2013

Cotton Varieties
for Louisiana

LSU AgCenter
Research & Extension

Table of Contents

Introduction

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

The official variety tests are conducted at 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.

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 or five 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 that 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 all 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 using the same high-volume-instrumentation classing system used by 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 answer is "How did a variety yield in relation to other varieties in the same trial?" Another important number to look for is the test average yield. 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 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 these new varieties that do not yet 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 should be considered, too.

Selecting Varieties

The LSU AgCenter indentifies 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 ("RF" or "F"). The Flex varieties have been commercially available 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 2013 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 2013 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 required in 2010 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 these and other caterpillar pests, note that under high and persistent populations, supplemental chemical control strategies will be necessary to provide satisfactory management. In addition, the insecticidal traits in Bollgard 2 varieties have no activity against noncaterpillar pests such as thrips, aphids, plant bugs, stink bugs and spider mites. Those pests must be managed with conventional integrated pest management practices.

Widestrike: Phytogen varieties with the designation "W" or "WS2" in their brand names are cotton lines that are tolerant to the Louisiana caterpillar pests known as tobacco budworm and fall armyworm. These varieties should not need any supplemental insecticidal sprays for control of those pests. The characteristics and insect management recommendations previously mentioned for Bollgard 2 traits remain the same for the Widestrike trait in Phytogen varieties.

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 population, seeding rates should be slightly higher based on the actual stated germination.

Seed sizes vary, and the number of 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 number 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. 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 plant 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.

Being aware of the cool germination test results is more important than determining what is actually 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

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

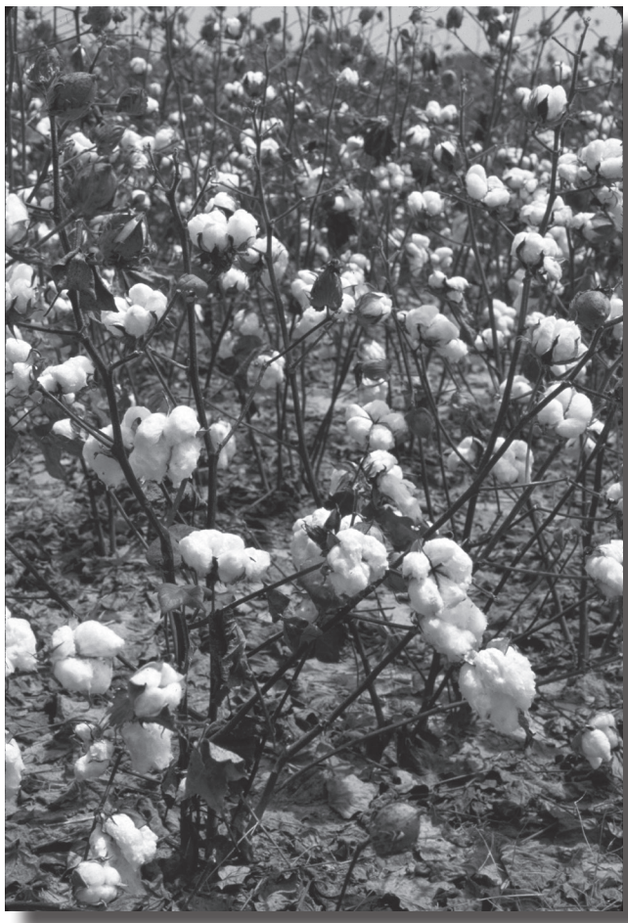

Table 1. Two-year yield performance of early maturing cotton varieties cultivated in a nonirrigated environment at two locations during 2011-2012.

Variety	Location and soil texture						Average across locations and years
	Alexandria				St. Joseph		
	Silt loam		Clay		Silt loam		
	2011	2012	2011	2012	2011	2012	
	Pounds of lint/acre						
DP0912B2RF	1011	1226	1800	1383	1380	1089	1315
ST5288B2F	1002	1417	1774	1242	1601	842	1313
PHY499WRF	961	1283	1933	1434	1269	847	1288
NG1511B2RF	911	1320	1725	1377	1371	902	1268
PHY375WRF	871	1145	1994	1294	1380	738	1237
FM1740B2F	973	1283	1347	1440	1347	868	1210
DG2570B2RF	1027	1227	1656	1242	1125	817	1182
AM1550B2RF	985	1134	1546	1145	1169	846	1138
PHY367WRF	884	1094	1681	1168	1173	808	1135
HQ210CT	901	1121	1604	1094	1229	631	1097
Mean	953	1225	1706	1282	1304	839	1218

Table 2. Two-year yield performance of early maturing cotton varieties cultivated in an irrigated environment at two locations during 2011-2012.

Variety	St. Joseph		Winnsboro		Average across locations and years
	Clay		Silt loam		
	2011	2012	2011	2012	
	Pound of lint/acre				
NG1511B2RF	1166	952	1531	1450	1275
AM1550B2RF	921	799	1533	1403	1164
DG2570B2RF	968	887	1376	1344	1144
DP0912B2RF	1162	1062	1441	1370	1259
FM1740B2F	908	879	1270	1374	1108
PHY367WRF	952	1011	1519	1404	1222
PHY375WRF	974	1009	1539	1410	1233
PHY499WRF	1137	1006	1356	1596	1274
ST5288B2F	1138	957	1556	1386	1259
Mean	1036	951	1458	1415	1215

Table 3. One-year yield performance of early maturing varieties cultivated in a nonirrigated environment at two locations during 2012.

Variety	Location and soil texture			Average across locations
	Alexandria		St. Joseph	
	Silt loam	Clay	Silt loam	
	Pounds of lint/acre			
PHY339WRF	1682	1581	868	1377
DP1311B2RF	1468	1463	959	1297
PX4339CBWRF	1558	1344	846	1249
DP0912B2RF	1226	1383	1089	1233
NG1511B2RF	1320	1377	902	1200
FM1740B2F	1283	1440	868	1197
CG3428B2RF	1400	1343	844	1196
PHY499WRF	1283	1434	847	1188
DP1321B2RF	1328	1441	792	1187
PX433915WRF	1243	1399	869	1170
ST5288B2F	1417	1242	842	1167
UA222	1220	1264	854	1113
DG2530B2RF	1351	1327	616	1098
DG2570B2RF	1227	1242	817	1095
FM1944GLB2	1132	1339	796	1089
ST6448GLB2	1233	1180	844	1086
PHY375WRF	1145	1294	738	1059
ST4946GLB2	1172	1206	767	1048
AM1550B2RF	1134	1145	846	1042
PHY367WRF	1094	1168	808	1023
HQ210CT	1121	1094	631	949
Overall Mean	1287	1319	831	1146
LSD(0.05)	257	182	207	
C.V. (%)	14.1	9.7	17.6	

Table 4. One-year yield performance of early maturing varieties cultivated in an irrigated environment at three locations during 2012.

Variety	Location and soil texture			Average across locations
	Bossier City	Winnsboro	St. Joseph	
	Silt Loam	Silt Loam	Clay	
	Pounds of lint/acre			
DP1311B2RF	1686	1668	1035	1463
PHY499WRF	1617	1596	1006	1406
PHY339WRF	1624	1577	983	1395
PX4339CBWRF	1564	1556	1063	1394
NG1511B2RF	1714	1450	952	1372
CG3428B2RF	1694	1312	996	1334
PX433915WRF	1579	1433	905	1306
DP0912B2RF	1478	1370	1062	1303
DG2530B2RF	1610	1508	778	1299
PHY367WRF	1474	1404	1011	1296
DP1321B2RF	1570	1350	944	1288
FM1944GLB2	1444	1432	917	1264
UA222	1525	1310	955	1263
PHY375WRF	1361	1410	1009	1260
ST4946GLB2	1472	1335	888	1232
ST5288B2F	1346	1386	957	1230
AM1550B2RF	1460	1403	799	1221
ST6448GLB2	1358	1317	932	1202
FM1740B2F	1329	1374	879	1194
DG2570B2RF	1326	1344	887	1186
HQ210CT	1386	1179	748	1104
Overall Mean	1506	1415	938	1286
LSD(0.05)	275	154	236	
C.V. (%)	12.9	7.7	17.8	

Table 5. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on a nonirrigated Latanier clay at the Dean Lee Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
PHY339WRF	**1581**	**44.0**	1.17	**84.65**	30.60	4.70
DP1311B2RF	**1463**	**44.0**	1.14	83.35	30.00	**4.90**
DP1321B2RF	**1441**	**43.5**	1.14	83.60	31.30	**5.10**
FM1740B2F	**1440**	**42.0**	1.14	83.75	30.35	**5.05**
PHY499WRF	**1434**	**41.5**	1.15	**84.60**	31.05	**4.95**
PX433915WRF	1399	**42.5**	**1.19**	**84.30**	29.90	4.50
DP0912B2RF	1383	39.5	1.11	83.35	30.75	**5.20**
NG1511B2RF	1377	**42.5**	1.12	83.65	31.70	**5.00**
PX4339CBWRF	1344	**41.0**	1.15	**84.40**	31.25	4.80
CG3428B2RF	1343	**43.0**	**1.19**	**83.95**	29.95	4.80
FM1944GLB2	1339	39.5	**1.21**	**84.90**	**32.45**	**5.00**
DG2530B2RF	1327	**42.5**	**1.20**	**85.00**	31.70	4.60
PHY375WRF	1294	**42.0**	1.13	**84.35**	30.65	4.85
UA222	1264	**41.5**	**1.19**	**85.25**	**33.20**	4.85
DG2570B2RF	1242	**40.5**	1.13	**83.95**	30.90	**5.15**
ST5288B2F	1242	**40.5**	**1.19**	**84.70**	30.30	4.75
ST4946GLB2	1206	**40.5**	1.12	83.55	31.55	4.80
ST6448GLB2	1180	40.0	**1.21**	**84.90**	29.85	**4.90**
PHY367WRF	1168	39.5	1.14	83.40	30.60	4.60
AM1550B2RF	1145	38.0	1.11	83.10	28.80	4.70
HQ210CT	1094	38.5	1.12	83.50	30.55	4.75
Overall Mean	1319	41.3	1.15	84.10	30.83	4.85
LSD(0.05)	182	3.84	0.04	1.40	1.49	0.34
C.V. (%)	9.7	4.5	1.8	0.9	2.3	3.4

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

Table 6. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on a nonirrigated Coushatta silt loam at the Dean Lee Research Station during 2012.

Variety	Lint yield (pounds/ acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
PHY339WRF	**1682**	**45.5**	1.15	**84.05**	31.05	**4.75**
PX4339CBWRF	**1558**	39.5	**1.20**	**83.90**	31.10	**4.75**
DP1311B2RF	**1468**	43.0	1.16	**83.40**	29.95	**4.95**
ST5288B2F	1417	42.0	1.15	83.20	29.70	**4.90**
CG3428B2RF	1400	41.0	**1.21**	**84.80**	29.85	**4.70**
DG2530B2RF	1351	40.5	**1.19**	**83.80**	31.70	**4.75**
DP1321B2RF	1328	40.0	1.15	**84.50**	31.85	**5.00**
NG1511B2RF	1320	40.5	1.16	**83.40**	31.30	**4.90**
FM1740B2F	1283	38.0	1.13	**84.00**	30.25	**5.05**
PHY499WRF	1283	38.0	**1.17**	**83.60**	31.95	4.65
PX433915WRF	1243	39.0	**1.18**	**83.40**	29.95	**4.70**
ST6448GLB2	1233	39.5	**1.19**	**83.80**	29.60	**4.75**
DG2570B2RF	1227	39.5	1.14	**83.55**	30.40	**5.05**
DP0912B2RF	1226	38.0	1.12	**83.40**	30.30	**4.80**
UA222	1220	37.5	**1.17**	**83.25**	30.25	**4.75**
ST4946GLB2	1172	38.0	1.13	**83.10**	31.50	4.35
PHY375WRF	1145	38.0	1.13	**83.50**	30.05	4.65
AM1550B2RF	1134	36.0	1.11	82.25	30.20	**4.75**
FM1944GLB2	1132	36.0	**1.21**	**84.35**	31.10	**5.00**
HQ210CT	1121	35.5	1.08	82.00	29.85	**4.90**
PHY367WRF	1094	38.0	1.16	**83.25**	31.70	4.45
Overall Mean	1287	39.0	1.15	83.55	30.65	4.79
LSD(0.05)	257	5.1	0.05	1.90	NS	0.36
C.V. (%)	14.1	6.2	2.0	1.1	4.05	3.63

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

Table 7. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on an irrigated Caplis silt loam at the Red River Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
NG1511B2RF	**1714**	**39.9**	1.11	82.78	32.33	**5.00**
CG3428B2RF	**1694**	**38.7**	**1.17**	**83.08**	29.95	4.83
DP1311B2RF	**1686**	**40.6**	1.09	82.15	29.78	4.85
PHY339WRF	**1624**	**39.1**	1.13	82.78	**32.43**	4.68
PHY499WRF	**1617**	**38.6**	1.12	**83.30**	**34.10**	4.78
DG2530B2RF	**1610**	**38.7**	1.15	**83.63**	32.33	4.88
PX433915WRF	**1579**	37.7	1.14	82.35	31.08	4.75
DP1321B2RF	**1570**	37.4	1.13	**83.38**	**33.40**	4.88
PX4339CBWRF	**1564**	38.4	**1.16**	**83.18**	31.78	4.60
UA222	**1525**	37.1	**1.18**	**83.63**	**32.80**	4.60
DP0912B2RF	**1478**	34.7	1.09	82.90	30.55	**5.18**
PHY367WRF	**1474**	36.3	1.13	**82.98**	31.38	4.58
ST4946GLB2	**1472**	37.0	1.10	82.83	32.30	4.65
AM1550B2RF	**1460**	37.8	1.09	82.38	28.63	4.93
FM1944GLB2	**1444**	35.3	**1.17**	**83.00**	30.88	4.75
HQ210CT	1386	34.8	1.09	81.75	31.75	4.63
PHY375WRF	1361	37.4	1.10	82.40	30.05	4.60
ST6448GLB2	1358	36.7	**1.18**	82.70	30.43	4.88
ST5288B2F	1346	36.6	1.09	81.85	29.30	**5.13**
FM1740B2F	1329	36.2	1.10	82.33	30.85	**4.98**
DG2570B2RF	1326	36.1	1.12	**83.78**	32.18	4.73
Overall Mean	1506	37.37	1.12	82.81	31.34	4.80
LSD(0.05)	275	2.02	0.02	0.85	1.73	0.22
C.V. (%)	12.9	3.8	1.4	0.8	3.9	3.2

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

Table 8. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on an irrigated Sharkey clay at the Northeast Research Station during 2012.

Variety	Lint yield	Lint %	Length	Uniformity	Strength	Micronaire
	(pounds/acre)	(%)	(in.)	(%)	(g/tex)	
PX4339CBWRF	**1063**	**37.5**	1.14	**82.73**	28.55	**4.48**
DP0912B2RF	**1062**	**40.0**	1.08	82.00	28.90	**4.60**
DP1311B2RF	**1035**	**37.5**	1.12	82.18	27.60	**4.55**
PHY367WRF	**1011**	**37.5**	1.12	82.60	29.43	**4.53**
PHY375WRF	**1009**	**35.0**	1.11	82.65	28.35	**4.58**
PHY499WRF	**1006**	**35.0**	1.12	**83.28**	**31.05**	**4.73**
CG3428B2RF	**996**	**35.0**	**1.17**	**83.48**	**30.35**	4.45
PHY339WRF	**983**	**37.5**	1.14	**83.15**	**30.03**	**4.48**
ST5288B2F	**957**	**35.0**	1.13	81.90	28.00	4.45
UA222	**955**	30.0	**1.18**	**83.25**	**30.98**	**4.55**
NG1511B2RF	**952**	**37.5**	1.10	82.08	29.93	4.43
DP1321B2RF	**944**	**37.5**	1.12	82.60	29.40	**4.55**
ST6448GLB2	**932**	**35.0**	**1.17**	82.60	27.93	**4.60**
FM1944GLB2	**917**	**35.0**	**1.16**	82.20	28.10	**4.68**
PX433915WRF	**905**	**37.5**	1.14	82.05	29.35	**4.60**
ST4946GLB2	**888**	**37.5**	1.12	**83.13**	**30.80**	**4.63**
DG2570B2RF	**887**	30.0	1.10	**83.15**	29.95	4.45
FM1740B2F	**879**	32.5	1.12	**82.98**	29.03	**4.73**
AM1550B2RF	799	32.5	1.09	81.33	27.58	4.40
DG2530B2RF	778	**35.0**	1.15	**83.80**	**31.10**	4.43
HQ210CT	748	30.0	1.10	82.03	28.98	**4.63**
Overall Mean	938	35.20	1.13	82.63	29.30	4.55
LSD(0.05)	236	7.0	0.03	1.12	1.15	0.26
C.V. (%)	17.8	13.8	1.7	1.0	2.8	4.0

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

Table 9. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on a nonirrigated Commerce silt loam at the Northeast Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
DP0912B2RF	**1089**	37.5	1.10	82.75	30.70	**5.08**
DP1311B2RF	**959**	40.0	1.10	82.53	29.38	4.83
NG1511B2RF	**902**	37.5	1.13	**83.30**	**33.13**	4.75
PX433915WRF	869	32.5	1.15	83.10	30.90	4.60
PHY339WRF	868	37.5	1.12	82.93	30.30	4.83
FM1740B2F	868	37.5	1.11	82.93	29.68	4.90
UA222	854	35.0	**1.18**	**83.50**	**33.38**	4.68
PHY499WRF	847	40.0	1.11	**84.10**	**32.63**	4.83
PX4339CBWRF	846	35.0	1.15	**83.55**	30.68	4.83
AM1550B2RF	846	32.5	1.10	83.08	29.50	4.80
CG3428B2RF	844	40.0	**1.16**	**83.65**	30.90	**5.05**
ST6448GLB2	844	35.0	1.16	83.10	29.50	4.83
ST5288B2F	842	32.5	1.12	82.65	29.93	4.90
DG2570B2RF	817	37.5	1.11	**83.38**	31.33	4.88
PHY367WRF	808	35.0	**1.16**	83.23	**32.98**	4.45
FM1944GLB2	796	32.5	**1.16**	**83.50**	30.63	4.80
DP1321B2RF	792	32.5	1.12	83.08	31.65	4.85
ST4946GLB2	767	35.0	1.11	**83.35**	**32.35**	4.70
PHY375WRF	738	37.5	1.09	82.95	29.90	4.78
HQ210CT	631	32.5	1.11	**83.25**	31.83	**5.23**
DG2530B2RF	616	37.5	**1.17**	**84.00**	**33.30**	4.93
Overall Mean	831	35.8	1.13	83.23	31.17	4.83
LSD(0.05)	207	NS	0.02	0.86	1.42	0.19
C.V. (%)	17.6	16.2	1.5	0.8	3.2	2.8

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

Table 10. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on an irrigated Gigger silt loam at the Macon Ridge Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
DP1311B2RF	**1668**	**43.4**	1.11	82.13	27.98	4.68
PHY499WRF	**1596**	41.6	1.13	**83.53**	**33.28**	4.83
PHY339WRF	**1577**	41.3	1.14	**83.60**	30.00	4.60
PX4339CBWRF	**1556**	40.9	**1.16**	**83.30**	29.95	4.68
DG2530B2RF	1508	**42.1**	**1.17**	**83.53**	31.33	4.85
NG1511B2RF	1450	41.2	1.12	**82.98**	31.15	**4.90**
PX433915WRF	1433	40.4	1.14	**82.73**	29.63	4.80
FM1944GLB2	1432	39.3	**1.16**	82.55	28.80	4.73
PHY375WRF	1410	41.0	1.11	82.33	28.25	4.58
PHY367WRF	1404	39.6	1.13	**83.03**	30.35	4.43
AM1550B2RF	1403	39.8	1.09	82.03	27.08	4.50
ST5288B2F	1386	39.3	1.12	82.30	28.30	**4.93**
FM1740B2F	1374	40.3	1.11	82.35	28.88	4.75
DP0912B2RF	1370	38.2	1.09	82.50	29.38	**5.05**
DP1321B2RF	1350	41.5	1.14	83.25	31.38	**5.05**
DG2570B2RF	1344	39.7	1.09	82.40	29.10	4.60
ST4946GLB2	1335	39.8	1.12	**82.88**	30.58	4.65
ST6448GLB2	1317	38.4	**1.17**	82.30	27.50	4.75
CG3428B2RF	1312	41.4	**1.15**	82.55	29.18	**4.98**
UA222	1310	38.6	**1.17**	82.60	31.45	4.50
HQ210CT	1179	36.5	1.11	82.43	30.00	4.63
Overall Mean	1415	40.0	1.13	82.73	29.69	4.73
LSD(0.05)	154	1.3	0.02	0.95	0.96	0.19
C.V. (%)	7.7	2.3	1.3	0.8	2.3	2.9

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

Table 11. Two-year yield performance of medium maturing cotton varieties cultivated in a nonirrigated environment at two locations during 2011-2012.

Variety	Location and soil texture						Average across locations and years
	Alexandria				St. Joseph		
	Silt loam		Clay		Silt loam		
	2011	2012	2011	2012	2011	2012	
	Pounds of lint/acre						
NG1511B2RF	1266	1174	1650	1240	1487	906	1287
CG3787B2RF	1226	1303	1590	1599	1428	675	1304
DP1034B2RF	1107	1339	1617	1477	1283	962	1298
DP1133B2RF	1165	1557	1778	1615	1499	719	1389
DP1137B2RF	1122	1314	1752	1474	1351	701	1286
LA06307025	961	1219	1445	942	1485	732	1131
LA35RS	829	1112	1371	956	1345	666	1047
PHY375WRF	1077	1249	1486	1414	1375	614	1203
PHY499WRF	1174	1424	1588	1528	1359	702	1296
Mean	1103	1299	1586	1361	1401	742	1249

Table 12. Two-year yield performance of medium maturing cotton varieties cultivated in an irrigated environment at two locations during 2011-2012.

Variety	Location and soil texture				Average across locations and years
	St. Joseph		Winnsboro		
	Clay		Silt loam		
	2011	2012	2011	2012	
	Pound of lint/acre				
DP1133B2RF	1113	1043	1645	1507	1327
NG1511B2RF	1220	908	1569	1410	1277
PHY499WRF	1191	945	1444	1481	1265
CG3787B2RF	1092	901	1648	1398	1260
PHY375WRF	994	976	1622	1412	1251
ST5288B2F	1141	862	1579	1412	1249
DP1137B2RF	1021	893	1499	1444	1214
LA06307025	1129	1051	1488	1123	1198
DP1034B2RF	991	866	1531	1362	1188
LA35RS	956	791	1213	1145	1026
Mean	1085	924	1524	1369	1225

Table 13. One-year yield performance of medium maturing varieties cultivated in a nonirrigated environment at two locations during 2012.

Variety	Location and soil texture			Average across locations
	Alexandria		St. Joseph	
	Silt Loam	Clay	Silt Loam	
	Pounds of lint/acre			
DP1133B2RF	1557	1615	719	1297
DP1034B2RF	1339	1477	962	1259
NG5315B2RF	1306	1544	830	1227
PHY499WRF	1424	1528	702	1218
CG3787B2RF	1303	1599	675	1192
DP1252B2RF	1300	1560	686	1182
DP1137B2RF	1314	1474	701	1163
DG2610B2RF	1222	1483	727	1144
FM1944GLB2	1259	1487	599	1115
NG1511B2RF	1174	1240	906	1107
DG2595B2RF	1304	1172	804	1093
PHY375WRF	1249	1414	614	1092
DP1359B2RF	1173	1348	662	1061
PX532211WRF	1334	1246	566	1049
ST5288B2F	1084	1399	641	1041
ST6448GLB2	1167	1333	579	1026
MON11R136B2R2	1206	1305	559	1023
MON11R154B2R2	1149	1155	619	974
LA06307025	1219	942	732	964
DP1044B2RF	1161	1237	494	964
ST4946GLB2	1049	1270	560	960
LA35RS	1112	956	666	911
LA17	858	784	621	754
Overall Mean	1229	1328	681	1079
LSD(0.05)	187	140	201	
C.V. (%)	10.8	7.4	20.6	

Table 14. One-year yield performance of medium maturing varieties cultivated in an irrigated environment at three locations during 2012.

Variety	Location and soil texture			Average across locations
	Bossier City	Winnsboro	St. Joseph	
	Silt loam	Silt loam	Clay	
	Pounds of lint per/acre			
PHY499WRF	1520	1481	945	1315
DP1133B2RF	1393	1507	1043	1314
DP1137B2RF	1493	1444	893	1277
CG3787B2RF	1450	1398	901	1250
PHY375WRF	1318	1412	976	1235
DP1034B2RF	1455	1362	866	1228
MON11R154B2R2	1372	1309	891	1191
ST5288B2F	1288	1412	862	1187
DP1044B2RF	1190	1484	885	1186
FM1944GLB2	1229	1373	953	1185
NG1511B2RF	1203	1410	908	1174
DG2610B2RF	1423	1273	769	1155
ST4946GLB2	1173	1366	923	1154
DP1252B2RF	1328	1411	717	1152
DG2595B2RF	1333	1237	877	1149
NG5315B2RF	1344	1197	852	1131
ST6448GLB2	1073	1450	858	1127
PX532211WRF	1176	1345	844	1122
LA06307025	1179	1123	1051	1118
MON11R136B2R2	1153	1292	833	1093
DP1359B2RF	1178	1242	673	1031
LA35RS	1076	1145	791	1004
LA17	1039	988	904	977
Overall Mean	1278	1337	879	1163
LSD(0.05)	133	181	189	
C.V. (%)	7.4	9.6	15.2	

Table 15. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on a nonirrigated Latanier clay at the Dean Lee Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
DP1133B2RF	**1615**	44.0	1.21	**85.40**	**33.35**	**4.75**
CG3787B2RF	**1599**	43.0	1.19	84.85	29.85	**4.50**
DP1252B2RF	**1560**	43.5	1.17	84.20	30.15	**4.60**
NG5315B2RF	**1544**	**45.0**	1.18	84.65	30.25	4.35
PHY499WRF	**1528**	42.0	1.17	84.65	**33.45**	4.30
FM1944GLB2	**1487**	39.0	**1.22**	**85.10**	31.00	**4.45**
DG2610B2RF	**1483**	42.5	1.18	83.50	29.40	4.30
DP1034B2RF	**1477**	43.0	1.19	**84.95**	31.65	**4.50**
DP1137B2RF	1474	43.0	1.17	84.00	30.10	**4.55**
PHY375WRF	1414	41.9	1.18	84.60	30.50	**4.60**
ST5288B2F	1399	42.5	**1.23**	**85.20**	32.10	**4.45**
DP1359B2RF	1348	42.0	1.19	84.00	31.65	**4.45**
ST6448GLB2	1333	39.0	**1.25**	**84.90**	30.15	**4.45**
MON11R136B2R2	1305	40.5	**1.26**	84.60	31.80	**4.50**
ST4946GLB2	1270	38.0	1.17	84.50	32.00	4.35
PX532211WRF	1246	37.5	**1.24**	84.55	29.80	4.10
NG1511B2RF	1240	41.5	1.14	84.40	31.60	**4.55**
DP1044B2RF	1237	37.5	1.15	83.05	30.70	4.10
DG2595B2RF	1172	38.0	1.17	82.95	30.20	**4.55**
MON11R154B2R2	1155	40.5	1.19	83.85	**32.75**	4.00
LA35RS	956	36.5	**1.25**	**85.60**	**33.15**	4.35
LA06307025	942	39.5	1.17	84.70	**33.50**	4.35
LA17	784	35.5	**1.26**	**86.60**	**34.35**	4.30
Overall Mean	1328	41.0	1.19	84.56	31.48	4.4
LSD(0.05)	140	1.6	0.04	1.72	2.14	0.36
C.V. (%)	7.4	2.23	1.6	1.0	3.2	3.8

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

Table 16. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on a nonirrigated Coushatta silt loam at the Dean Lee Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
DP1133B2RF	**1557**	**44.0**	1.16	**85.20**	34.95	4.75
PHY499WRF	**1424**	**42.5**	1.18	**85.70**	**33.70**	4.85
DP1034B2RF	1339	**42.5**	1.16	83.65	28.25	4.50
PX532211WRF	1334	**43.0**	1.21	83.95	28.60	4.60
DP1137B2RF	1314	**41.0**	1.14	84.00	29.05	4.50
NG5315B2RF	1306	**43.0**	1.14	83.75	29.25	4.55
DG2595B2RF	1304	**38.5**	1.19	83.00	30.30	4.85
CG3787B2RF	1303	**43.5**	1.14	83.50	29.25	4.65
DP1252B2RF	1300	**43.0**	1.18	**84.25**	30.95	4.85
FM1944GLB2	1259	**39.0**	**1.21**	**85.45**	29.25	4.90
PHY375WRF	1249	**41.5**	1.15	83.35	29.10	4.65
DG2610B2RF	1222	**42.5**	1.15	84.25	30.45	4.60
LA06307025	1219	**39.0**	1.17	**84.25**	**33.30**	5.25
MON11R136B2R2	1206	**41.5**	1.19	83.85	30.25	4.70
NG1511B2RF	1174	**42.5**	1.14	83.35	30.35	4.75
DP1359B2RF	1173	**42.0**	1.18	83.75	30.70	4.70
ST6448GLB2	1167	**39.5**	**1.21**	**84.35**	29.55	4.75
DP1044B2RF	1161	**39.5**	1.15	83.80	30.70	4.25
MON11R154B2R2	1149	**40.0**	1.14	83.35	**32.85**	4.85
LA35RS	1112	**39.0**	**1.24**	**85.55**	32.55	4.50
ST5288B2F	1084	**39.0**	1.13	82.30	27.40	4.60
ST4946GLB2	1049	**41.0**	1.13	82.95	30.45	4.35
LA17	858	31.0	**1.21**	**85.50**	**34.20**	4.75
Overall Mean	1229	41.0	1.17	84.05	30.67	4.68
LSD(0.05)	187	5.8	0.04	1.59	2.36	0.31
C.V. (%)	10.8	6.8	1.6	1.0	3.7	3.2

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

Table 17. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on an irrigated Caplis silt loam at the Red River Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
PHY499WRF	**1520**	**40.05**	1.12	83.53	**32.68**	4.93
DP1137B2RF	**1493**	**40.25**	1.10	82.85	29.08	**5.08**
DP1034B2RF	**1455**	39.80	1.14	83.18	30.25	4.95
CG3787B2RF	**1450**	**40.25**	1.14	83.00	30.70	4.98
DG2610B2RF	**1423**	39.38	1.13	82.95	30.00	4.85
DP1133B2RF	**1393**	39.83	1.13	83.33	**32.50**	**5.18**
MON11R154B2R2	1372	37.68	1.15	82.50	**32.45**	4.48
NG5315B2RF	1344	**40.30**	1.14	**83.63**	30.48	4.93
DG2595B2RF	1333	38.03	1.14	82.83	31.33	**5.05**
DP1252B2RF	1328	**40.83**	1.13	**83.75**	30.15	**5.10**
PHY375WRF	1318	38.35	1.10	82.15	29.25	4.83
ST5288B2F	1288	37.95	1.10	82.23	28.80	**5.18**
FM1944GLB2	1229	36.63	1.15	81.73	28.35	4.90
NG1511B2RF	1203	39.50	1.12	83.03	**32.60**	**5.03**
DP1044B2RF	1190	36.53	1.10	82.03	31.33	4.85
LA06307025	1179	38.95	1.15	**83.60**	**33.05**	**5.08**
DP1359B2RF	1178	39.03	1.14	81.90	31.20	4.75
PX532211WRF	1176	36.08	1.17	83.00	30.45	4.58
ST4946GLB2	1173	36.80	1.13	83.45	**33.63**	4.85
MON11R136B2R2	1153	36.58	**1.21**	**83.83**	**32.78**	4.58
LA35RS	1076	34.05	**1.19**	83.48	**33.15**	4.65
ST6448GLB2	1073	36.78	**1.18**	82.43	28.80	**5.00**
LA17	1039	32.90	**1.20**	**84.50**	**33.53**	4.45
Overall Mean	1278	38.11	1.14	82.99	31.15	4.88
LSD(0.05)	133	0.98	0.02	0.91	1.46	0.19
C.V. (%)	7.4	1.8	1.5	1.0	3.3	2.71

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

Table 18. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on an irrigated Sharkey clay at the Northeast Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
LA06307025	**1051**	**38.1**	1.12	82.55	31.10	**4.90**
DP1133B2RF	**1043**	**38.3**	1.12	**83.65**	**32.15**	4.55
PHY375WRF	**976**	**37.7**	1.09	82.30	28.08	4.38
FM1944GLB2	**953**	**35.6**	1.16	82.65	29.10	**4.78**
PHY499WRF	**945**	**37.4**	1.09	82.48	30.95	4.68
ST4946GLB2	**923**	**36.9**	1.10	82.18	30.53	**4.80**
NG1511B2RF	**908**	**37.5**	1.11	82.80	30.83	4.53
LA17	**904**	33.1	**1.17**	**84.35**	**32.68**	4.40
CG3787B2RF	**901**	**37.2**	1.12	83.03	29.48	4.63
DP1137B2RF	**893**	**36.0**	1.10	82.48	28.68	4.60
MON11R154B2R2	**891**	**37.5**	1.12	82.50	31.53	4.48
DP1044B2RF	**885**	34.8	1.09	81.83	28.75	4.58
DG2595B2RF	**877**	**35.2**	1.12	82.68	30.18	4.63
DP1034B2RF	**866**	**35.7**	1.12	82.58	28.75	4.50
ST5288B2F	862	**35.9**	1.12	81.93	27.95	4.50
ST6448GLB2	858	34.7	**1.18**	82.73	28.23	4.55
NG5315B2RF	852	**36.4**	1.13	82.60	29.68	4.55
PX532211WRF	844	34.7	**1.17**	82.88	29.18	4.13
MON11R136B2R2	833	34.1	**1.19**	**83.65**	31.03	4.20
LA35RS	791	33.1	1.16	**83.50**	31.00	4.50
DG2610B2RF	769	33.3	1.13	83.20	30.10	4.38
DP1252B2RF	717	**37.8**	1.12	**83.48**	31.08	4.55
DP1359B2RF	673	**36.6**	1.12	82.18	31.18	4.43
Overall Mean	879	36.0	1.13	82.79	30.09	4.53
LSD(0.05)	189	3.3	0.02	1.08	1.06	0.21
C.V. (%)	15.2	6.6	1.4	0.9	2.5	3.3

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

Table 19. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on a nonirrigated Commerce silt loam at the Northeast Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
DP1034B2RF	**962**	**43.6**	1.14	83.08	28.63	4.73
NG1511B2RF	**906**	**38.9**	1.11	82.43	29.70	**4.90**
NG5315B2RF	**830**	**39.7**	1.11	81.93	28.05	4.78
DG2595B2RF	**804**	35.2	1.14	82.33	28.78	**4.93**
LA06307025	732	**38.2**	1.13	83.33	30.18	**5.00**
DG2610B2RF	727	**38.2**	1.12	82.75	28.03	4.75
DP1133B2RF	719	**38.6**	1.12	83.00	30.48	**5.03**
PHY499WRF	702	**40.2**	1.12	**83.68**	**31.03**	4.70
DP1137B2RF	701	34.4	1.11	81.75	27.28	**4.88**
DP1252B2RF	686	**40.3**	1.12	82.58	28.30	**4.85**
CG3787B2RF	675	**39.0**	1.11	82.60	27.20	4.75
LA35RS	666	33.5	1.17	**83.85**	**31.23**	4.70
DP1359B2RF	662	**38.7**	1.13	82.20	29.63	**4.95**
ST5288B2F	641	36.3	1.11	81.78	26.98	**4.85**
LA17	621	33.2	1.17	**84.20**	**32.05**	4.48
MON11R154B2R2	619	37.1	1.11	82.13	**30.93**	**4.95**
PHY375WRF	614	36.5	1.10	81.85	27.63	4.55
FM1944GLB2	599	35.7	1.17	82.40	27.73	4.73
ST6448GLB2	579	36.2	1.16	81.93	25.30	4.60
PX532211WRF	566	35.2	1.16	82.25	27.93	4.50
ST4946GLB2	560	31.2	1.12	82.88	29.40	4.70
MON11R136B2R2	559	34.7	**1.20**	**83.73**	29.53	4.55
DP1044B2RF	494	35.5	1.12	82.40	28.70	4.50
Overall Mean	681	37.0	1.13	82.65	28.89	4.75
LSD(0.05)	201	5.7	0.02	0.97	1.16	0.19
C.V. (%)	20.6	10.9	1.5	0.8	2.8	2.8

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

Table 20. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on an irrigated Gigger silt loam at the Macon Ridge Research Station during 2012.

Variety	Lint yield (pounds/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
DP1133B2RF	**1507**	**42.7**	1.13	**83.68**	31.50	**5.05**
DP1044B2RF	**1484**	39.3	1.11	81.98	29.58	4.55
PHY499WRF	**1481**	**41.8**	1.10	**83.30**	30.88	**4.98**
ST6448GLB2	**1450**	39.1	1.17	82.45	27.13	4.83
DP1137B2RF	**1444**	**41.7**	1.11	82.75	28.70	4.90
ST5288B2F	**1412**	40.2	1.12	81.93	27.23	4.88
PHY375WRF	**1412**	39.9	1.13	82.63	28.70	4.65
DP1252B2RF	**1411**	**43.1**	1.12	**83.48**	28.75	**5.08**
NG1511B2RF	**1410**	40.8	1.11	82.75	30.88	**4.98**
CG3787B2RF	**1398**	**41.4**	1.12	82.88	28.88	4.88
FM1944GLB2	**1373**	38.2	**1.18**	82.80	28.70	4.78
ST4946GLB2	**1366**	40.5	1.14	**83.28**	30.55	4.70
DP1034B2RF	**1362**	**42.0**	1.14	82.75	28.65	4.85
PX532211WRF	**1345**	40.7	**1.19**	**83.78**	28.73	4.58
MON11R154B2R2	1309	40.4	1.13	82.93	**32.68**	**4.98**
MON11R136B2R2	1292	39.4	**1.19**	**83.88**	30.68	4.70
DG2610B2RF	1273	**41.3**	1.13	**83.15**	29.55	4.78
DP1359B2RF	1242	**41.3**	1.15	**83.28**	31.63	**5.03**
DG2595B2RF	1237	39.3	1.12	82.28	28.80	**5.00**
NG5315B2RF	1197	**41.4**	1.13	**83.45**	29.43	4.85
LA35RS	1145	36.2	**1.18**	**83.90**	31.05	4.75
LA06307025	1123	40.9	1.14	82.98	30.95	**5.03**
LA17	988	35.7	**1.18**	**84.00**	**32.18**	4.43
Overall Mean	1337	40.3	1.14	83.05	29.8	4.83
LSD(0.05)	181	2.0	0.03	0.96	0.87	0.14
C.V. (%)	9.6	3.5	1.7	0.8	2.1	2.0

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

Table 21. Dates of agronomically important events for cotton variety trials managed at the LSU AgCenter Research Stations during 2012.

Event	Alexandria		Bossier City	St. Joseph			Winnsboro
	Silt Loam	Clay	Silt Loam	Silt Loam Early	Silt Loam Medium	Clay	Silt Loam
Planting Date	4/24/2012	4/24/2012	4/24/2012	5/10/2012	4/24/2012	4/25/2012	26-Apr
Emergence	5/2/2012	5/2/2012	5/1/2012	5/16/2012	5/1/2012	5/2/2012	4-May
N Application	5/7/2012	5/7/2012	.	6/1/2012	5/22/2012	5/23/2012	4/25/2012
Pre Herbicide App.	4/27/2012	5/21/2012	3/26/2012	5/11/2012	4/26/2012	4/26/2012	4/26/2012
			4/25/2012	.	.	.	.
Early Post Herbicide App.	5/9/2012	.	5/8/2012	6/13/2012	6/8/2012	6/8/2012	.
	5/29/2012	.	5/21/2012	.	.	.	.
Layby Herbicide App.	6/15/2012	6/25/2012	6/6/2012	6/28/2012	6/25/2012	6/20/2012	.
	6/20/2012	.	6/20/2012	.	.	.	.
		.	7/16/2012	.	.	.	.
Early Insecticide App.	6/5/2012	5/21/2012	5/12/2012	6/20/2012	7/2/2012	7/2/2012	5/13/2012
	6/11/2012	6/11/2012	5/18/2012	.	.	.	.
	6/28/2012	6/28/2012	5/29/2012	.	.	.	.
Mid Insecticide App.	7/17/2012	7/3/2012	6/5/2012	8/14/2012	7/31/2012	7/31/2012	6/15/2012
	7/31/2012	7/19/2012	6/20/2012	.	.	.	.
	.	7/31/2012	6/26/2012	.	.	.	.
	.	.	6/29/2012	.	.	.	.
	.	.	7/4/2012	.	.	.	.
	.	.	7/13/2012	.	.	.	.
	.	.	7/16/2012	.	.	.	.
	.	.	7/18/2012	.	.	.	.
	.	.	7/26/2012	.	.	.	.
Late Insecticide App.	88/12	8/8/2012	8/1/2012	9/7/2012	8/17/2012	8/17/2012	.
	8/16/2012	8/16/2012	8/9/2012	.	.	.	.
	.	.	8/16/2012	.	.	.	.
			8/28/2012	.	.	.	.
PGR	6/25/2012	6/25/2012	8/28/2012	6/13/2012	6/8/2012	N/A	7/17/2012
	.	8/1/12 (MEDIUM ONLY)	.	.	.	.	7/23/2012
Harvest Aid	9/7/2012	9/7/2012	9/19/2012	9/19/2012	8/11/2012	8/7/2012	8/28/2012
							9/5/2012
							9/5/2012
							9/13/2012
	9/20/2012	9/20/2012	.	9/17/2012	8/19/2012	8/13/2012	.
Harvest	9/28/2012	9/27/2012	9/26/2012	10/17/2012	10/5/2012	10/11/2012	9/19 early, 9/24 mid

Table 22. Yield performance and fiber characteristics of Core Block (on-farm) variety trials on alluvial soils, Mississippi Delta, La., during 2012.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
Catahoula						
PHY499WRF	1245	0.42	1.13	83.80	35.30	4.9
DP1133B2RF	1149	0.42	1.13	82.90	32.00	5.1
ST5288B2F	1079	0.41	1.11	81.60	28.80	5.1
FM1944GLB2	1067	0.39	1.2	84.00	32.10	4.9
ST5458B2RF	1011	0.39	1.15	81.90	29.50	4.9
DP1044B2RF	1003	0.39	1.11	81.00	29.60	4.8
DP0912B2RF	1001	0.38	1.06	81.00	28.60	5.1
PHY375WRF	965	0.40	1.09	82.20	28.50	4.5
PHY367WRF	921	0.39	1.12	82.30	33.50	4.4
NG1511B2RF	901	0.40	1.05	80.30	30.10	4.6
Concordia						
DP1133B2RF	962	0.39	1.16	83.60	37.20	3.8
PHY499WRF	942	0.40	1.15	83.80	35.20	3.7
ST5458B2RF	902	0.37	1.19	83.40	34.40	3.8
FM1944GLB2	898	0.36	1.2	83.20	32.30	3.7
PHY375WRF	874	0.38	1.18	84.00	32.30	3.5
NG1511B2RF	857	0.39	1.13	84.90	35.00	4
ST5288B2F	857	0.37	1.16	83.10	31.90	3.8
DP0912B2RF	848	0.36	1.11	83.40	32.20	4.1
PHY367WRF	812	0.36	1.14	82.80	34.80	3.5
DP1044B2RF	805	0.36	1.12	83.20	30.90	3.6
East Carroll						
DP0912B2RF	968	0.37	1.12	83.40	33.00	4.9
DP1044B2RF	919	0.37	1.16	83.60	31.40	4.7
ST5288B2F	897	0.38	1.16	82.20	27.50	4.2
NG1511B2RF	865	0.39	1.14	83.00	30.50	4.4
ST5458B2RF	837	0.37	1.11	81.80	30.60	4.8
PHY367WRF	819	0.37	1.19	81.40	31.00	4.2
PHY499WRF	778	0.40	1.15	83.30	31.40	4.8
FM1944GLB2	755	0.35	1.16	81.50	29.20	4.3
DP1133B2RF	713	0.40	1.16	83.30	31.50	4.8
PHY375WRF	684	0.38	1.13	83.10	29.50	4.3

Table 22 Continued. Yield performance and fiber characteristics of Core Block (on-farm) variety trials on alluvial soils, Mississippi Delta, La., during 2012.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
Madison						
PHY499WRF	1480	0.42	1.13	84.60	33.00	4.8
NG1511B2RF	1407	0.41	1.12	83.40	32.80	4.6
DP1044B2RF	1405	0.39	1.09	81.50	30.10	4.9
ST5288B2F	1374	0.40	1.13	83.20	28.10	4.8
DP1133B2RF	1357	0.42	1.14	82.80	30.20	4.9
ST5458B2RF	1344	0.38	1.13	82.10	31.40	5.1
DP0912B2RF	1341	0.39	1.12	84.00	31.30	4.9
PHY375WRF	1274	0.40	1.11	82.00	29.70	4.6
FM1944GLB2	1251	0.38	1.18	83.90	28.40	4.4
PHY367WRF	1225	0.39	1.15	83.00	31.40	4.3
Pointe Coupee						
DP0912B2RF	1302	0.38	1.13	82.70	28.60	5.1
FM1944GLB2	1207	0.38	1.2	82.10	28.80	4.5
DP1133B2RF	1187	0.41	1.16	84.70	29.40	4.6
PHY499WRF	1159	0.41	1.17	84.00	31.60	4.7
PHY375WRF	1130	0.39	.	.	.	.
PHY367WRF	1101	0.40	.	.	.	.
ST5288B2F	1083	0.39	1.15	83.00	26.90	4.8
NG1511B2RF	1061	0.38	1.18	83.80	27.80	4.7
ST5458B2RF	976	0.38	.	.	.	.
DP1044B2RF	956	0.30	1.15	83.30	30.10	4.6
Tensas						
DP0912B2RF	1657	0.40	1.15	84.45	31.45	4.7
PHY499WRF	1556	0.40	1.15	82.80	31.60	4.7
ST5288B2F	1512	0.39	1.13	82.80	28.95	4.55
NG1511B2RF	1462	0.41	1.13	82.65	30.70	4.6
PHY367WRF	1394	0.39	1.15	82.90	31.15	4.2
DP1133B2RF	1376	0.44	1.15	83.50	31.60	4.75
DP1044B2RF	1348	0.39	1.11	83.05	29.20	4.35
ST5458B2RF	1334	0.39	1.17	83.35	30.45	4.85
FM1944GLB2	1322	0.38	1.18	83.70	29.10	4.7
PHY375WRF	1169	0.39	1.15	83.05	30.35	4.35

Table 23. Yield performance and fiber characteristics of Core Block (on-farm) variety trials on loess soils, Macon Ridge, La., during 2012.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
Franklin						
PHY499WRF	1348	0.42	1.13	84	32.1	4.4
DP1044B2RF	1324	0.40	1.1	83.6	28.2	4.6
DP0912B2RF	1282	0.38	1.12	82.9	29	4.5
NG1511B2RF	1271	0.41	1.11	83.7	31.5	4.4
ST5288B2F	1268	0.39	1.13	82.8	28.3	4.7
PHY375WRF	1265	0.40	1.11	82.7	28.9	4.1
DP1133B2RF	1253	0.43	1.13	83.8	29.8	4.4
ST5458B2RF	1236	0.40	1.11	83.4	29.7	4.6
PHY367WRF	1227	0.39	1.16	82.3	30.2	4.1
FM1944GLB2	1219	0.38	1.18	83.3	28.5	4.4
Richland						
ST5458B2RF	897	0.37	1.19	83.6	34.8	4.2
DP1133B2RF	866	0.38	.	.	.	.
DP0912B2RF	825	0.38	1.11	81.9	30.7	4.4
PHY375WRF	804	0.39	1.17	84.1	33.2	4.1
NG1511B2RF	791	0.40	1.14	83.6	34	4.1
DP1044B2RF	761	0.37	1.13	83.1	31.3	4
PHY499WRF	722	0.41	1.18	84.8	36.5	4
PHY367WRF	700	0.36	1.21	82.9	33.1	3.7
ST5288B2F	694	0.37	1.14	82.4	28.8	4
FM1944GLB2	689	0.37	1.25	84.6	33.8	4.1

Table 24. Yield performance and fiber characteristics of Core Block (on-farm) variety trials on high pH soils, Red River Valley, La., during 2012.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
Avoyelles						
ST5288B2F	1213	0.39	1.16	83.3	29.9	4.3
FM1944GLB2	1130	0.38	.	.	.	.
PHY499WRF	1129	0.40	1.22	84.5	29.6	4.7
DP0912B2RF	1121	0.37	1.16	82.8	27.7	4.8
NG1511B2RF	1110	0.41	1.15	84.4	32.6	4.8
DP1133B2RF	1101	0.39	1.18	83.8	30.6	4.8
PHY375WRF	1095	0.38	1.15	84.2	31.1	4.7
PHY367WRF	1091	0.38	1.18	84.1	31.4	4.4
DP1044B2RF	1049	0.37	1.17	84.2	29.7	4.4
ST5458B2RF	1038	0.37	1.16	84.7	34	4.9
Caddo						
PHY499WRF	2020	0.42	1.16	84.3	34	4.6
DP0912B2RF	1917	0.38	1.19	84.4	32.4	4.6
PHY375WRF	1839	0.40	1.16	84.6	34.2	4.6
DP1133B2RF	1763	0.38	1.18	83	32.3	4.2
ST5458B2RF	1718	0.36	1.16	83.5	31	4.6
FM1944GLB2	1707	0.37	1.21	84.7	31.4	4.2
ST5288B2F	1700	0.38	1.18	84.7	32.1	4.2
PHY367WRF	1698	0.39	1.14	83.4	30.2	4.5
NG1511B2RF	1669	0.40	1.15	83	30	4.4
DP1044B2RF	1643	0.41	1.19	84.9	34.2	4.6
Caddo						
DP1044B2RF	1494	0.37	1.15	83.5	30.2	4.7
ST5288B2F	1457	0.39	1.14	82.3	28.9	4.4
PHY375WRF	1385	0.38	1.14	82.6	28	4.1
NG1511B2RF	1339	0.39	1.13	83.4	31.4	4.4
DP1133B2RF	1221	0.41	1.15	83.5	32	4.6
PHY499WRF	1197	0.40	1.11	81.5	31.6	4.6
DP0912B2RF	1188	0.37	1.11	83.4	29.2	4.5
ST5458B2RF	1133	0.38	1.12	82.9	29	4.5
PHY367WRF	1055	0.38	1.15	82.8	30.9	4.1
FM1944GLB2	900	0.35	1.16	81.6	27.2	3.7

Table 24 Continued. Yield performance and fiber characteristics of Core Block (on-farm) variety trials on high pH soils, Red River Valley, La., during 2012.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
Rapides						
DP1133B2RF	1423	0.41	1.16	85.4	35	4.5
PHY499WRF	1304	0.41	1.15	84.1	35.4	4.2
FM1944GLB2	1226	0.37	1.22	84	32.6	4.3
ST5288B2F	1214	0.38	1.15	82.5	30.2	4.5
ST5458B2RF	1213	0.37	1.12	82.7	31.7	4.5
DP0912B2RF	1109	0.38	1.07	82.1	30.9	4.8
NG1511B2RF	1038	0.39	1.14	83.7	34	4.4
DP1044B2RF	958	0.36	1.1	82.2	31.6	4.1
PHY375WRF	953	0.35	1.14	83.5	30.2	4.3
PHY367WRF	942	0.37	1.17	84.1	33.9	3.9
Rapides						
DP0912B2RF	1135	0.38	1.15	83.7	30.9	4.5
DP1133B2RF	1088	0.42	1.14	82.9	29	4.6
PHY367WRF	1032	0.39	1.14	82.9	29.3	4.1
NG1511B2RF	1020	0.40	1.16	84.4	31.5	4.6
PHY499WRF	969	0.41	1.15	82.4	28.7	4.1
ST5458B2RF	956	0.38	1.12	82.4	29.1	3.8
ST5288B2F	944	0.38	1.16	83.2	32.3	4.4
DP1044B2RF	898	0.39	1.14	81.2	28.3	4.4
FM1944GLB2	895	0.38	1.18	82.5	29	4.7
PHY375WRF	852	0.39	1.18	82.3	28.4	4.4

Table 25. Yield performance and fiber characteristics of Core Block (on-farm) variety trials on alluvial soils, Ouachita Valley, La., during 2012.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Uniformity (%)	Strength (g/tex)	Micronaire
Morehouse						
PHY499WRF	757	0.41	1.1	79.9	32.90	5.1
DP0912B2RF	711	0.41	1.1	80.7	30.30	5.4
ST5288B2F	677	0.39	1.1	82.6	31.20	5.3
NG1511B2RF	625	0.39	.	.	.	.
PHY375WRF	613	0.41	1.2	83.8	30.90	4.8
ST5458B2RF	533	0.37	1.2	83.1	33.20	4.9
DP1044B2RF	531	0.38	1.1	80.9	31.50	4.9
DP1133B2RF	523	0.40	1.2	82.9	35.20	5.1
PHY367WRF	521	0.39	1.1	82.0	32.40	4.6
FM1944GLB2	462	0.38	1.2	83.9	32.40	4.7
Ouachita						
PHY367WRF	1343	0.43	1.16	82.2	32.3	4.4
ST5288B2F	1338	0.41	1.12	83.6	30	4.8
PHY499WRF	1297	0.43	1.14	83.6	31.7	4.4
NG1511B2RF	1269	0.41	1.17	84.1	33.2	4.9
DP0912B2RF	1249	0.39	1.16	82.3	31.2	4.4
ST5458B2RF	1245	0.38	.	.	.	.
DP1044B2RF	1182	0.38	1.13	84.1	34	4.8
FM1944GLB2	1144	0.39	1.14	81.7	29.3	4.9
DP1133B2RF	1141	0.42	1.17	82.5	29.4	4.9
PHY375WRF	1097	0.40	1.19	83.5	29	4.5

Table 26. List of variety entries submitted for 2012 testing.

Provider	Variety
Americot	NG1511B2RF
Americot	AM1550B2RF
Americot	NG5315B2RF
Bayer CropScience	ST4946GLB2
Bayer CropScience	ST6448GLB2
Bayer CropScience	ST5288B2F
Bayer CropScience	ST 5458B2RF
Croplan Genetics	CG3428B2RF
Croplan Genetics	CG3787B2RF
Dyna-Gro	DG2530B2RF
Dyna-Gro	DG2570B2RF
Dyna-Gro	DG2595B2RF
Dyna-Gro	DG2610B2RF
Deltapine	DP0912B2RF
Deltapine	DP1034B2RF
Deltapine	DP1044B2RF
Deltapine	DP1133B2RF
Deltapine	DP1137B2RF
Deltapine	DP1252B2RF
FiberMax	FM1740B2F
FiberMax	FM1944GLB2
Seed Source Genetics	HQ210CT
LSU AgCenter	LA06307025
LSU AgCenter	LA17
LSU AgCenter	LA35RS
Deltapine	DP1321B2RF
Deltapine	DP1311B2RF
Deltapine	MON11R136B2R2
Deltapine	MON11R154B2R2
Deltapine	DP1359B2RF
Phytogen	PHY367WRF
Phytogen	PHY375WRF
Phytogen	PHY499WRF
Phytogen	PHY339WRF
Phytogen	PX433915WRF
Phytogen	PX4339CBWRF
Phytogen	PX532211WRF
University of Arkansas	UA222

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