2012

Cotton Varieties
for Louisiana

LSU AgCenter
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Introduction

Each year, scientists with the LSU AgCenter evaluate cotton varieties at four locations that are representative of Louisiana's cotton producing regions. The official variety tests are conducted at the AgCenter's Red River Research Station near Bossier City, Dean Lee Research Station near 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 within a trial are replicated four or five times, and data is 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 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 given careful consideration because of the tremendous importance of this decision 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 as much information as possible to growers 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 always should plant multiple varieties, selected from the top performers in the variety trials that are 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 is actually 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. As 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 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 is often 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 that is 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 are currently introduced at a rapid pace and have shorter life spans than in the past. Data for 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 as well.

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 the 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. Moreover, growers should consult the label for specific glyphosate formulations for permitted use on Roundup Ready Flex varieties.

Weed control is a major factor in producing high-yielding, high-quality cotton. Because of the increased flexibility for applying glyphosate over the top to Roundup Ready Flex varieties, some growers may opt to wait until weeds emerge and get some size before making applications. This is not recommended, 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. Moreover, 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 2012 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 Ignite 280 or Ignite (glufosinate). These varieties can be managed in a Liberty Link weed control program, which is covered in more detail in the LSU AgCenter's 2012 Louisiana Suggested Chemical Weed Management Guide publication. Liberty Link cotton is tolerant to Ignite 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.

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 and beat 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 non-caterpillar 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 tobacco budworm and fall armyworm. These varieties should not need any supplemental insecticidal sprays for control of these 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 for existing and forecast temperatures and soil moisture levels. 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, are typically 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 good, warm conditions, however, overall germination is likely to 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 three locations during 2010-2011.

Variety	Location and soil texture								Average across locations and years
	Alexandria				St. Joseph		Winnsboro		
	Silt loam		Clay		Silt loam		Silt loam		
	2010	2011	2010	2011	2010	2011	2010	2011	
	Pounds of lint/acre								
AM1550B2RF	1269	985	1562	1546	563	1169	553	670	1040
DG2450B2RF	1223	887	1582	1639	578	1254	550	585	1037
DG2570B2RF	1216	1027	1679	1656	544	1125	595	738	1073
DP0912B2RF	1403	1011	1835	1800	699	1380	590	724	1180
DP1133B2RF	1294	1055	1967	1990	629	1491	697	569	1212
FM1740B2F	1279	973	1949	1347	767	1347	496	488	1081
HQ210CT	1030	901	1082	1604	553	1229	391	532	915
PHY367WRF	1249	884	1747	1681	733	1173	469	531	1058
PHY375WRF	1357	871	1823	1994	720	1380	479	661	1161
ST4288B2F	1052	874	1545	1552	709	1335	543	660	1034
ST5288B2F	1506	1002	1993	1774	789	1601	691	806	1270

Table 2. Two-year yield performance of early maturing cotton varieties cultivated in an irrigated environment at two locations during 2010-2011.

Variety	Location and soil texture				Average across locations and years
	St. Joseph		Winnsboro		
	Clay		Silt loam		
	2010	2011	2010	2011	
	Pounds of lint/acre				
AM1550B2RF	836	921	1085	1533	1094
DG2450B2RF	805	982	1144	1379	1078
DG2570B2RF	856	968	1095	1376	1074
DP0912B2RF	1175	1162	1275	1441	1263
DP1133B2RF	1138	1141	1463	1535	1319
FM1740B2F	959	908	1288	1270	1106
HQ210CT	744	861	1108	1237	988
PHY367WRF	1007	952	1244	1519	1181
PHY375WRF	949	974	1167	1539	1157
ST4288B2F	894	960	1303	1386	1136
ST5288B2F	1311	1138	1255	1556	1315

Table 3. One-year yield performance of early maturing cotton varieties cultivated in a nonirrigated environment at three locations during 2011.

Variety	Location and soil texture				Average across locations
	Alexandria		St. Joseph	Winnsboro	
	Silt loam	Clay	Silt loam	Silt loam	
	Pounds of lint/acre				
AM1511B2RF	**911**	1725	1371	**747**	1189
AM1550B2RF	**985**	1546	1169	700	1100
BCSX1150B2F	772	1686	1183	525	1042
BX1252LLB2	777	1648	1302	569	1074
BX1254LLB2	848	1835	1400	591	1169
BX1262B2F	777	1676	1273	658	1096
DG2450B2RF	**887**	1639	1254	585	1091
DG2570B2RF	**1027**	1656	1125	**738**	1137
DP0912B2RF	**1011**	1800	1380	**724**	1229
DP1133B2RF	**1055**	**1990**	**1491**	569	1276
FM1740B2F	**973**	1347	1347	488	1039
HQ210CT	**901**	1604	1229	532	1067
HQ212CT	857	1664	1258	504	1071
PHY367WRF	**884**	1681	1173	531	1067
PHY375WRF	**871**	**1994**	1380	661	1227
PHY499WRF	**961**	**1933**	1269	**799**	1241
ST4145LLB2	**973**	**1873**	1326	674	1212
ST4288B2F	**874**	1552	1335	660	1105
ST5288B2F	**1002**	1774	**1601**	**806**	1296
Overall Mean	913	1717	1309	635	1143
LSD(0.05)	195	129	193	122	
C.V. (%)	14.5	5.1	10.2	13.8	10.9

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 4. One-year yield performance of early maturing cotton varieties cultivated in an irrigated environment at three locations during 2011.†

Variety	Locations and soil texture			Average across locations
	Bossier City	St. Joseph	Winnsboro	
	Clay	Clay	Silt loam	
	Pounds of lint/acre			
AM1511B2RF	**1049**	**1166**	**1531**	1249
AM1550B2RF	715	921	**1533**	1056
BCSX1150B2F	817	850	**1421**	1029
BX1252LLB2	735	947	**1452**	1045
BX1254LLB2	762	**1119**	**1580**	1154
BX1262B2F	759	**1014**	**1546**	1106
DG2450B2RF	776	982	1379	1046
DG2570B2RF	611	968	1376	985
DP0912B2RF	827	**1162**	**1441**	1143
DP1133B2RF	**1047**	**1141**	**1535**	1241
FM1740B2F	523	908	1270	900
HQ210CT	799	861	1237	966
HQ212CT	715	909	1227	950
PHY367WRF	**937**	952	**1519**	1136
PHY375WRF	754	974	**1539**	1089
PHY499WRF	**1083**	**1137**	1356	1192
ST4145LLB2	**980**	**1022**	**1447**	1150
ST4288B2F	785	960	1386	1044
ST5288B2F	727	**1138**	**1556**	1140
Overall Mean	811	1007	1438	1085
LSD(0.05)	213	182	186	
C.V. (%)	15.3	12.6	9.0	12.3

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

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 2011†

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
AM1511B2RF	1725	39.75	**1.17**	**4.75**	31.75	83.65
AM1550B2RF	1546	38.80	1.15	**4.70**	**31.90**	**84.35**
BCSX1150B2F	1686	36.70	**1.21**	4.45	**34.05**	**85.35**
BX1252LLB2	1648	38.95	**1.18**	4.60	**32.35**	83.95
BX1254LLB2	1835	**40.25**	1.15	**4.70**	**32.90**	**84.25**
BX1262B2F	1676	38.25	**1.17**	4.55	**33.00**	**84.20**
DG2450B2RF	1639	37.50	**1.18**	4.25	29.70	**84.20**
DG2570B2RF	1656	38.10	1.16	4.35	**32.20**	**84.15**
DP0912B2RF	1800	39.35	1.13	4.60	31.30	**84.25**
DP1133B2RF	**1990**	**42.05**	1.14	**4.95**	**33.10**	83.85
FM1740B2F	1347	36.30	**1.17**	4.25	**33.45**	**84.65**
HQ210CT	1604	36.30	1.15	**4.70**	**32.60**	83.20
HQ212CT	1664	37.65	1.14	**4.85**	**33.95**	**84.35**
PHY367WRF	1681	39.20	**1.17**	4.50	**33.25**	**84.70**
PHY375WRF	**1994**	**41.10**	1.15	**5.05**	31.05	**84.30**
PHY499WRF	**1933**	**42.80**	**1.18**	4.60	**34.20**	**84.95**
ST4145LLB2	**1873**	**40.05**	1.15	4.60	**33.35**	83.50
ST4288B2F	1552	35.20	**1.21**	4.35	**34.45**	**84.60**
ST5288B2F	1774	39.35	**1.17**	4.50	30.95	83.85
Overall Mean	1717	38.82	1.16	4.59	32.61	84.23
LSD(0.05)	129	2.9	0.05	0.42	2.63	1.40
C.V. (%)	5.1	3.8	2.2	4.3	3.8	0.8

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

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 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
AM1511B2RF	**911**	**36.45**	1.15	**4.50**	**33.20**	**84.00**
AM1550B2RF	**985**	**37.20**	1.10	**4.50**	29.10	83.45
BCSX1150B2F	772	33.30	**1.16**	**4.50**	**32.25**	**84.35**
BX1252LLB2	777	**37.15**	**1.12**	**4.60**	**31.85**	82.85
BX1254LLB2	848	**37.35**	**1.15**	4.40	**31.95**	**83.70**
BX1262B2F	777	**36.10**	**1.15**	**4.55**	**32.60**	**84.05**
DG2450B2RF	**887**	**36.10**	**1.14**	**4.45**	28.65	**84.00**
DG2570B2RF	**1027**	**36.20**	**1.13**	**4.55**	**31.05**	**84.60**
DP0912B2RF	**1011**	**37.40**	**1.13**	**4.75**	**31.70**	**83.70**
DP1133B2RF	**1055**	**38.65**	**1.12**	**4.65**	**32.30**	**84.05**
FM1740B2F	**973**	**36.15**	**1.14**	**4.55**	**31.10**	**84.20**
HQ210CT	**901**	**36.55**	**1.13**	**4.70**	29.95	82.70
HQ212CT	857	34.20	**1.14**	**4.60**	**30.95**	82.75
PHY367WRF	**884**	**36.55**	**1.15**	4.30	**32.05**	**84.00**
PHY375WRF	**871**	**37.35**	**1.12**	**4.50**	29.35	**83.75**
PHY499WRF	**961**	**38.30**	**1.14**	**4.65**	**32.60**	**84.35**
ST4145LLB2	**973**	35.25	**1.14**	**4.50**	**31.65**	**84.50**
ST4288B2F	**874**	34.35	**1.13**	4.25	30.05	**83.80**
ST5288B2F	**1002**	**36.80**	**1.12**	**4.45**	29.15	82.55
Overall Mean	913	36.39	1.13	4.52	31.13	83.76
LSD(0.05)	195	2.9	0.05	0.34	2.63	0.96
C.V. (%)	14.5	3.8	2.27	3.53	4.02	0.55

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 7. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on an irrigated Moreland clay at the Red River Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
AM1511B2RF	**1049**	**41.30**	1.04	**4.58**	30.38	**81.73**
AM1550B2RF	715	38.28	1.04	4.10	26.58	**81.95**
BCSX1150B2F	817	37.80	**1.11**	**4.40**	**33.98**	**82.78**
BX1252LLB2	735	37.75	**1.08**	4.13	29.18	81.68
BX1254LLB2	762	39.55	**1.07**	**4.68**	29.15	**82.08**
BX1262B2F	759	39.17	**1.08**	4.15	30.83	**82.05**
DG2450B2RF	776	37.90	**1.09**	3.98	27.83	**81.73**
DG2570B2RF	611	36.67	1.05	4.05	28.38	81.65
DP0912B2RF	827	38.00	1.05	**4.45**	28.33	81.20
DP1133B2RF	**1047**	**42.23**	**1.08**	**4.75**	30.95	**81.88**
FM1740B2F	523	39.57	1.04	4.25	26.83	81.10
HQ210CT	799	35.27	1.07	**4.63**	29.60	**81.80**
HQ212CT	715	35.18	1.07	**4.45**	28.40	81.35
PHY367WRF	**937**	39.57	**1.10**	4.30	29.80	**82.95**
PHY375WRF	754	39.53	1.07	3.98	27.08	81.18
PHY499WRF	**1083**	**42.90**	1.06	**4.45**	**32.30**	**82.45**
ST4145LLB2	**980**	38.30	**1.07**	4.18	27.08	**82.30**
ST4288B2F	785	35.03	1.06	4.10	26.88	**81.80**
ST5288B2F	727	38.15	1.03	4.25	26.90	80.80
Overall Mean	811	38.53	1.07	4.31	28.97	81.81
LSD(0.05)	213	2.25	0.04	0.42	2.50	1.26
C.V. (%)	15.3	3.39	2.77	6.95	6.08	1.09

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 8. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on an irrigated Sharkey clay at the Northeast Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
AM1511B2RF	**1166**	**40.18**	1.12	**4.93**	30.53	83.03
AM1550B2RF	921	37.73	1.10	4.68	28.28	82.80
BCSX1150B2F	850	33.78	**1.20**	4.68	**32.63**	**84.18**
BX1252LLB2	947	36.63	1.16	4.63	30.60	83.25
BX1254LLB2	**1119**	37.38	1.13	**4.93**	29.95	82.70
BX1262B2F	**1014**	36.88	1.15	4.70	30.60	82.80
DG2450B2RF	982	35.95	1.16	4.45	27.53	82.85
DG2570B2RF	968	38.63	1.12	**4.80**	29.73	82.90
DP0912B2RF	**1162**	37.70	1.12	**5.03**	28.73	83.13
DP1133B2RF	**1141**	**41.40**	1.15	**5.03**	31.38	83.25
FM1740B2F	908	36.70	1.14	**4.90**	29.45	83.25
HQ210CT	861	35.10	1.12	**4.83**	29.63	82.33
HQ212CT	909	35.50	1.11	**4.93**	29.10	82.15
PHY367WRF	952	38.58	1.15	4.40	30.25	82.95
PHY375WRF	974	37.95	1.13	4.48	27.90	83.03
PHY499WRF	**1137**	**40.48**	1.15	**4.80**	31.63	83.00
ST4145LLB2	**1022**	35.85	1.16	4.55	29.05	82.98
ST4288B2F	960	34.13	1.15	**4.80**	28.75	83.03
ST5288B2F	**1138**	38.73	1.13	**4.98**	28.25	82.28
Overall Mean	1007	37.33	1.14	4.76	29.68	82.94
LSD(0.05)	182	1.39	0.02	0.24	0.95	0.89
C.V. (%)	12.6	2.63	1.33	3.49	2.26	0.75

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 9. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on an nonirrigated Commerce silt loam at the Northeast Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
AM1511B2RF	1371	**40.83**	1.13	4.80	30.63	**82.63**
AM1550B2RF	1169	38.53	1.13	4.50	27.65	**82.70**
BCSX1150B2F	1183	34.60	**1.20**	4.65	**31.78**	**83.05**
BX1252LLB2	1302	**39.83**	1.15	4.58	30.05	**82.65**
BX1254LLB2	1400	39.33	1.14	**5.07**	29.97	**83.37**
BX1262B2F	1273	39.15	1.16	4.43	**30.73**	**82.60**
DG2450B2RF	1254	36.60	1.17	4.40	28.00	**83.28**
DG2570B2RF	1125	38.68	1.13	4.73	**31.10**	**83.13**
DP0912B2RF	1380	39.13	1.10	**5.07**	28.47	**82.67**
DP1133B2RF	**1491**	**41.85**	1.14	4.83	30.65	**83.25**
FM1740B2F	1347	37.83	1.15	4.80	29.83	**82.90**
HQ210CT	1229	36.00	1.12	4.77	29.03	81.07
HQ212CT	1258	35.53	1.13	4.68	29.68	82.30
PHY367WRF	1173	38.20	1.16	4.10	29.37	**82.67**
PHY375WRF	1380	39.73	1.11	4.57	26.63	81.63
PHY499WRF	1269	**41.08**	1.14	4.58	**31.08**	**83.10**
ST4145LLB2	1326	36.78	1.15	4.38	28.28	**82.90**
ST4288B2F	1335	34.70	1.16	4.50	29.13	**83.13**
ST5288B2F	**1601**	38.40	1.14	**4.90**	27.70	82.07
Overall Mean	1309	38.25	1.14	4.65	29.46	82.69
LSD(0.05)	193	2.05	0.03	0.17	1.05	0.85
C.V. (%)	10.2	3.78	1.57	2.39	2.36	0.68

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 10. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on a nonirrigated Gigger silt loam at the Macon Ridge Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
AM1511B2RF	**747**	38.75	1.07	**4.10**	29.25	82.03
AM1550B2RF	700	38.25	1.06	3.58	25.60	82.38
BCSX1150B2F	525	38.50	1.14	3.73	**30.68**	**83.48**
BX1252LLB2	569	38.88	1.10	3.70	28.70	**82.65**
BX1254LLB2	591	38.25	1.09	3.88	26.30	81.80
BX1262B2F	658	**40.13**	1.09	3.70	29.20	82.30
DG2450B2RF	585	**41.75**	1.10	3.60	24.88	**82.58**
DG2570B2RF	**738**	**40.17**	1.05	3.78	27.68	**82.48**
DP0912B2RF	**724**	38.88	1.06	3.88	28.08	82.45
DP1133B2RF	569	38.50	1.11	3.95	**30.60**	**83.55**
FM1740B2F	488	38.63	1.08	3.73	26.95	**82.75**
HQ210CT	532	**39.50**	1.05	3.78	26.33	81.40
HQ212CT	504	37.38	1.08	3.60	26.60	81.60
PHY367WRF	531	**40.63**	1.10	3.45	27.35	82.10
PHY375WRF	661	**40.75**	1.07	3.70	26.38	81.93
PHY499WRF	**799**	37.13	1.08	3.78	**30.33**	**83.15**
ST4145LLB2	674	38.00	1.09	3.35	25.75	82.05
ST4288B2F	660	**39.25**	1.10	3.68	25.98	82.45
ST5288B2F	**806**	**40.38**	1.08	**4.35**	26.68	81.43
UA48	408	38.38	**1.21**	3.95	**30.43**	**83.60**
Overall Mean	623	39.10	1.09	3.76	27.69	82.41
LSD(0.05)	122	2.82	0.03	0.36	1.28	1.14
C.V. (%)	13.8	5.06	1.62	6.73	3.25	0.97

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 11. Yield performance and fiber characteristics of early maturing cotton varieties cultivated on an irrigated Gigger silt loam at the Macon Ridge Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
AM1511B2RF	**1531**	40.33	1.11	**4.68**	31.83	**82.05**
AM1550B2RF	**1533**	39.00	1.08	**4.40**	28.55	81.58
BCSX1150B2F	**1421**	35.16	1.16	**4.60**	**33.65**	**83.03**
BX1252LLB2	**1452**	37.63	1.14	4.28	31.28	**82.68**
BX1254LLB2	**1580**	39.75	1.13	**4.70**	30.98	**82.40**
BX1262B2F	**1546**	38.57	1.14	**4.43**	31.83	**82.08**
DG2450B2RF	1379	36.14	1.13	4.15	28.70	**82.18**
DG2570B2RF	1376	37.85	1.11	4.23	30.83	**82.00**
DP0912B2RF	**1441**	36.95	1.10	**4.70**	30.48	81.95
DP1133B2RF	**1535**	**42.18**	1.13	**4.65**	32.65	**82.80**
FM1740B2F	1270	37.82	1.11	4.13	29.18	**82.18**
HQ210CT	1237	35.96	1.11	4.33	30.68	81.40
HQ212CT	1227	35.61	1.09	4.05	29.63	80.65
PHY367WRF	**1519**	38.58	1.12	3.98	30.80	81.93
PHY375WRF	**1539**	39.74	1.11	4.23	29.75	81.80
PHY499WRF	1356	40.71	1.10	4.30	32.68	**82.08**
ST4145LLB2	**1447**	36.82	1.13	4.08	29.73	**82.33**
ST4288B2F	1386	35.09	1.13	**4.50**	29.93	81.73
ST5288B2F	**1556**	38.25	1.10	**4.68**	28.50	81.95
UA48	1232	35.97	**1.22**	**4.75**	**34.28**	**83.05**
Overall Mean	1428	37.91	1.12	4.39	30.80	82.09
LSD(0.05)	186	1.26	0.03	0.37	1.15	1.07
C.V. (%)	9.03	2.32	1.62	5.93	2.64	0.92

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 12. Two-year yield performance of medium maturing cotton varieties cultivated in a nonirrigated environment at three locations in 2010 and 2011.

Variety	Location and soil texture								Average across locations and years
	Alexandria				St. Joseph		Winnsboro		
	Silt loam		Clay		Silt loam		Silt loam		
	2010	2011	2010	2011	2010	2011	2010	2011	
	Pounds of lint/acre								
10R052B2R2	1653	995	2009	1703	513	1344	634	755	1201
DP1034B2RF	1699	1107	1790	1617	683	1283	493	777	1181
DP1048B2RF	1607	1120	1892	1830	578	1430	583	656	1212
DP1050B2RF	1625	1308	1839	1861	577	1366	492	760	1229
DP1133B2RF	1652	1165	2058	1778	677	1499	487	782	1262
DP1137B2RF	1585	1122	1964	1752	563	1351	531	945	1227
FM1740B2F	1481	998	1789	1534	724	1404	416	634	1123
PHY375WRF	1682	1077	1836	1486	611	1375	452	820	1167
PHY499WRF	1627	1174	1764	1588	696	1359	624	930	1220
PHY565WRF	1625	920	1725	1499	553	1293	390	629	1079
ST5288B2F	1565	1053	2030	1552	742	1615	466	845	1234
ST5458B2RF	1513	943	1855	1560	782	1355	417	631	1132

Table 13. Two-year yield performance of medium maturing cotton varieties cultivated in an irrigated environment at three locations in 2010 and 2011.

Variety	Location and soil texture				Average across locations and years
	St. Joseph		Winnsboro		
	Clay		Silt loam		
	2010	2011	2010	2011	
	Pounds of lint/acre				
10R052B2R2	1088	1131	1235	1582	1259
DP1034B2RF	1064	991	1272	1531	1215
DP1048B2RF	1089	986	1285	1563	1231
DP1050B2RF	1077	1032	1255	1543	1227
DP1133B2RF	1259	1113	1388	1645	1351
DP1137B2RF	1075	1021	1295	1499	1223
FM1740B2F	1131	1053	1158	1588	1233
PHY375WRF	1063	994	1096	1622	1194
PHY499WRF	1444	1191	1419	1444	1375
PHY565WRF	1157	1032	1092	1289	1143
ST5288B2F	1287	1141	1101	1579	1277
ST5458B2RF	1384	1316	1411	1502	1403

Table 14. One-year yield performance of medium maturing cotton varieties cultivated in a nonirrigated environment at three locations during 2011. †

Variety	Location and soil texture				Average across locations
	Alexandria		St. Joseph	Winnsboro	
	Silt loam	Clay	Silt loam	Silt loam	
	Pounds of lint/acre				
10R051B2R2	993	1552	1377	758	1170
10R052B2R2	995	1703	1344	755	1199
AM1511B2RF	**1266**	1650	**1487**	792	1299
BX1261B2F	963	1578	1309	713	1141
CG3787B2RF	**1226**	1590	1428	777	1255
DP393	.	.	.	729	729
DP1034B2RF	1107	1617	1283	777	1196
DP1048B2RF	1120	**1830**	1430	656	1259
DP1050B2RF	**1308**	**1861**	1366	760	1324
DP1133B2RF	1165	**1778**	**1499**	782	1306
DP1137B2RF	1122	**1752**	1351	**945**	1293
FM1740B2F	998	1534	1404	634	1143
LA06307025	961	1445	**1485**	753	1161
LA35RS	829	1371	1345	747	1073
PHY375WRF	1077	1486	1375	**820**	1190
PHY499WRF	1174	1588	1359	**930**	1263
PHY565WRF	920	1499	1293	629	1085
SG105	.	.	.	756	756
ST5288B2F	1053	1552	**1615**	**845**	1266
ST5458B2RF	943	1560	1355	631	1122
Overall Mean	1068	1608	1395	759	1161
LSD(0.05)	134	126	168	140	
C.V. (%)	8.2	5.2	8.4	12.5	8.6

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 15. One-year yield performance of medium maturing cotton varieties cultivated in an irrigated environment at three locations during 2011. †				
Variety	**Locations and soil texture**			**Average across locations**
	Bossier City	**St. Joseph**	**Winnsboro**	
	Clay	**Clay**	**Silt loam**	
	Pounds of lint/acre			
10R051B2R2	**1261**	1118	**1629**	1336
10R052B2R2	**1386**	**1131**	**1582**	1366
AM1511B2RF	**1422**	**1220**	**1569**	1404
BX1261B2F	957	1039	1347	1114
CG3787B2RF	**1240**	1092	**1648**	1327
DP393	.	.	1345	1345
DP1034B2RF	**1243**	991	**1531**	1255
DP1048B2RF	**1351**	986	**1563**	1300
DP1050B2RF	**1191**	1032	**1543**	1255
DP1133B2RF	**1293**	1113	**1645**	1350
DP1137B2RF	**1262**	1021	**1499**	1261
FM1740B2F	979	1053	**1588**	1207
LA06307025	1024	**1129**	**1488**	1214
LA35RS	1091	956	1213	1087
PHY375WRF	993	994	**1622**	1203
PHY499WRF	**1301**	**1191**	1444	1312
PHY565WRF	930	1032	1289	1084
SG105	.	.	1412	1412
ST5288B2F	**1210**	**1141**	**1579**	1310
ST5458B2RF	1116	**1316**	**1502**	1311
Overall Mean	1181	1086	1502	1273
LSD(0.05)	232	197	172	
C.V. (%)	13.4	12.8	8.1	11.4

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 16. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on a nonirrigated Latanier clay at the Dean Lee Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
10R051B2R2	1552	37.30	1.16	4.50	30.75	84.00
10R052B2R2	1703	**38.85**	1.16	**4.65**	30.10	84.60
AM1511B2RF	1650	**41.40**	1.12	**4.70**	**31.85**	83.90
BX1261B2F	1578	37.25	1.13	4.55	28.95	83.55
CG3787B2RF	1590	**38.70**	1.15	**4.60**	30.05	83.75
DP1034B2RF	1617	**40.40**	1.15	**4.65**	29.25	84.30
DP1048B2RF	**1830**	**41.05**	1.14	**4.60**	29.70	83.65
DP1050B2RF	**1861**	**42.45**	1.14	4.50	29.35	83.95
DP1133B2RF	**1778**	**40.55**	1.15	**4.85**	**32.55**	84.25
DP1137B2RF	**1752**	**42.35**	1.11	**4.70**	29.60	83.25
FM1740B2F	1534	**38.70**	1.13	**4.65**	30.10	83.80
LA06307025	1445	**38.95**	1.15	**4.85**	30.70	84.30
LA35RS	1371	34.85	**1.24**	4.50	**32.40**	**86.00**
PHY375WRF	1486	37.25	1.12	4.50	28.90	83.90
PHY499WRF	1588	**40.15**	1.13	**4.65**	30.45	84.00
PHY565WRF	1499	37.15	1.17	4.55	**33.15**	84.10
ST5288B2F	1552	35.80	1.16	4.35	29.30	84.35
ST5458B2RF	1560	**39.80**	1.14	**4.90**	29.95	83.70
Overall Mean	1608	39.05	1.15	4.63	30.39	84.08
LSD(0.05)	126	4.0	0.04	0.35	1.66	1.37
C.V. (%)	5.2	4.6	1.61	3.57	2.60	0.77

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 17. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on a nonirrigated Coushatta silt loam at the Dean Lee Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
10R051B2R2	993	37.00	1.12	4.30	30.55	**84.45**
10R052B2R2	995	**41.35**	1.11	**4.40**	30.85	82.65
AM1511B2RF	**1266**	37.90	1.12	**4.55**	**31.50**	83.30
BX1261B2F	963	35.75	1.13	4.20	29.35	82.75
CG3787B2RF	**1226**	**40.00**	1.15	**4.45**	31.45	**84.30**
DP1034B2RF	1107	**39.05**	1.12	4.30	29.75	83.40
DP1048B2RF	1120	**38.35**	1.14	4.30	30.35	83.85
DP1050B2RF	**1308**	**39.55**	1.13	4.30	29.80	82.90
DP1133B2RF	1165	**38.55**	1.14	**4.60**	**32.75**	**85.05**
DP1137B2RF	1122	**39.25**	1.12	4.35	30.35	84.05
FM1740B2F	998	37.55	1.12	**4.45**	29.45	83.90
LA06307025	961	**38.90**	**1.15**	**4.70**	**31.75**	**84.40**
LA35RS	829	33.75	**1.18**	**4.60**	**31.85**	**85.00**
PHY375WRF	1077	36.90	1.13	**4.40**	28.80	83.30
PHY499WRF	1174	**40.10**	1.11	**4.60**	**32.80**	84.05
PHY565WRF	920	36.25	1.11	4.35	**31.60**	**84.25**
ST5288B2F	1053	35.55	1.1	**4.60**	29.15	81.95
ST5458B2RF	943	37.15	1.15	4.35	30.15	83.40
Overall Mean	1068	37.94	1.13	4.43	30.68	83.72
LSD(0.05)	134	2.9	0.03	0.35	1.30	0.90
C.V. (%)	8.2	4.2	1.44	3.71	2.01	0.51

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 18. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on an irrigated Moreland clay at the Red River Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
10R051B2R2	**1261**	**43.50**	1.09	4.53	**29.33**	**83.33**
10R052B2R2	**1386**	**42.40**	1.08	**4.65**	28.73	82.38
AM1511B2RF	**1422**	**42.58**	1.05	**4.68**	**30.65**	81.73
BX1261B2F	957	37.13	1.06	4.13	26.75	81.50
CG3787B2RF	**1240**	**41.45**	1.07	4.50	27.45	82.08
DP1034B2RF	**1243**	**42.20**	1.09	4.55	28.38	**82.75**
DP1048B2RF	**1351**	**41.75**	1.08	4.43	27.95	**82.90**
DP1050B2RF	**1191**	**41.48**	1.09	4.45	27.80	81.88
DP1133B2RF	**1293**	**42.95**	1.07	**4.88**	**30.25**	**83.20**
DP1137B2RF	**1262**	41.00	1.07	4.53	27.53	**82.73**
FM1740B2F	979	39.13	1.08	4.53	29.15	**82.93**
LA06307025	1024	39.43	1.09	**4.83**	29.03	82.08
LA35RS	1091	37.05	**1.12**	4.63	**31.08**	**83.55**
PHY375WRF	993	40.60	1.05	4.33	26.40	82.23
PHY499WRF	**1301**	**44.15**	1.06	4.40	**30.98**	82.50
PHY565WRF	930	37.72	1.08	4.35	**29.70**	82.08
ST5288B2F	**1210**	41.10	1.06	4.40	27.75	81.80
ST5458B2RF	1116	**41.40**	1.05	4.50	27.98	81.58
Overall Mean	1181	40.95	1.07	4.52	28.72	82.40
LSD(0.05)	232	2.84	0.03	0.23	1.87	1.03
C.V. (%)	13.4	4.73	1.95	3.63	4.60	0.88

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 19. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on an irrigated Sharkey clay at the Northeast Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
10R051B2R2	1118	**41.88**	1.16	4.95	29.13	**83.35**
10R052B2R2	**1131**	**41.75**	1.14	4.95	29.28	**83.35**
AM1511B2RF	**1220**	**40.33**	1.13	5.03	**31.03**	**83.25**
BX1261B2F	1039	36.10	1.16	4.73	30.20	**83.80**
CG3787B2RF	1092	**41.43**	1.16	4.85	28.98	**83.58**
DP1034B2RF	991	39.05	1.16	4.90	28.75	**83.65**
DP1048B2RF	986	**40.85**	1.17	4.78	28.65	**83.33**
DP1050B2RF	1032	**41.15**	1.16	4.85	29.10	82.65
DP1133B2RF	1113	**41.78**	1.15	**5.18**	**31.30**	**83.70**
DP1137B2RF	1021	**40.85**	1.13	4.95	28.43	82.65
FM1740B2F	1053	37.85	1.15	5.03	29.95	**83.95**
LA06307025	**1129**	39.45	**1.18**	**5.35**	**31.03**	**83.70**
LA35RS	956	35.15	**1.20**	4.75	**31.55**	**83.88**
PHY375WRF	994	37.95	1.11	4.60	27.98	82.30
PHY499WRF	**1191**	39.88	1.14	4.98	**31.10**	**83.35**
PHY565WRF	1032	37.50	1.16	4.85	**31.80**	**84.03**
ST5288B2F	**1141**	37.80	1.14	5.03	27.85	82.33
ST5458B2RF	**1316**	37.80	1.15	**5.30**	29.40	82.68
Overall Mean	1086	39.36	1.15	4.95	29.75	83.31
LSD(0.05)	197	1.99	0.02	0.19	0.90	1.07
C.V. (%)	12.8	3.56	1.41	2.70	2.14	0.90

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 20. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on a nonirrigated Commerce silt loam at the Northeast Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
10R051B2R2	1377	**41.58**	**1.15**	**4.80**	28.60	**82.98**
10R052B2R2	1344	**42.28**	1.13	**4.88**	28.50	82.73
AM1511B2RF	**1487**	40.83	1.12	**1.83**	**30.70**	**82.55**
BX1261B2F	1309	36.95	1.14	4.58	28.95	82.33
CG3787B2RF	1428	**41.85**	**1.15**	4.73	28.68	**83.10**
DP1034B2RF	1283	40.70	1.14	4.60	28.80	**82.48**
DP1048B2RF	1430	**41.25**	**1.15**	4.58	28.13	**82.40**
DP1050B2RF	1366	**42.20**	**1.15**	4.65	28.65	**82.35**
DP1133B2RF	**1499**	**42.25**	1.14	**4.98**	**31.00**	**83.30**
DP1137B2RF	1351	**41.08**	1.12	4.75	27.88	**82.95**
FM1740B2F	1404	38.65	1.13	**4.95**	29.35	**82.75**
LA06307025	**1485**	40.00	**1.17**	**4.98**	**31.10**	**82.75**
LA35RS	1345	37.03	**1.17**	4.68	30.28	**82.90**
PHY375WRF	1375	37.50	**1.15**	4.50	28.65	**82.98**
PHY499WRF	1359	40.58	1.12	4.65	**30.60**	**83.20**
PHY565WRF	1293	37.10	**1.15**	4.53	**31.78**	**82.93**
ST5288B2F	**1615**	38.73	1.12	**4.93**	28.08	81.80
ST5458B2RF	1355	37.85	1.14	**4.90**	28.63	81.83
Overall Mean	1395	39.91	1.14	4.58	29.35	82.68
LSD(0.05)	168	1.36	0.03	0.19	1.39	0.97
C.V. (%)	8.4	2.40	1.62	2.83	3.35	0.83

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 21. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on a nonirrigated Gigger silt loam at the Macon Ridge Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
10R051B2R2	758	43.18	1.1	3.97	27.87	**83.40**
10R052B2R2	755	**44.68**	1.09	4.12	28.20	**82.76**
AM1511B2RF	792	**43.73**	1.06	4.18	29.90	81.83
BX1261B2F	713	39.06	1.1	3.80	28.05	82.15
CG3787B2RF	777	**43.23**	1.12	3.93	28.37	**83.03**
DP393	729	38.81	1.1	4.15	27.88	**82.85**
DP1034B2RF	777	**43.22**	1.1	4.00	28.10	**82.58**
DP1048B2RF	656	40.63	1.11	3.83	27.15	82.28
DP1050B2RF	760	**43.66**	1.08	4.08	26.73	82.15
DP1133B2RF	782	**44.75**	1.1	**4.43**	**31.55**	**83.38**
DP1137B2RF	**945**	**44.48**	1.08	4.13	27.80	**82.88**
FM1740B2F	634	40.93	1.06	4.00	26.50	82.10
LA06307025	753	42.14	1.1	4.25	29.38	**82.83**
LA35RS	747	39.46	**1.15**	3.90	29.57	**82.97**
PHY375WRF	**820**	**43.74**	1.05	4.08	26.63	81.80
PHY499WRF	**930**	**45.10**	1.07	4.20	**30.93**	**83.50**
PHY565WRF	629	40.54	1.09	3.88	29.76	82.50
SG105	756	40.89	1.1	4.20	29.93	**83.00**
ST5288B2F	**845**	43.02	1.06	**4.65**	26.38	81.93
ST5458B2RF	631	40.45	1.07	4.25	26.98	82.30
Overall Mean	759	42.29	1.09	4.10	28.38	82.61
LSD(0.05)	140	1.88	0.03	0.33	1.22	0.97
C.V. (%)	12.5	3.00	1.65	5.46	2.89	0.79

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 22. Yield performance and fiber characteristics of medium maturing cotton varieties cultivated on an irrigated Gigger silt loam at the Macon Ridge Research Station during 2011. †

Variety	Lint yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
10R051B2R2	**1629**	**42.82**	1.16	4.63	30.48	83.15
10R052B2R2	**1582**	**44.08**	1.15	**4.80**	29.88	82.83
AM1511B2RF	**1569**	41.03	1.13	**4.85**	31.85	82.23
BX1261B2F	1347	36.10	1.16	4.20	31.55	83.05
CG3787B2RF	**1648**	41.03	1.13	**4.78**	30.13	82.33
DP393	1345	36.25	1.15	4.48	30.73	83.18
DP1034B2RF	**1531**	41.78	1.15	4.68	29.68	82.78
DP1048B2RF	**1563**	41.40	1.16	4.50	29.55	82.85
DP1050B2RF	**1543**	**42.30**	1.14	4.65	29.73	82.58
DP1133B2RF	**1645**	41.95	1.16	4.65	31.68	83.18
DP1137B2RF	**1499**	42.06	1.13	**4.78**	29.73	82.75
FM1740B2F	**1588**	38.51	1.12	4.58	29.60	82.23
LA06307025	**1488**	39.79	1.17	**4.80**	32.13	83.18
LA35RS	1213	36.03	**1.22**	4.30	**33.08**	**84.38**
PHY375WRF	**1622**	38.82	1.13	4.43	29.75	81.95
PHY499WRF	1444	40.41	1.15	4.58	**33.40**	83.38
PHY565WRF	1289	36.26	1.15	4.35	**33.00**	82.93
SG105	1412	37.67	1.17	4.48	31.45	83.13
ST5288B2F	**1579**	38.08	1.14	4.65	28.98	81.73
ST5458B2RF	**1502**	37.95	1.15	**4.85**	30.53	82.50
Overall Mean	1502	39.72	1.15	4.60	30.85	82.82
LSD(0.05)	172	1.92	0.03	0.17	1.05	0.90
C.V. (%)	8.1	3.42	1.60	2.62	2.41	0.77

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.

Table 23. Dates of agronomically important events for cotton variety trials managed at LSU AgCenter research stations during 2010.

Event	Location and Soil Texture						
	Alexandria		Bossier City	St. Joseph		Winnsboro	
	Silt Loam	Clay	Clay	Silt loam	Clay-IRR	Silt Loam	Silt Loam-IRR
	Month/day						
Planting Date	5/14	5/20	5/3	6/8	5/26	4/26	4/26
Emergence	5/20	5/28	5/10	6/13	5/30	5/7	5/7
N Application †	5/30 (90)	6/18 (90)	5/30 (65)	6/29 (120)	6/28 (120)	5/10 (80)	5/10 (80)
Pre Herbicide App.	N/A	5/20	5/4	6/11	5/27	4/9	4/9
Early Post Herbicide App.	6/8,	7/12	6/9	N/A	6/24	4/29	4/29
Layby Herbicide App.	7/13	8/10	N/A	N/A	N/A	5/28, 6/8	5/28, 6/8
Early Insecticide App.	6/8, 6/16, 6/29	N/A	7/2	6/25, 7/30	7/12, 7/30	6/9, 6/21	6/9, 6/21
Mid Insecticide App.	7/8, 7/21, 7/29, 8/6	7/27, 8/6	7/13, 7/23, 7/30	8/10, 8/16	8/10, 8/16	7/12,	7/12, 7/22
Late Insecticide App.	8/17, 8/24	8/17, 8/24, 9/1	8/9	9/9, 9/23	9/9, 9/15, 9/23	7/22	N/A
PGR	7/8	7/22	none	none	none	none	none
Harvest Aid	9/17, 9/21,	9/28, 10/6	9/8	10/12, 10/15	10/4, 10/15	8/16	9/6, 9/13
Harvest	9/27	10/18	9/16	11/1	10/23	8/24	9/17

† Nitrogen application rates for each trial are listed in parentheses next to application date and expressed in pounds of nitrogen per acre.

Table 24. Yield performance and fiber characteristics of cotton varieties cultivated on alluvial soils, Mississippi Delta, La., during 2011.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
Catahoula						
AM1550B2RF	1321	43.64	1.07	4.60	25.60	81.50
DP0912B2RF	1382	41.54	1.05	5.10	27.10	79.30
DP1048B2RF	1285	44.08	1.15	4.60	28.10	81.80
DP1133B2RF	1357	44.88	1.14	5.00	29.60	83.70
FM1740B2F	1301	42.92	1.07	4.80	28.50	80.80
PHY375WRF	1347	43.36	1.08	4.60	27.70	81.80
PHY499WRF	1505	46.77	1.09	5.00	30.20	82.50
PHY565WRF	1141	42.28	1.13	4.60	32.00	82.70
ST4288B2F	1282	41.33	1.08	5.00	28.00	82.60
ST5288B2RF	1339	43.66	1.08	5.00	28.20	81.20
ST5458B2RF	1395	42.37	1.09	4.70	30.10	80.70
Concordia						
AM1550B2RF	1537	42.23	1.11	4.90	28.10	82.30
DP0912B2RF	1618	42.75	1.10	5.00	28.40	82.60
DP1048B2RF	1490	44.91	1.18	4.50	29.50	83.00
DP1133B2RF	1544	44.94	1.15	4.60	30.60	83.80
FM1740B2F	1328	38.91	1.13	4.40	30.60	81.40
PHY375WRF	1533	44.18	1.11	4.70	27.50	82.60
PHY499WRF	1535	46.83	1.12	4.80	31.50	82.60
PHY565WRF	1405	42.45	1.17	4.50	33.40	82.90
ST4288B2F	1395	43.23	1.14	4.60	29.40	81.90
ST5288B2RF	1581	43.17	.	.	.	.
ST5458B2RF	1546	57.41	1.13	4.90	30.30	81.80
East Carroll						
AM1550B2RF	1372	46.5	1.10	4.50	26.90	83.50
DP0912B2RF	1447	43.1	1.08	4.90	29.20	83.00
DP1048B2RF	1253	44.9	1.14	4.90	29.50	82.50
DP1133B2RF	1282	45.7	1.15	5.10	32.10	83.40
FM1740B2F	1217	42.0	1.11	5.10	31.50	82.50
PHY375WRF	1173	41.8	1.13	4.50	29.30	82.20
PHY499WRF	1468	47.1	1.13	5.00	32.70	83.20
PHY565WRF	1180	42.1	1.11	5.00	30.10	82.40
ST4288B2F	1219	39.5	1.14	4.80	30.10	82.30
ST5288B2RF	1505	43.6	1.10	4.80	27.60	81.60
ST5458B2RF	1393	42.5	1.12	5.10	30.70	83.00

Table 24. Yield performance and fiber characteristics of cotton varieties cultivated on alluvial soils, Mississippi Delta, La., during 2011 (continued).

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
Madison						
AM1550B2RF	1179	41.29	1.09	4.40	26.40	80.70
DP0912B2RF	1145	40.72	1.08	4.70	30.50	81.80
DP1048B2RF	1283	43.01	1.10	4.60	26.90	82.00
DP1133B2RF	1519	42.99	1.14	4.90	31.40	83.80
FM1740B2F	1143	40.00	1.09	4.90	29.80	81.50
PHY375WRF	1179	40.08	1.05	4.10	27.30	78.90
PHY499WRF	1611	42.87	1.11	4.60	31.40	81.60
PHY565WRF	1156	41.46	1.14	4.80	32.00	83.30
ST4288B2F	1333	37.92	1.12	4.60	28.30	82.40
ST5288B2RF	1319	41.43	1.08	4.80	27.10	81.40
ST5458B2RF	1323	39.61	1.12	5.00	31.30	81.40
Pointe Coupee						
AM1550B2RF	1007	44.33	1.12	4.80	29.80	83.70
DP0912B2RF	1128	42.17	1.12	5.20	30.40	81.90
DP1048B2RF	1080	41.73	1.14	4.70	29.60	81.70
DP1133B2RF	1214	47.30	1.12	4.80	29.10	83.50
FM1740B2F	1200	44.66	1.12	4.80	28.60	81.60
PHY375WRF	1130	44.04	1.11	4.60	26.30	83.10
PHY499WRF	1106	45.15	1.14	4.90	31.30	82.50
PHY565WRF	1187	44.20	1.13	4.90	28.00	82.20
ST4288B2F	1157	45.72	1.17	4.30	27.40	83.30
ST5288B2RF	1083	40.80	1.20	4.30	30.80	83.70
ST5458B2RF	1155	42.91	1.10	5.10	28.90	83.20
Tensas						
AM1550B2RF	1279	42.50	1.10	4.60	27.40	81.20
DP0912B2RF	1379	41.92	1.07	4.90	29.70	81.40
DP1048B2RF	1239	42.47	1.15	4.70	30.10	83.40
DP1133B2RF	1390	44.51	1.13	5.10	32.80	82.20
FM1740B2F	1110	41.83	1.11	5.10	29.10	82.20
PHY375WRF	1193	41.79	1.15	4.50	30.80	81.70
PHY499WRF	1464	44.61	1.13	5.00	32.10	83.40
PHY565WRF	1236	41.56	1.11	4.90	31.10	82.10
ST4288B2F	1116	37.51	1.11	4.80	28.30	81.70
ST5288B2RF	1418	43.85	1.16	4.80	29.10	82.70
ST5458B2RF	1385	40.14	1.15	4.80	32.80	82.30

Table 25. Yield performance and fiber characteristics of cotton varieties cultivated on loess soils, Macon Ridge, La., during 2011.

Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
Franklin						
AM1550B2RF	1182	44.34	1.08	4.60	26.80	81.30
DP0912B2RF	1194	41.98	1.07	4.90	27.00	81.00
DP1048B2RF	1074	44.76	1.13	4.70	28.30	81.30
DP1133B2RF	1163	45.13	1.10	4.90	29.30	82.20
FM1740B2F	1258	45.48	1.10	4.80	28.20	82.10
PHY375WRF	.	.	.	.	.	.
PHY499WRF	1241	44.96	1.13	4.80	32.30	82.20
PHY565WRF	1040	41.95	1.13	4.60	32.20	83.20
ST4288B2F	1158	40.78	1.11	4.80	27.70	80.50
ST5288B2RF	1256	43.20	1.11	4.80	27.10	82.50
ST5458B2RF	1180	42.38	1.10	5.00	28.80	82.00
Richland						
AM1550B2RF	776	41.70	1.05	4.70	26.50	81.60
DP0912B2RF	829	41.35	1.05	5.00	27.70	81.80
DP1048B2RF	767	43.75	1.12	4.80	30.50	81.50
DP1133B2RF	771	44.73	1.10	5.00	32.00	83.30
FM1740B2F	615	41.35	1.10	4.80	29.80	83.10
PHY375WRF	663	42.65	1.08	4.40	28.90	80.70
PHY499WRF	918	45.79	.	.		.
PHY565WRF	764	46.24	1.12	4.70	32.00	82.70
ST4288B2F	719	38.57	1.09	4.90	27.20	82.20
ST5288B2RF	804	42.75	1.07	5.20	27.50	81.70
ST5458B2RF	758	42.99	1.08	5.10	29.10	80.90

Table 26. Yield performance and fiber characteristics of cotton varieties cultivated on high pH soils, Red River Valley, La., during 2011.						
Variety	Lint Yield (Pounds of lint/acre)	Lint % (%)	Length (in.)	Micronaire	Strength (g/tex)	Uniformity (%)
Avoyelles						
AM1550B2RF	859	44.35	1.05	4.70	25.40	81.20
DP0912B2RF	666	41.30	1.03	4.30	26.50	81.60
DP1048B2RF	914	44.67	1.10	4.30	26.90	81.40
DP1133B2RF	891	45.74	1.08	4.70	29.30	81.90
FM1740B2F	843	43.52	1.07	4.70	28.20	81.10
PHY375WRF	918	44.36	1.08	4.50	27.50	80.90
PHY499WRF	944	45.76	1.07	4.70	28.50	82.20
PHY565WRF	727	41.85	1.09	4.40	28.60	81.40
ST4288B2F	751	39.17	1.11	4.50	28.20	80.70
ST5288B2RF	880	42.50	1.09	5.00	32.80	83.20
ST5458B2RF	924	42.85	1.09	4.90	29.60	80.30
Caddo						
AM1550B2RF	742	37.98	1.06	3.40	26.20	79.90
DP0912B2RF	995	38.51	1.02	4.20	27.20	80.90
DP1048B2RF	1232	43.20	1.09	4.20	27.40	81.90
DP1133B2RF	1102	42.44	1.12	4.40	31.60	82.50
FM1740B2F	964	41.36	1.06	4.40	26.70	8.10
PHY375WRF	762	40.27	1.06	3.40	25.50	80.50
PHY499WRF	1349	44.39	1.10	4.20	29.00	83.10
PHY565WRF	877	40.33	1.08	4.30	30.70	81.60
ST4288B2F	890	35.02	1.10	4.00	28.10	81.70
ST5288B2RF	1119	40.13	1.07	4.50	25.50	80.20
ST5458B2RF	880	40.45	1.08	4.10	27.50	79.70
Caddo						
AM1550B2RF	1354	43.72	1.09	4.90	27.60	81.10
DP0912B2RF	1397	41.09	1.09	5.00	28.10	82.60
DP1048B2RF	1437	44.14	1.12	4.80	28.30	81.80
DP1133B2RF	1390	44.17	1.13	5.00	31.20	83.10
FM1740B2F	1169	41.74	1.10	4.70	28.50	80.90
PHY375WRF	1332	42.71	1.08	4.70	26.80	81.40
PHY499WRF	1477	45.03	1.12	4.70	31.00	82.90
PHY565WRF	1168	41.20	1.11	4.60	30.90	82.50
ST4288B2F	1157	37.88	1.09	4.60	27.60	81.00
ST5288B2RF	1353	40.61	1.11	4.90	26.60	81.00
ST5458B2RF	1439	41.53	1.09	5.30	30.30	81.00
Rapides						
AM1550B2RF	718	42.65	1.02	4.60	24.50	80.90
DP0912B2RF	696	40.90	1.04	4.50	26.60	81.60
DP1048B2RF	797	42.72	1.06	4.60	25.80	79.50
DP1133B2RF	736	44.42	1.05	4.60	27.90	79.70
FM1740B2F	758	41.44	1.06	4.50	27.00	80.10
PHY375WRF	604	42.95	1.03	4.20	26.00	79.70
PHY499WRF	757	44.16	1.40	4.40	28.60	82.20
PHY565WRF	596	39.83	1.07	4.30	28.30	81.40
ST4288B2F	786	37.09	1.09	4.30	26.80	78.70
ST5288B2RF	769	40.59	1.03	4.70	25.10	81.00
ST5458B2RF	476	29.20	1.05	4.70	26.50	79.40

Table 27. Yield performance and fiber characteristics of cotton varieties cultivated on alluvial soils, Ouachita Valley, La., during 2011.						
Variety	**Lint Yield**	**Lint %**	**Length**	**Micronaire**	**Strength**	**Uniformity**
	(Pounds of lint/acre)	**(%)**	**(in.)**		**(g/tex)**	**(%)**
Morehouse						
AM1550B2RF	1040	43.47	1.10	4.40	28.50	81.80
DP0912B2RF	1557	50.48	1.16	4.50	29.20	83.60
DP1048B2RF	967	45.60	1.20	4.40	30.00	83.10
DP1133B2RF	1095	46.32	1.17	4.60	31.70	83.20
FM1740B2F	1216	44.80	1.14	4.60	30.70	83.30
PHY375WRF	1193	45.43	1.16	4.20	32.80	83.80
PHY499WRF	1230	47.15	1.14	4.30	29.40	83.10
PHY565WRF	965	39.29	1.16	3.90	31.40	83.50
ST4288B2F	1188	40.95	1.19	4.30	32.20	82.90
ST5288B2RF	1400	44.58	1.14	5.10	28.60	82.00
ST5458B2RF	1262	42.20	1.02	5.10	25.80	79.40
Ouachita						
AM1550B2RF	950	39.51	1.11	4.90	27.70	82.20
DP0912B2RF	1004	41.10	1.11	4.80	29.40	81.90
DP1048B2RF	882	43.67	1.16	5.00	29.80	82.60
DP1133B2RF	851	41.75	1.17	5.00	32.90	84.20
FM1740B2F	826	41.77	1.13	5.00	28.40	82.40
PHY375WRF	656	41.22	1.13	4.40	29.20	81.70
PHY499WRF	661	41.74	1.14	4.80	34.00	82.90
PHY565WRF	527	40.80	1.16	4.70	31.90	82.60
ST4288B2F	847	36.78	1.19	4.60	31.60	82.80
ST5288B2RF	1006	41.88	1.14	4.60	28.90	81.90
ST5458B2RF	1140	45.33	1.19	4.80	32.70	83.10

Table 28. List of variety entries submitted for 2010 testing.	
Provider	**Variety**
Americot	AM 1550 B2RF
Americot	AM1511 B2RF
Bayer Crop Sci.	BX 1261 B2F
Bayer Crop Sci.	BX 1254 B2F
Bayer Crop Sci.	BX 1262 B2F
Bayer Crop Sci.	BX 1252 LLB2
Bayer Crop Sci.	BCSX 1150 B2F
Croplan Genetics	CG 3787 B2RF
Deltapine	10R052 B2R2
Deltapine	10R051B2R2
Deltapine	DP 393
Deltapine	DP 0912 B2RF
Deltapine	DP 1034 B2RF
Deltapine	DP 1048 B2RF
Deltapine	DP 1050 B2RF
Deltapine	DP 1133 B2RF
Deltapine	DP 1137 B2RF
Dyna-Gro	DG 2450 B2RF
FiberMax	FM 1740 B2F
LSU AgCenter	LA06307025
LSU AgCenter	LA 35 RS
Phytogen	PHY 367 WRF
Phytogen	PHY 375 WRF
Phytogen	PHY 499 WRF
Phytogen	PHY 565 WRF
Seed Source Genetics	HQ 210 CT
Seed Source Genetics	HQ 212 CT
Stoneville	ST 4288 B2F
Stoneville	ST 5288 B2F
Stoneville	ST 5458 B2F
Stoneville	ST 4145 LLB2
Sure-Grow	SG105
University of Arkansas	UA 48

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