHY444WRF	**1163**	43.33	**1.26**	**86.4**	31.0	4.3	**55.04**	**640.03**
ST4946GLB2	**1158**	40.58	1.15	83.8	33.6	4.8	**54.25**	**628.00**
NG3406B2XF	**1140**	41.75	1.15	84.7	31.6	4.8	**54.85**	**625.33**
DP1522B2XF	**1139**	40.83	1.17	84.8	32.4	**5.1**	53.19	604.66
BX1738GLT	1084	40.42	1.22	**85.5**	33.5	4.6	**55.13**	597.40
PHY333WRF	1077	42.11	1.18	84.5	30.6	4.6	**54.76**	589.81
15R535B2XF	1068	42.91	1.19	83.6	30.2	4.8	**54.11**	577.20
NG5007B2XF	1063	42.09	1.18	84.6	29.4	4.7	**54.61**	580.42
DP1646B2XF	1060	41.79	**1.25**	85.1	30.5	4.6	**54.84**	581.16
BX1776GLTP	1053	41.19	1.19	84.0	30.8	4.6	**54.85**	577.79
DP1518B2XF	1052	40.39	1.19	84.8	30.4	4.5	**54.84**	577.00
ST5115GLT	1052	41.74	1.15	84.1	32.2	4.9	**54.21**	572.50
BX1737GLT	1030	40.59	1.21	84.6	31.6	4.8	**54.91**	565.48
ST4949GLT	1020	**44.09**	1.15	84.3	32.1	4.9	**54.16**	551.81
DP1555B2RF	1015	42.36	1.21	**85.8**	**33.9**	**5.0**	53.39	542.79
BX1775GLTP	1009	39.64	1.20	82.9	30.3	4.2	54.66	551.55
ST5289GLT	1002	40.33	1.16	83.9	30.2	4.8	**53.99**	540.80
BX1739GLT	980	40.97	**1.24**	**85.9**	**33.8**	4.9	**54.54**	533.73
16R229B2XF	978	41.38	1.15	83.1	30.7	4.7	**54.59**	533.96
PHY339WRF	976	40.63	1.20	84.8	32.7	4.6	**54.98**	536.33
DG3385B2XF	972	41.27	1.18	**85.6**	31.0	**5.0**	53.80	522.04
ST6182GLT	972	**44.28**	1.18	84.8	30.3	4.8	**54.15**	527.86
CPS16654B2XF	886	41.63	**1.24**	84.5	31.0	4.5	**54.93**	487.21
PHY312WRF	885	41.74	1.18	**85.4**	31.4	4.7	**54.96**	486.35
DG3526B2XF	879	43.14	1.17	85.0	32.2	4.9	**54.33**	477.04
AMX1601B2XF	843	42.72	1.20	84.8	**34.3**	**5.1**	52.71	444.40
DP1538B2XF	826	42.15	1.14	84.7	30.9	4.8	53.84	445.66
DG3757B2XF	770	42.92	1.18	83.8	30.5	4.9	54.09	415.29
DG3445B2XF	756	38.50	1.22	**86.8**	**33.9**	4.9	54.01	408.33
DP1614B2XF	729	42.80	1.20	**85.7**	32.5	**5.0**	52.91	385.49
AMX1604B2XF	642	39.35	1.15	84.2	31.9	4.8	**54.80**	351.43
HQ210CT	620	38.88	1.15	83.4	32.0	**5.2**	51.90	321.18
UA222	517	39.49	**1.24**	**85.7**	33.6	**5.1**	53.03	273.26
Overall mean	1003.574801	41.7025	1.1829	84.801	32.063	4.777	54.225	544.7313
LSD (0.05)	254.4737937	1.5932	0.0299	1.489	1.817	0.258	1.2856	138.7143
C.V. (%)	18.11	2.73	1.8	1.25	4.05	3.85	1.69	18.18

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

Table 9. Yield performance, fiber characteristics, loan values and dollar return per acre of cotton varieties grown on an irrigated Caplis very fine sandy loam soil at the Red River Research Station, Bossier City, Louisiana, 2016.

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	**(lb/ac)**	**(%)**	**(inches)**	**(%)**	**(g/tex)**		¢	(acre)
DP1639B2XF	**1257**	**43.82**	1.17	**85.5**	**35.1**	5.2	52.60	**659.32**
DP1646B2XF	**1166**	42.67	**1.26**	84.9	30.8	4.9	53.66	**625.99**
ST4848GLT	**1136**	**43.45**	1.16	**85.1**	31.9	5.1	52.65	**598.01**
PHY499WRF	**1120**	**44.03**	1.15	84.9	**35.8**	4.8	**54.95**	**615.60**
PHY495W3RF	**1118**	**43.45**	1.12	**85.2**	**35.5**	4.7	**54.28**	**607.01**
DP1555B2RF	**1094**	**43.99**	1.19	84.9	33.8	5.0	53.26	**583.75**
PHY496W3RF	**1088**	42.68	1.12	84.0	**34.7**	4.5	**54.54**	**594.26**
DG3757B2XF	1077	**43.19**	1.18	84.8	30.8	5.0	**54.23**	**583.97**
ST4949GLT	1066	**44.29**	1.15	**85.1**	31.6	5.0	53.18	**567.49**
NG3406B2XF	1058	41.71	1.15	84.6	30.2	4.7	**54.63**	**577.80**
15R535B2XF	1049	**44.48**	1.18	83.9	30.5	5.1	53.15	556.26
CL3885B2XF	1045	42.39	1.16	84.6	31.0	4.8	**54.84**	572.77
DP1538B2XF	1041	42.48	1.13	83.6	29.9	5.0	53.31	555.79
DG3526B2XF	1029	**43.14**	1.15	84.5	32.1	4.9	53.63	550.51
NG5007B2XF	1025	41.80	1.17	84.1	29.4	4.6	**54.61**	560.06
BX1737GLT	1017	39.84	1.18	84.3	30.4	4.8	**54.10**	550.33
ST5115GLT	1016	41.32	1.13	83.3	33.2	5.0	53.56	544.52
PHY444WRF	1016	**43.56**	**1.27**	**86.3**	33.1	4.4	**55.16**	560.16
PHY339WRF	1010	41.64	1.19	84.8	32.2	4.5	**54.94**	554.73
DG3385B2XF	1007	40.63	1.16	**85.6**	29.6	5.0	53.51	539.24
BX1775GLTP	989	39.79	1.19	84.1	30.5	4.3	**54.75**	541.65
ST5289GLT	989	39.16	1.16	83.1	28.0	4.7	**54.34**	537.12
BX1738GLT	972	39.92	1.21	**85.2**	33.8	4.7	**54.49**	530.77
16R229B2XF	972	42.89	1.14	84.0	31.1	5.2	52.20	506.07
ST4946GLB2	969	40.48	1.16	**85.2**	**34.3**	4.5	**54.96**	532.34
PHY333WRF	965	**43.33**	1.20	**85.3**	30.0	4.6	**54.79**	528.55
PHY552WRF	959	42.58	1.18	84.9	**34.7**	4.5	**55.00**	527.44
CPS16654B2XF	939	41.55	**1.28**	84.2	31.3	4.6	**54.91**	515.21
DP1522B2XF	936	41.92	1.16	84.3	32.3	5.1	53.13	496.26
AMX1601B2XF	916	42.28	1.19	84.5	**35.3**	4.9	**53.88**	492.99
BX1776GLTP	897	41.11	1.15	83.3	30.0	4.4	**54.54**	489.00
BX1739GLT	890	41.95	1.23	**85.1**	32.9	5.1	52.73	468.97
ST6182GLT	889	**44.85**	1.14	83.7	29.1	4.7	**54.39**	483.21
DP1614B2XF	884	42.73	1.20	**85.2**	31.9	5.2	52.94	468.57
DP1518B2XF	881	40.36	1.19	84.5	29.9	4.6	**54.66**	481.43
PHY312WRF	877	**43.44**	1.17	**85.3**	31.2	4.9	53.73	471.38
AMX1604B2XF	753	40.75	1.16	85.0	32.2	4.8	**54.90**	413.18
DG3445B2XF	710	38.46	1.19	84.8	33.6	4.9	53.79	382.19
UA222	528	41.96	1.23	84.7	32.4	5.2	52.31	275.40
HQ210CT	294	37.26	1.16	84.5	33.4	**5.5**	51.10	150.14
Overall mean	965.91	42.0331	1.1753	84.616	31.971	4.813	53.9072	521.2349
LSD (0.05)	172.91	1.8463	0.0284	1.24	1.603	0.266	1.3529	94.272
C.V. (%)	12.78	3.14	1.72	1.05	3.58	3.95	1.79	12.92

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, 2016.

	Dean Lee, Alexandria		Northeast, St. Joseph		Macon Ridge, Winnsboro	Red River Bossier City	
Event	silt loam	clay	silt loam	clay	silt loam	v. fine sandy loam	clay
Planting date	5/6	5/12	5/10	5/10	5/6	5/10	5/10
Emergence	5/12	5/17	5/16	5/16	5/12	5/16	5/16
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 events			1 time	2 times	5 times	6 times	6 times
N, P, K (lb)	90-32-63-6	90-32-63-6	90-80-60	100-0-0	100-0-0	60-0-0	60-0-0
Defoliation dates	9/14	9/20	9/7, 9/21	9/21/, 9/28	9/12, 9/18	9/19, 10/12	9/19, 10/12
Harvest date	9/27	10/3	10/4	10/10	9/22	10/26	10/27

Trial	GPS Location
Dean Lee-clay	31.17879N, 092.38795W
Dean Lee-silt loam	31.18090N, 092.39961W
Northeast-clay	31.94113N, 091.23299W
Northeast-silt loam	31.94140N, 091.226787W
Macon Ridge-silt loam	32.14208N, 091.70127W
Red River-silt loam	32.419587N, 093.639048W
Red River-clay	32.416170N, 093.638078W

Table 11. Summary of lint yield performance of on-farm core block demonstrations across locations, 2016.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	Franklin	P. Coupee	Rapides-1	Rapides-2	Rapides-3	St. Landry	Average
DP1646B2XF	980	525	1362	1287	879	1830	1947	913	1198	1213
PHY312WRF	944	616	1381	1211	901	1561	1589	791	1217	1135
DP1522B2XF	977	527	1387	1162	838	1462	1696	1005	1131	1132
PHY333WRF	929	611	1299	1210	873	1590	1757	735	1179	1131
PHY444WRF	884	456	1384	1108	897	1552	1677	742	1380	1120
PHY496W3RF	834	417	1271	1196	815	1478	1806	729	1190	1082
ST4848GLT	814	566	1276	1166	833	1444	1472	757	1110	1049
ST6182GLT	891	518	1155	1140	814	1274	1560	892	1055	1033
Average	907	530	1314	1185	856	1524	1688	821	1183	

Table 12. Summary of fiber quality and loan values of on-farm core block demonstrations across locations.

	Lint	Length	Uniformity	Strength	Micronaire	Loan Value
Variety	%	(in.)	(%)	(g/tex)		(¢/lb)
DP1646B2XF	44.76	1.24	84.9	29.1	4.5	54.69
PHY312WRF	42.51	1.20	85.6	30.6	4.3	54.91
DP1522B2XF	42.59	1.16	84.2	30.1	4.9	53.10
PHY333WRF	43.17	1.20	85.1	29.4	4.3	54.74
PHY444WRF	43.19	1.27	85.8	30.4	3.9	54.62
PHY496W3RF	43.64	1.13	84.0	31.8	4.5	54.21
ST4848GLT	42.62	1.17	84.8	30.4	4.5	54.43
ST6182GLT	45.45	1.18	84.4	28.6	4.4	54.57

Table 13. Lint yield performance, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, Avoyelles Parish, 2016.

Parish: Avoyelles-1	Previous crop: soybeans	Irrigation? No
Community: Moreauville	Soil type: Coushatta silt loam	Pivot or furrow?
Cooperator: Trent Clark	Tillage Type: conventional	GPS coord: 31.103840N, 91.933005W
Agent: Justin Dufour	N rate (lbs/acre): 100	Plot size: 4 rows by 720 feet
Planting date: 5/6/16	Seeding rate: 42,000	Misc: each var. replicated 2x
Harvest date: 9/20/16	Row spacing: 36"	

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	(lb/acre	%	(inches)	(%)	(g/tex)		(¢/lb)	(acre)
PHY 312WRF	944	41.14	1.20	84.8	32.5	4.1	55.10	520.14
ST 6182GLT	891	44.53	1.16	84.5	27.6	4.5	54.45	485.15
PHY 496W3RF	834	41.48	1.09	82.7	30.9	4.0	53.60	447.02
DP 1646B2XF	980	44.09	1.20	83.8	29.1	4.8	54.50	534.10
PHY 333WRF	929	44.63	1.14	84.4	29.6	4.9	54.50	506.31
ST 4848GLT	814	39.95	1.14	84.0	30.0	4.7	54.70	445.26
PHY 444WRF	884	41.94	1.27	85.0	30.6	4.0	55.05	486.64
DP 1522B2XF	977	42.67	1.09	84.3	28.6	5.3	49.65	485.08

Table 14. Lint yield, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, Avoyelles Parish, 2016.

Parish: Avoyelles-2	Previous crop: soybeans	Irrigation? No
Community: Mansura	Soil type: Calhoun silt loam	Pivot or furrow?
Cooperator: Adam Lemoine	Tillage Type: conventional	GPS coord: 31.07232N, 092.08368W
Agent: Justin Dufour	N rate (lbs/acre): 100	Plot size: 4 rows by 1212 feet
Planting date: 5/7/16	Seeding rate: 33,000	Misc: 2 replications
Harvest date: 10/3/16	Row spacing: 38	

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	(lb/acre	%	(inches)	(%)	(g/tex)		(¢/lb)	(acre)
PHY 312WRF	616	42.07	1.19	85.2	28.9	4.3	54.70	342.30
PHY 333WRF	611	41.58	1.17	84.2	27.4	4.0	54.60	339.04
ST 4848GLT	566	43.76	1.14	84.3	28.6	4.7	54.43	313.66
DP 1522B2XF	527	41.27	1.12	83.8	30.0	5.2	52.15	280.01
DP 1646B2XF	525	43.80	1.23	84.6	27.4	4.7	54.55	291.73
ST 6182GLT	518	45.43	1.15	84.5	27.8	4.7	54.50	287.97
PHY 444WRF	456	41.77	1.25	86.3	29.3	3.9	54.95	255.96
PHY 496W3RF	417	43.25	1.10	83.2	31.0	4.2	53.63	229.02

Table 15. Lint yield, gin turn-out, fiber characteristics, loan values, and dollar return per acre, Catahoula Parish core block demonstration, 2016.

Parish: Catahoula	Previous crop: cotton	Irrigation? No
Community: Foules	Soil type: Sharkey clay	Pivot or furrow?
Cooperator: Matt Myers	Tillage Type: conventional	GPS coord: 31.81657N, 091.59186W
Agent: Lucas Stamper	N rate (lbs/acre): 120	Plot size: 6 rows by 1,516 feet
Planting date: 5/6/16	Seeding rate: 42,000	Misc: 2 replications
Harvest date: 9/30/16	Row spacing: 38	

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	(lbs/acre	%	(inches)	(%)	(g/tex)		(¢/lb)	(acre)
DP 1522B2XF	1387	43.03	1.16	84.7	29.4	5.3	52.20	724.01
PHY 444WRF	1384	44.06	1.28	88.0	30.7	4.4	55.00	761.20
PHY 312WRF	1381	43.22	1.17	85.9	29.6	4.9	54.60	754.03
DP 1646B2XF	1362	43.83	1.25	85.8	28.8	4.8	54.65	744.33
PHY 333WRF	1299	44.17	1.18	86.4	29.6	4.8	54.80	711.85
ST 4848GLT	1276	44.01	1.15	85.6	29.3	5.2	52.30	667.35
PHY 496W3RF	1271	44.71	1.13	84.2	31.6	5.1	52.45	666.64
ST 6182GLT	1155	45.12	1.19	85.1	28.8	4.9	54.65	631.21

Table 16. Lint yield performance, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, Franklin Parish, 2016.

Parish: Franklin	Previous crop: soybeans	Irrigation? Yes
Community: Winnsboro	Soil type: Gigger-Gilbert	Pivot or furrow? Furrow
Cooperator: MRRRS	Tillage Type: Minimum	GPS coord: 32.139347N, 91.701478W
County Agent: Carol Pinnell-Alison	N rate (lbs/acre): 90	Plot size: 4 rows by 500 feet
Planting date: 5/17/16	Seeding rate: 45,000	Misc. Replicated 3 times in a RCBD
Harvest date: 9/23/16	Row spacing: 40	

	Lint Yield		Lint		Length		Uniformity		Strength		Micronaire		Loan Value		Dollar return	
Variety	(lb/acre)		(%)		(inches)		(%)		(g/tx)				(¢/lb)		(acre)	
DP1646B2XF	1287	a	45.40	ab	1.25	a	85.4	ab	29.6	cd	4.5	b	54.78	a	705.34	a
PHY312WRF	1211	a	42.04	d	1.21	b	86.9	a	32.0	ab	4.2	b	55.22	a	668.82	a
PHY333WRF	1210	a	43.09	cd	1.21	b	86.2	a	30.1	bcd	4.2	b	54.97	a	665.28	a
PHY496W3RF	1196	a	43.75	bc	1.13	c	84.2	b	33.3	a	4.4	b	54.55	a	652.32	a
ST4848GLT	1166	a	42.59	cd	1.18	b	85.7	ab	31.3	abc	4.4	b	54.90	a	640.28	a
DP1522B2XF	1162	a	42.06	cd	1.18	b	85.7	ab	31.7	abc	4.8	a	54.28	a	631.57	a
ST6182GLT	1140	a	45.68	a	1.17	b	84.1	b	28.6	d	4.4	b	54.47	a	620.72	a
PHY444WRF	1108	a	43.42	cd	1.28	a	86.8	a	30.6	bcd	3.9	c	55.05	a	610.15	a
LSD (0.05)	NS		1.7124		0.0368		1.695		2.267		0.248		NS		NS	
CV (%)	5.52		2.25		1.75		1.13		4.19		3.25		0.84		5.48	
Mean	1185.04		43.5046		1.2013		85.638		30.9		4.354		54.7771		649.3101	
P>F	0.1158		0.002		0.0001		0.0232		0.0135		0.0001		0.2657		0.098	

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

Table 17. Lint yield, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, Pointe Coupee Parish, 2016.

Parish: Pointe Coupee	Previous crop: cotton	Irrigation? No
Community: Innis	Soil type: Commerce silty clay loam	Pivot or furrow?
Cooperator: George Lacour	Tillage Type: Conventional	GPS coord: 30.86389N, 091.73649W
County Agent: Mark Carriere	N rate (lb/acre):	Plot size: 6 rows by 1232 feet
Planting date: 5/16/16	Seeding rate: 37,000	Misc. Replicated 4 times in a RCBD
Harvest date: 10/7/16	Row spacing: 38	

	Lint Yield		Lint		Length		Uniformity		Strength		Micronaire		Loan Value		Dollar return	
Variety	(lb/acre)		(%)		(inches)		(%)		(g/tx)				(¢/lb)		(acre)	
PHY 312WRF	901	a	42.76	a	1.18	cd	84.8	a	31.5	a	4.5	d	54.90	a	494.45	a
PHY 444WRF	897	a	42.99	a	1.24	a	85.8	a	31.2	a	4.2	e	55.10	a	494.24	a
DP 1646B2XF	879	a	43.85	a	1.24	ab	84.2	a	30.4	a	4.6	cd	54.83	a	482.00	ab
PHY 333WRF	873	a	42.68	a	1.20	bc	84.4	a	30.0	a	4.5	d	54.70	a	477.70	abc
DP 1522B2XF	838	a	42.48	a	1.15	de	83.2	a	31.6	a	5.1	a	52.37	c	438.82	c
ST 4848GLT	833	a	42.97	a	1.15	de	83.6	a	30.7	a	4.9	b	53.72	b	447.74	bc
PHY 496W3RF	815	a	42.74	a	1.11	e	83.9	a	32.7	a	4.9	b	54.42	ab	443.61	bc
ST 6182GLT	814	a	45.30	a	1.15	d	84.6	a	29.9	a	4.8	bc	54.67	a	444.83	bc
LSD (0.05)	NS		NS		0.0396		NS		NS		0.194		0.937		40.8615	
CV (%)	5.14		3.24		1.92		1.4		4.69		2.37		0.98		5.01	
Mean	856.25		43.2204		1.1775		84.313		30.996		4.692		54.3375		465.425	
P>F	0.1367		0.3034		0.0001		0.2933		0.3472		0.0001		0.0004		0.0317	

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

Table 18. Lint yield, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, Rapides Parish, 2016.

Parish: Rapides-1	Previous crop: Soybeans	Irrigation? No
Community: Alexandria	Soil type: Coushatta silt loam	Pivot or furrow?
Cooperator: Dean Lee Res. & Ext. CTR	Tillage Type: Minimum	GPS coord: 31.180678N, 92.398574W
Study Director: Dan Fromme	N rate (lbs/acre): 90	Plot size: 4 rows by 48 feet
Planting date: 5/6/16	Seeding rate: 42,000	Misc. Replicated 4 times in a RCBD
Harvest date: 9/28/16	Row spacing: 38	

	Lint Yield		Lint		Length		Uniformity		Strength		Micronaire		Loan Value		Dollar return	
Variety	(lb/acre)		(%)		(inches)		(%)		(g/tx)				(¢/lb)		(acre)	
DP 1646B2XF	1830	a	44.37	ab	1.25	b	85.2	a	28.9	b	4.5	bc	54.74	a	1001.76	a
PHY 333WRF	1590	b	43.15	bcd	1.24	bc	85.6	a	30.1	ab	4.2	cd	54.85	a	872.24	b
PHY 312WRF	1561	b	42.16	d	1.22	bcd	85.6	a	30.0	ab	4.3	cd	54.94	a	857.45	b
PHY 444WRF	1552	b	42.98	bcd	1.28	a	86.6	a	30.8	a	4.1	d	55.05	a	854.43	b
PHY 496W3RF	1478	bc	43.99	abc	1.14	g	84.8	a	30.8	a	4.7	ab	54.68	a	808.28	bc
DP 1522B2XF	1462	bc	42.50	cd	1.19	ef	84.8	a	30.3	ab	5.0	a	53.60	b	783.95	bc
ST 4848GLT	1444	bc	42.39	cd	1.21	cde	86.2	a	31.5	a	4.4	cd	55.10	a	795.29	bc
ST 4949GLT	1406	bc	43.50	a-d	1.16	fg	85.1	a	30.1	ab	4.3	cd	54.83	a	771.00	bc
ST 6182GLT	1274	c	45.05	a	1.19	de	85.2	a	28.8	b	4.4	cd	54.69	a	696.41	c
LSD (0.05)	215.04		1.6295		0.0284		NS		1.57		0.369		NS		118.6978	
CV (%)	9.75		2.58		1.61		1.03		3.57		5.72		0.87		9.84	
Mean	1510.75		43.3428		1.2078		85.431		30.131		4.417		54.7181		826.7562	
P>F	0.0025		0.0164		0.0001		0.0986		0.037		0.0013		0.0083		0.0023	

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

Table 19. Lint yield, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, Rapides Parish, 2016.

Parish: Rapides-2	Previous crop: Soybeans	Irrigation? No
Community: Alexandria	Soil type: Latanier clay	Pivot or furrow?
Cooperator: Dean Lee Res. & Ext. CTR	Tillage Type: Minimum	GPS coord: 31.179098N, 92.389456W
Study Director: Dan Fromme	N rate (lbs/acre): 90	Plot size: 4 rows by 48 feet
Planting date: 5/12/16	Seeding rate: 42,000	Misc. Replicated 4 times in a RCBD
Harvest date: 10/6/16	Row spacing: 38	

	Lint Yield		Lint		Length		Uniformity		Strength		Micronaire		Loan Value		Dollar return	
Variety	(lb/acre)		(%)		(inches)		(%)		(g/tx)				(¢/lb)		(acre)	
Deltapine 1646B2XF	1947	a	43.66	a	1.27	ab	84.8	cd	28.5	c	4.1	b	54.74	a	1065.65	a
Phytogen 496W3RF	1806	ab	43.04	a	1.15	g	84.2	cd	31.9	a	4.1	b	54.88	a	990.95	ab
Phytogen 333WRF	1757	abc	41.10	bc	1.24	bc	86.3	a	28.6	c	4.0	bc	54.93	a	965.32	abc
Deltapine 1522B2XF	1696	bc	41.48	bc	1.19	ef	85.2	abc	30.9	ab	4.4	a	54.98	a	932.46	bc
Phytogen 444WRF	1677	bc	41.46	bc	1.30	a	86.3	a	29.7	bc	3.4	e	53.54	a	899.14	bcd
Stoneville 4949GLT	1608	bcd	41.71	b	1.17	fg	85.0	bc	28.8	c	4.1	b	54.69	a	879.36	bcd
Phytogen 312WRF	1589	cd	40.30	c	1.22	cd	86.1	ab	29.1	bc	3.7	d	54.81	a	871.14	cd
Stoneville 6182GLT	1560	cd	43.63	a	1.20	de	83.7	d	28.5	c	3.8	cd	54.64	a	852.30	cd
Stoneville 4848GLT	1472	d	40.89	bc	1.18	ef	84.4	cd	30.8	ab	4.0	bc	54.86	a	807.32	d
LSD (0.05)	202.55		1.2416		0.0276		1.22		1.821		0.241		NS		116.6518	
CV (%)	8.27		2.03		1.56		0.98		4.21		4.17		1.05		8.71	
Mean	1679.08		41.9183		1.2125		85.119		29.642		3.964		54.6722		918.182	
P>F	0.0026		0.0001		0.0001		0.0008		0.0035		0.0001		0.0519		0.0043	

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

Table 20. Lint yield, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, Rapides Parish, 2016.

Parish: Rapides-3	Previous crop: soybeans	Irrigation? No
Community: Poland	Soil type: Coushatta silt loam	Pivot or furrow?
Cooperator: Fred Collins	Tillage Type: conventional	GPS coord: 31.16843N, 092.3006W
Agent: Donna Morgan	N rate (lb/acre): 90	Plot size: 4 rows by 1868 feet
Planting date: 5/6/16	Seeding rate: 37,000	Misc: each var. replicated 2x
Harvest date: 9/29/16	Row spacing: 38	

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	(lb/acre	%	(inches)	(%)	(g/tex)		(¢/lb)	(acre)
DP1522B2XF	1005	43.42	1.16	82.4	29.7	4.6	54.30	545.72
DP1646B2XF	913	46.92	1.25	84.0	29.3	4.5	54.60	498.50
ST6182GLT	892	47.17	1.16	84.8	28.8	4.3	54.45	485.69
PHY312WRF	791	44.22	1.22	85.7	32.1	4.4	55.05	435.45
ST4848GLT	757	45.15	1.19	85.0	30.1	4.5	54.80	414.84
PHY444WRF	742	45.25	1.24	86.0	30.0	4.0	54.85	406.99
PHY333WRF	735	44.62	1.20	85.8	29.7	4.2	54.85	403.15
PHY496W3RF	729	45.3	1.14	84.7	31.9	4.3	54.90	400.22

Table 21. Lint yield, gin turn-out, fiber characteristics, loan values and dollar return per acre of on-farm core block demonstration, St. Landry Parish, 2016.

Parish: St. Landry	Previous crop: rice	Irrigation? No
Community: Palmetto	Soil type: Tensas-Sharkey complex	Pivot or furrow?
Cooperator: Charlie Fontenot	Tillage Type: Conventional	GPS coord: 30.798333, 91.901944
Agent: Vince Deshotel	N rate (lb/acre): 90	Plot size: 5 rows by 1270 feet
Planting date: 5/10/16	Seeding rate: 40,000	Misc:
Harvest date: 10/24/16	Row spacing: 38	

	Lint Yield	Lint	Length	Uniformity	Strength	Micronaire	Loan Value	Dollar Return
Variety	(lb/acre	%	(inches)	(%)	(g/tex)		(¢/lb)	(acre)
PHY444WRF	1380	44.86	1.25	84.5	30.5	3.3	53.00	731.40
PHY312WRF	1217	44.72	1.18	85.6	29.4	4.0	54.85	667.52
DP1646B2XF	1198	46.94	1.23	86.3	29.5	4.3	54.80	656.50
PHY496W3RF	1190	44.52	1.14	83.9	32.4	4.4	54.75	651.53
PHY333WRF	1179	43.48	1.20	83.0	29.1	3.5	54.50	642.56
DP1522B2XF	1131	44.38	1.17	83.3	28.5	4.3	54.35	614.70
ST4848GLT	1110	41.86	1.19	84.5	31.0	4.0	55.10	611.61
ST6182GLT	1055	47.1	1.21	83.1	28.5	4.0	54.60	576.03

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