

2009

Cotton Varieties for Louisiana



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Introduction

Each year, scientists at the LSU AgCenter evaluate cotton varieties at four locations that are representative of Louisiana's cotton production regions. The official variety tests (OVTs) are performed at the Red River Research Station near Bossier City, the Dean Lee Research Station near Alexandria, the Macon Ridge Research Station near Winnsboro and the Northeast Research Station near St. Joseph. Varieties are managed using practices that follow AgCenter recommendations and typify commercial operations as closely as possible. All entries within a trial are replicated four or five times and data are compiled for average performance after one and two years of testing.

Choosing Varieties

Variety selection is one of the most important decisions a cotton farmer will make for the entire growing season. The variety, and associated traits in that variety, set the stage for harvest at the time of planting. All other input decisions become supplemental after the variety is selected. Variety selection has become increasingly important since the introduction of transgenic cottons and concurrent increases in seed costs and technology fees. Moreover, variety selection is the one decision a producer makes that is not influenced by weather or other 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 many different transgenic traits 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 wide range of conditions. The information reported concerning measured

performance of cotton varieties in Louisiana should be extremely useful as a primary source of information for choosing varieties.

Producers should be mindful that OVTs can never identify the best single variety for all soils and conditions. Producers should always plant multiple varieties – selected from the top performers in the OVTs that are closest to their production region. This decision is one of the best to spread crop management activities and mitigate risk from adverse environmental conditions. There are always differences in performance of individual varieties from one year to the next. However, in most years those among the top 10% of the highest-yielding varieties generally remain there for several seasons. So the best variety for a particular farm very likely resides among the top yielders in the OVT, but no one can be certain exactly 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 5 to 10 varieties with different traits, knowing that any 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 tried 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 being exported to foreign mills who generally demand cotton with the most consistent and highest-quality fiber properties. The quality of Louisiana cotton has been a concern in recent years, particularly with regard to high micronaire. Although 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 share in the world market.

Fiber parameters in the OVTs were determined using the same high volume instrumentation (HVI) classing system used in a USDA classing office. Physical properties including staple length (reported as the upper half mean length or UHM), 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. OVTs may not be representative of commercial operations for these fiber properties and therefore are not reported in this publication.

Using the Data

Yield should be the primary factor considered 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 (LSD) 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 relative to other varieties in the trial”? Another important number to look for is the test average yield. Considering a variety’s performance relative to the average for the entire trial will help identify varieties that are above average at a given location.

Cotton varieties should be chosen by considering their performance across several locations and years of testing. Superior performance in one year can often 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 are often 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 its first year of testing.

Grower experience with a past 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 OVTs should be considered as well.

Selecting Varieties

The LSU AgCenter identifies the top tier of high-yielding varieties at each location by the use of a statistical test called the least significant difference (LSD). A probability level of 5 percent is used, which means that 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 that have only one year of testing in the OVTs, a multilocation analysis is performed. New entries that yielded within one $LSD_{0.05}$ of the top yielding entry in the across location analysis are in bold print.

The following table lists (alphabetically) all early and medium-maturity varieties that are among the top varieties in yield performance in the 2008 OVTs at one or more locations. Not all varieties are included in the top yielding tier at all locations; therefore, producers should review the data tables for variety performance at the closest location that is most representative of their individual farms.



Americot AM 1550 B2RF	Deltapine DP 141 B2RF	Seed Tec Genetics HQ210 CT
Americot NG 3331 B2RF	Deltapine DP 161 RF	
Americot NG 4370 B2RF	Deltapine DP 174 RF	Stoneville ST 4427 B2RF
	Deltapine DP 0935 B2RF	Stoneville ST 4498 B2RF
Bayer Crop Sci. BCSX 0714 B2F	Deltapine 555 BG/RR	Stoneville ST 4554 B2RF
Bayer Crop Sci. BCSX 0721 B2F		Stoneville ST 5327 B2RF
Bayer Crop Sci. BCSX 0727 B2F	Dynagro DG 2570 B2RF	Stoneville ST 5458 B2RF
Bayer Crop Sci. BCSX 0102 B2F		Stoneville ST 5599BR
Bayer Crop Sci. BCSX 0704 B2F	FiberMax FM 1740 B2RF	
Croplan CG3035 RF	Phytogen PHY 370 WR	
	Phytogen PHY 375 WRF	
Deltapine DP 0924 B2RF	Phytogen PHY 425 WRF	
Deltapine DP 121 RF	Phytogen PHY 485 WRF	

Transgenic Traits

Roundup Ready. Transgenic lines are available for glyphosate tolerance, usually indicated as Roundup Ready (R or RR) or Roundup Ready Flex (RF). The Flex varieties have been commercially available since 2006 and after this year will completely replace all Roundup Ready 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 Roundup Ready 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. The Roundup Ready varieties that you have grown accustomed to will still have the label restrictions for glyphosate applications.

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. Waiting 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 therefore be timed to weed size and not other factors. Moreover, reliance on one mode of action for weed control is not recommended and will lead to herbicide resistant weeds. Because of the recent concerns with glyphosate-resistant weeds, the use of other herbicides in addition to glyphosate in Roundup Ready Flex cotton is strongly encouraged. Consult LSU AgCenter publication 2746, 2009 Controlling Weeds in Cotton, for more information on controlling weeds in Roundup Ready Flex cotton.

Liberty link. Varieties with the designation LL in their brand name are transgenic varieties tolerant to over-the-top applications 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 LSU AgCenter publication 2746, 2009 Controlling Weeds in Cotton. Liberty Link cotton is tolerant to Ignite, but will be injured by applications or drift of glyphosate. On farms or in areas where Liberty Link cotton is grown near Roundup Ready or Roundup Ready Flex cotton, care should be taken to avoid confusion of the herbicide systems and reduce the potential for mistaken applications or drift.

Bollgard and Bollgard 2. Varieties with the designation B ,BG, B2 or BG2 in their brand name are cotton lines that are tolerant to the Louisiana caterpillar pest, tobacco budworm. These varieties should not need any supplemental insecticide sprays for control of this pest. Varieties with the Bollgard 2 (B2, BG2) traits are also tolerant to the bollworm, soybean looper and beet armyworm. For these and other caterpillar pests, beware that under high and persistent populations, supplemental chemical control strategies may be necessary to provide satisfactory management. In addition, the insecticidal traits in Bollgard and Bollgard 2 varieties have no activity against noncaterpillar pests (trhrips, aphids, plant bugs, stink bugs, spider mites). Those pests must be managed with conventional IPM practices.

WideStrike. Phytogen varieties with the designation W or WS2 in their brand name are cotton lines that are tolerant to the Louisiana caterpillar pests, tobacco budworm and fall armyworm. These varieties should not need any supplemental insecticide sprays for control of these pests. The other characteristics and insect management recommendations previously mentioned for Bollgard and Bollgard 2 traits remain the same for the WideStrike trait in Phytogen varieties.

Seeding Rate and Stand

Two to three plants per row foot 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. To ensure the best seedling emergence, however, planting should still be scheduled during the most favorable conditions possible for existing and forecasted temperature and soil moisture.

Most cotton seed sold will have at least an 80 percent germination reported on the bag. This percentage 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 results of the cool germination test is more important than determining what is actually a good or bad cool germ. For example, a seed lot with 85 percent

cool germ is more vigorous than one with a 65 percent cool germ. If the 65 percent cool germ lot is planted in good, warm conditions, however, overall germination is likely to be as high as the 85 percent lot. Under adverse conditions, the 85 percent lot is likely to germinate at a much higher rate than the 65 percent lot. A somewhat arbitrary division of the cool germ 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 companies will not sell this seed

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



Average Performance Across Four Louisiana Locations

Table 1. Two-year performance of early maturing cotton varieties across four Louisiana locations (2008).

Company	Variety	Location				Average Yield
		Alexandria Silt loam	Alexandria Clay	Winnsboro Irrigated	Winnsboro Non-irrig	
		----- lb lint/acre -----				
Phytogen	PHY 370 WR	1467	1236	1307	440	1112
Stoneville	ST 5599 BR*	1500	1082	1333	524	1110
Deltapine	DP 555 BR*	1656	1006	1280	390	1083
Phytogen	PHY 375 WRF	1485	1139	1228	432	1071
Stoneville	ST 4498 B2RF	1473	1092	1217	378	1040
Stoneville	ST 4427 B2RF	1344	1078	1238	489	1037
Phytogen	PHY 485 WRF	1453	1029	1195	451	1032
Stoneville	ST 4554 B2RF	1421	973	1287	442	1031
Deltapine	DP 121 RF	1322	1034	1292	466	1029
Phytogen	PHY 425 RF	1331	941	1261	538	1018
Croplan Genetics	CG 3220 B2RF	1420	1002	1143	464	1007
Phytogen	PHY 315 RF	1444	867	1204	483	1000
Croplan Genetics	CG 3035 RF	1429	839	1240	408	979
Croplan Genetics	CG 3520 B2RF	1324	997	1003	421	936
Croplan Genetics	CG 3020 B2RF	1293	951	1122	367	933
Croplan Genetics	CG 4020 B2RF	1324	1029	1040	335	932
Dyna-Gro	DG 2520 B2RF	1304	923	1101	371	925
	Mean	1414	1013	1205	435	1016
	LSD _{0.05}	184	113	91	65	104
	CV (%)	12.1	10.4	7.6	14.0	7.2

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Medium season varieties included for comparison.

Table 2. One-year performance of early maturing cotton varieties across four Louisiana locations (2008).

Company	Variety	Location				Average Yield
		Alexandria Silt loam	Alexandria Clay	Winnsboro Irrigated	Winnsboro Non-irrig	
		----- lb lint/acre -----				
Fibermax	FM 1740 B2F	1703	732	1282	404	1030
Deltapine	DP 555 BR*	1743	654	1049	427	968
Bayer Crop Science	BCSX0704B2F	1537	627	1227	478	967
Deltapine	DP 161 B2RF	1465	716	1215	443	960
Phytogen	PHY 370 WR	1421	727	1209	436	948
Stoneville	ST 5458 B2RF	1618	679	1142	347	947
Phytogen	PHY 375 WRF	1425	773	1094	493	946
Stoneville	ST 4427 B2RF	1439	744	1151	442	944
Deltapine	DP 141 B2RF	1225	749	1290	513	944
Stoneville	ST 5599 BR*	1575	650	1139	379	936
Deltapine	DP 0924 B2RF	1461	692	1166	376	924
Americot Inc.	NG 3331 B2RF	1534	745	945	424	912
Stoneville	ST 4498 B2RF	1468	732	1093	349	911
Dyna-Gro	DG 2570 B2RF	1459	688	1092	399	910
Phytogen	PHY 485 RF	1581	612	1035	400	907
Deltapine	DP 121 RF	1308	743	1254	290	899
Seed Tech Genetics	HQ 210CT	1244	883	1075	381	896
Americot Inc.	AM 1550 B2RF	1368	654	1109	404	884
Phytogen	PHY 315 RF	1501	572	1077	380	883
Stoneville	ST 4554 B2RF	1332	600	1149	360	860
Croplan Genetics	CG 3035 RF	1230	575	1173	418	849
Deltapine	DP 143B 2RF	1439	577	1050	327	848
Phytogen	PHY 425 RF	1284	588	1115	401	847
Americot Inc.	NG 4370 B2RF	1398	504	958	493	838
Americot Inc.	AM 1532 B2RF	1291	662	1068	315	834
Croplan Genetics	CG 3220 B2RF	1343	565	1064	361	833
Dyna-Gro	DG 2520 B2RF	1277	649	1026	329	820
Croplan Genetics	CG 3020 B2RF	1218	595	1044	350	802
Croplan Genetics	CG 4020 B2RF	1260	666	950	320	800
Americot Inc.	NG 4377 B2RF	1232	601	977	373	796
Croplan Genetics	CG 3520 B2RF	1233	581	881	266	740
	Mean	1407	1280	1092	387	887
	LSD _{0.05}	183	178	126	121	138
	CV (%)	8.0	9.8	8.1	22.2	11.0

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Medium season varieties included for comparison.

Table 3. Two-year performance of medium maturing cotton varieties across four Louisiana locations (2007 & 2008).

Company	Variety	Location				Average Yield
		Alexandria Silt loam	Alexandria Clay	Winnsboro Irrigated	Winnsboro Non-irrig	
----- lb lint/acre -----						
Stoneville	ST 5458 B2RF	1451	1075	1499	483	1127
Deltapine	DP 174 RF	1551	982	1406	566	1126
Stoneville	ST 5599 BR	1489	1044	1378	577	1122
Deltapine	DP 555 BR	1452	1028	1332	490	1075
Deltapine	DP 141 B2RF*	1279	940	1327	487	1008
Deltapine	DP 161 B2RF*	1250	927	1355	433	991
Stoneville	ST 5327 B2RF	1206	916	1316	515	988
Fibermax	FM 835 LLB2	1227	974	1302	397	975
Deltapine	DP 164 B2RF	1270	912	1274	438	973
	Mean	1336	977	1357	466	1043
	LSD _{0.05}	117	157	112	54	82
	CV (%)	8.2	15.0	8.2	10.8	5.5

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Early season varieties included for comparison.

Table 4. One-year performance of medium maturing cotton varieties across four Louisiana locations (2008).

Company	Variety	Location				Average Yield
		Alexandria Silt loam	Alexandria Clay	Winnsboro Irrigated	Winnsboro Non-irrig	
----- lb lint/acre -----						
Bayer Crop Science	BCSX 0721 B2F	1523	828	1407	402	1040
Bayer Crop Science	BCSX 0727 B2F	1566	762	1225	341	974
Bayer Crop Science	BCSX 0102 LLB2	1407	839	1284	367	974
Stoneville	ST 5458 B2RF	1605	653	1297	327	971
Deltapine	DP 555 BR	1688	821	1102	271	971
Stoneville	ST 5599 BR	1555	714	1215	337	955
Deltapine	DP 174 RF	1517	782	1151	365	954
Deltapine	DP 141 B2RF*	1467	770	1211	285	933
Deltapine	DP 0935 B2RF	1360	737	1234	396	932
Bayer Crop Science	BCSX 0888 LLB2	1474	746	1196	253	917
Deltapine	DP 161 B2RF*	1342	695	1272	280	897
Deltapine	DP 164 B2RF	1384	635	1135	424	895
Fibermax	FM 1735 LLB2	1498	687	1113	261	890
Stoneville	ST 5327 B2RF	1342	656	1112	406	879
Stoneville	ST 4554 B2RF*	1274	687	1150	367	870
Bayer Crop Science	BCSX 0614 B2F	1377	656	1087	334	864
Bayer Crop Science	BCSX 0187 LLB2	1278	673	1219	269	860
Fibermax	FM 840 B2F	1329	661	1036	334	840
Fibermax	FM 835 LLB2	1313	642	1109	287	838
Phytogen	PHY 485 WRF	1409	630	936	321	824
Mean		1407	662	1092	387	887
LSD _{0.05}		183	152	126	121	140
CV (%)		8.0	14.1	8.1	22.2	11.1

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Early season varieties included for comparison.

Alexandria Silt Loam Tests

Table 5. Performance of early maturing cotton varieties on Norwood silt loam at the LSU AgCenter Dean Lee Research Station, Alexandria, La. in 2008.

Variety	Lint yield			2008 Fiber Properties				
	2008 [†]	2007	2-yr.avg	Lint	Length		Strength	Uniformity
	----- lb/ac -----			%	in.	Micronaire	g/tex	%
DP 555 BR*	1743	1569	1656	45.5	1.17	4.4	27.6	83.6
FM 1740 B2F	1703	-----	-----	45.6	1.16	4.7	29.1	84.1
ST 5458 B2RF	1618	-----	-----	44.7	1.16	5.1	30	83.5
PHY 485 WRF	1581	1324	1453	44.2	1.16	4.8	31.3	84.4
ST 5599 BR*	1575	1425	1500	43.4	1.16	4.5	28.7	83
BCSX 0704 B2F	1537	-----	-----	41	1.2	4.5	29.5	84
NG 3331 B2RF	1534	-----	-----	44.7	1.13	4.9	29.1	84.8
PHY 315 RF	1501	1386	1444	46.6	1.12	4.3	26.5	82.5
ST 4498 B2RF	1468	1478	1473	43.4	1.13	4.1	31.4	84.4
DP 161 B2RF	1465	-----	-----	42.2	1.21	4.1	30.3	83.5
DP 0924 B2RF	1461	-----	-----	44.4	1.12	4.7	28.7	83.7
DG 2570 B2RF	1459	-----	-----	45.0	1.14	4.6	29.1	82.9
DP 143 B2RF	1439	-----	-----	43.1	1.22	4.4	27.7	82.2
ST 4427 B2RF	1439	1249	1344	42.8	1.12	4.4	28.1	83.4
PHY 375 WRF	1425	1535	1485	43.7	1.14	4.4	28	83.9
PHY 370 WR	1421	1512	1467	44.1	1.12	4.8	29.4	84
NG 4370 B2RF	1398	-----	-----	43.5	1.13	4.6	28.4	83.2
AM 1550 B2RF	1368	-----	-----	43.4	1.12	4.5	26.2	83.4
CG 3220 B2RF	1343	1497	1420	43.3	1.15	4.9	27.9	83
ST 4554 B2RF	1332	1510	1421	42.6	1.13	4.5	30.5	82.7
DP 121 RF	1308	1336	1322	43.9	1.13	4.7	29	83.4
AM 1532 B2RF	1291	-----	-----	40.9	1.17	4.3	26.8	82.9
PHY 425 RF	1284	1378	1331	42.9	1.16	4.9	30.8	83.8
DG 2520 B2RF	1277	1331	1304	41.2	1.19	4.3	28.6	83.3
CG 4020 B2RF	1260	1387	1324	42.7	1.18	4.5	26.8	83.9
HQ 210 CT	1244	-----	-----	41.5	1.14	4.7	28.9	83
CG 3520 B2RF	1233	1415	1324	41.7	1.14	4.6	27.8	83.4
NG 4377 B2RF	1232	-----	-----	43.3	1.14	4.6	29.1	83.5
CG 3035 RF	1230	1627	1429	43.2	1.13	4.5	29	83.6
DP 141 B2RF	1225	-----	-----	42.2	1.2	4.2	30.4	83.1
CG 3020 B2RF	1218	1367	1293	41.1	1.13	4.4	27.6	83.9
Mean	1407	1280	1414	42.8	1.15	4.5	28.8	83.5
LSD (P=.05)	183	287	184	7.0	0.04	0.3	1.47	0.98
CV	8.0	14.1	12.1	10.15	2.0	4.1	3.1	0.7

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Full season varieties included for comparison.

[†]Planted May 22, 2008. Harvested October 2, 2008.

TABLE 6. Performance of medium maturing cotton varieties on Norwood silt loam at the LSU AgCenter Dean Lee Research Station, Alexandria, La. in 2007-2008

Variety	2008 Fiber Properties							
	Lint Yield			Length				
	2008 [†]	2007	2-yr avg	Lint	UHM	Micronaire	Strength	Uniformity
	----- lb/ac -----			%	in.		g/tex	%
DP 555 BR	1688	1216	1452	45.0	1.16	4.7	27.6	82.8
ST 5458 B2RF	1605	1296	1451	44.1	1.18	5.0	30.3	83.4
BCSX 0727 B2F	1566	-----	-----	44.2	1.16	5.0	28	82.9
ST 5599 BR	1555	1424	1489	43.5	1.16	4.6	30.2	83.2
BCSX 0721 B2F	1523	-----	-----	45.9	1.18	5.1	30.1	84.1
DP 174 RF	1517	1585	1551	47.0	1.19	4.6	27.6	83.9
FM 1735 LLB2	1498	-----	-----	43.5	1.16	4.6	28.6	84.1
BCSX 0888 LLB2	1474	-----	-----	42.7	1.17	5.2	30.1	84.7
DP 141 B2RF	1467	1091	1279	42.1	1.22	4.4	29.1	82.7
PHY 485 WRF	1409	-----	-----	43.3	1.15	5.0	30.8	83.9
BCSX 0102 LLB2	1407	-----	-----	42.1	1.24	4.9	31.6	85.1
DP 164 B2RF	1384	1156	1270	41.5	1.18	4.6	29.3	83.6
BCSX 0614 B2F	1377	-----	-----	40.9	1.2	4.6	29.2	83.7
DP 0935 B2RF	1360	-----	-----	43.4	1.16	4.2	29.3	83.3
DP 161 B2RF	1342	1158	1250	41.7	1.19	4.5	30.5	83.6
ST 5327 B2RF	1342	1069	1206	42.9	1.14	4.5	30.5	83.8
FM 840 B2F	1329	-----	-----	42.3	1.22	4.8	30.7	85.3
FM 835 LLB2	1313	1140	1227	41.7	1.21	4.4	30.9	85.3
BCSX 0187 LLB2	1278	-----	-----	41.2	1.15	4.9	28.6	83.3
ST 4554 B2RF	1274	-----	-----	42.1	1.13	4.9	31.5	83.7
Mean	1435	1215	1336	43.3	1.18	4.7	29.7	83.8
LSD (P=.05)	145	163	117	4.0	0.04	0.4	1.3	1.0
CV	6.2	9.5	8.2	5.6	1.78	5.0	2.6	0.7

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

[†]Planted May 22, 2008. Harvested October 2, 2008.

Alexandria Clay Loam Tests

Table 7. Performance of early maturing cotton varieties on Moreland clay loam at the LSU AgCenter Dean Lee Research Station, Alexandria, La. in 2008.

Variety	2008 Fiber Properties							
	Lint yield			Length				
	2008 [†]	2007	2-yr.avg	Lint	UHM	Micronaire	Strength	Uniformity
	lb/ac			%	in.		g/tex	%
HQ 210 CT	883	-----	-----	47.9	1.09	5.0	25.8	82.1
PHY 375 WRF	773	1418	1139	51.6	1.1	4.6	24.2	82.8
DP 141 B2RF	749	-----	-----	48.5	1.15	4.5	25.3	82.2
NG 3331 B2RF	745	-----	-----	49.5	1.08	5.1	24.8	82.6
ST 4427 B2RF	744	1327	1078	47.5	1.1	4.4	22.6	82.6
DP 121 RF	743	1254	1034	49.5	1.1	4.9	25.4	83.5
FM 1740 B2F	732	-----	-----	50.7	1.12	4.7	25.6	83.4
ST 4498 B2RF	732	1397	1092	47.7	1.11	4.6	26.6	83
PHY 370 WR	727	1619	1236	49	1.07	4.9	26.1	82.1
DP 161 B2RF	716	-----	-----	48.9	1.15	4.7	24.9	82.4
DP 0924 B2RF	692	-----	-----	50.5	1.09	4.9	25	82.9
DG 2570 B2RF	688	-----	-----	50.7	1.09	4.6	24.8	82.8
ST 5458 B2RF	679	-----	-----	52.8	1.09	4.8	23.1	81.5
CG 4020 B2RF	666	1301	1029	49	1.11	4.4	22.8	81.8
AM 1532 B2RF	662	-----	-----	48.3	1.11	4.4	22.3	82.3
DP 555 BR*	654	1301	1006	52.2	1.09	4.8	23.1	81.5
AM 1550 B2RF	654	-----	-----	50.4	1.07	4.6	21.6	81.8
ST 5599 BR*	650	1406	1082	48.1	1.1	4.8	23.8	82.1
DG 2520 B2RF	649	1128	923	47.3	1.11	4.2	21.1	81.4
BCSX 0704 B2F	627	-----	-----	45.9	1.13	4.6	22.7	81.9
PHY 485 WRF	612	1339	1029	48.2	1.1	4.7	26	83.5
NG 4377 B2RF	601	-----	-----	48.7	1.08	4.6	23.7	82.1
ST 4554 B2RF	600	1251	973	47.5	1.08	4.6	25.4	81.8
CG 3020 B2RF	595	1216	951	46	1.08	4.1	23.2	82.4
PHY 425 RF	588	1200	941	47.2	1.08	4.8	26.9	82.7
CG 3520 B2RF	581	1306	997	46.6	1.12	4.3	23.2	82.7
DP 143 B2RF	577	-----	-----	46.5	1.14	4.3	23.1	81.2
CG 3035 RF	575	1039	839	49.6	1.1	4.8	24.4	82.8
PHY 315 RF	572	1079	867	50	1.07	4.5	23.6	81.9
CG 3220 B2RF	565	1329	1002	48.6	1.09	4.5	22.2	81.8
NG 4370 B2RF	504	-----	-----	47.6	1.08	4.4	23.3	82.1
Mean	662	1280	1013	48.8	1.1	4.6	24.1	82.3
LSD (P=.05)	152	178	113	2.6	0.03	0.27	1.47	1.3
CV	14.1	9.8	10.4	3.2	1.37	3.54	3.73	0.95

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Full season varieties included for comparison.

[†]Planted April 17, 2008. Harvested October 2, 2008.

Table 8. Performance of medium maturing cotton varieties on Moreland clay loam at the LSU AgCenter Dean Lee Research Station, Alexandria, La. in 2007-2008

Variety	2008 Fiber Properties							
	Lint Yield			Length				
	2008 [†]	2007	2-yr avg	Lint	UHM	Micronaire	Strength	Uniformity
	----- lb/ac -----			%	in.		g/tex	%
BCSX 0102 LLB2	839	-----	-----	46.8	1.17	4.7	26	84.3
BCSX 0721 B2F	828	-----	-----	50.5	1.12	4.8	25.7	83.1
DP 555 BR	821	1185	1028	51.8	1.08	5.0	23.2	82.6
DP 174 RF	782	1133	982	51.8	1.12	4.6	24	83
DP 141 B2RF	770	1067	940	47.6	1.12	4.4	23.9	81.5
BCSX 0727 B2F	762	-----	-----	49.9	1.09	4.9	22.9	82.9
BCSX 0888 LLB2	746	-----	-----	47.8	1.11	4.9	24.7	83.4
DP 0935 B2RF	737	-----	-----	49.1	1.08	4.8	23.5	82.3
ST 5599 BR	714	1294	1044	48	1.1	5.0	23.4	82.4
DP 161 B2RF	695	1102	927	47.8	1.12	4.7	23.6	82.4
FM 1735 LLB2	687	-----	-----	46.9	1.11	4.5	23.5	83.5
ST 4554 B2RF	687	-----	-----	47.5	1.09	4.8	26.8	82.3
BCSX 0187 LLB2	673	-----	-----	47.7	1.11	4.6	23.2	83
FM 840 B2F	661	-----	-----	46.8	1.18	4.3	25.8	84.2
BCSX 0614 B2F	656	-----	-----	45.7	1.11	4.7	24.3	82
ST 5327 B2RF	656	1113	916	49.2	1.09	4.4	25.3	83
ST 5458 B2RF	653	1391	1075	48.6	1.12	4.8	23.7	81.9
FM 835 LLB2	642	1222	974	45.8	1.15	4.4	26.1	83.9
DP 164 B2RF	635	1119	912	47.9	1.14	4.6	23.7	83
PHY 485 WRF	630	-----	-----	47.9	1.1	4.7	25.6	82.8
Mean	714	1084	977	48.3	1.12	4.7	24.4	82.9
LSD (P=.05)	143	212	157	1.5	0.03	0.2	1.39	0.9
CV	12.1	13.8	15.0	1.88	1.67	2.53	3.44	0.66

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

[†]Planted April 17, 2008. Harvested October 2, 2008.

Winnsboro Irrigated Silt Loam Tests

Table 9. Performance of early maturing cotton varieties on irrigated Gigger silt loam at the LSU AgCenter Macon Ridge Research Station, Winnsboro, La. in 2007-2008.

Variety	Lint yield			2008 fiber properties				
	2008 [†]	2007	2-yr. avg	Lint	Length	Micronaire	Strength	Uniformity
	----- lb/ac -----			%	in.		g/tex	%
DP 141 B2RF	1290	-----	-----	40.5	1.15	4.40	28.20	82.1
FM 1740 B2F	1282	-----	-----	42.1	1.10	4.85	27.47	83.0
DP 121 RF	1254	1330	1292	43.4	1.07	4.92	27.70	83.0
BCSX 0704 B2F	1227	-----	-----	37.8	1.13	4.92	28.07	83.4
DP 161 B2RF	1215	-----	-----	39.7	1.14	4.65	28.80	83.3
PHY 370 WR	1209	1405	1307	41.7	1.07	4.90	28.45	83.2
CG 3035 RF	1173	1307	1240	42.4	1.08	4.55	27.75	82.7
DP 0924 B2RF	1166	-----	-----	40.9	1.09	4.85	28.17	82.6
ST 4427B2RF	1151	1324	1238	40.7	1.10	4.52	27.10	83.4
ST 4554 B2RF	1149	1425	1287	40.5	1.09	4.87	29.55	83.1
ST 5458 B2RF	1142	-----	-----	42.0	1.07	4.50	28.16	82.4
ST 5599 BR*	1139	1526	1333	41.0	1.10	5.15	27.65	82.4
PHY 425 RF	1115	1406	1261	39.5	1.10	5.00	28.72	83.7
AM 1550 B2RF	1109	-----	-----	41.7	1.07	4.72	25.97	82.0
PHY 375 WRF	1094	1361	1228	43.0	1.07	4.52	25.90	82.6
ST 4498 B2RF	1093	1342	1217	39.7	1.09	4.52	30.17	83.0
DG 2570 B2RF	1092	-----	-----	41.6	1.09	4.62	28.15	83.3
PHY 315 RF	1077	1331	1204	42.0	1.08	4.42	26.40	81.9
HQ 210 CT	1075	-----	-----	39.9	1.08	5.22	28.37	82.6
AM 1532 B2RF	1068	-----	-----	40.6	1.12	4.62	26.52	83.3
CG 3220 B2RF	1064	1223	1143	41.3	1.09	4.65	27.52	83.4
DP 143 B2RF	1050	-----	-----	40.2	1.17	4.30	27.20	81.7
DP 555 BG/RR*	1049	1511	1280	41.3	1.10	4.67	27.62	81.8
CG 3020 B2RF	1044	1200	1122	37.9	1.08	4.32	26.42	82.8
PHY 485 WRF	1035	1355	1195	39.5	1.09	4.95	28.70	82.6
DG 2520 B2RF	1026	1176	1101	40.6	1.11	4.62	26.75	83.0
NG 4377 B2RF	977	-----	-----	40.0	1.09	4.67	28.22	83.6
NG 4370 B2RF	958	-----	-----	40.4	1.08	4.77	27.45	83.2
CG 4020 B2RF	950	1129	1040	40.3	1.10	4.52	26.12	82.7
NG 3331 B2RF	945	-----	-----	39.6	1.08	5.02	28.05	83.4
CG 3520 B2RF	881	1124	1003	39.2	1.12	4.75	27.5	83.0
Mean	1092	1320	1205	40.6	1.10	4.70	27.7	82.9
LSD (P=.05)	126	141	91	0.10	0.03	0.24	1.5	1.0
CV	8.1	8.0	7.6	2.5	1.8	3.6	3.4	0.9

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Full-season varieties included for comparison.

[†]Planted 24 April 2008. Harvested September 18 2008.

Table 10. Performance of medium maturing cotton varieties on irrigated Gigger silt loam at the LSU AgCenter Macon Ridge Research Station, Winnsboro, La. in 2007-2008

Variety	2008 Fiber Properties							
	Lint Yield			Length				
	2008 [†]	2007	2-yr avg	Lint	UHM	Micronaire	Strength	Uniformity
	----- lb/ac -----			%	in.		g/tex	%
BCSX 0721 B2F	1407	----	----	42.9	1.13	4.45	29	83.3
ST 5458 B2RF*	1297	1701	1499	41.0	1.11	4.67	27.7	82.4
BCSX 0102 LLB2	1284	----	----	39.3	1.19	4.40	29.6	84.5
DP 161 B2RF*	1272	1437	1355	39.2	1.16	4.15	29.1	84.0
DP 0935 B2RF	1234	----	----	41.9	1.09	4.20	27.1	82.9
BCSX 0727 B2F	1225	----	----	39.8	1.09	4.55	27.2	83.0
BCSX 0187 LLB2	1219	----	----	40.3	1.07	4.47	25.7	82.3
ST 5599 BR	1215	1541	1378	40.3	1.12	4.57	27.6	83.0
DP 141 B2RF	1211	1443	1327	39.7	1.18	4.02	28.7	83.2
BCSX 0888 LLB2	1196	----	----	39.5	1.10	5.07	28.1	83.1
DP 174 RF	1151	1660	1406	43.3	1.14	4.30	26.8	83.4
ST 4554 B2RF	1150	----	----	41.9	1.09	4.67	29.4	83.5
DP 164 B2RF	1135	1413	1274	39.1	1.15	4.17	28.1	83.3
FM 1735 LLB2	1113	----	----	39.2	1.11	4.32	26.9	83.4
ST 5327 B2RF	1112	1520	1316	41.4	1.08	4.40	29	83.2
FM 835 LLB2	1109	1495	1302	37.4	1.17	4.07	29.2	85.0
DP 555 BG/RR	1102	1561	1332	42.6	1.08	4.42	26.4	81.6
BCSX 0614 B2F	1087	----	----	38.2	1.14	4.30	27.6	82.9
FM 840 B2F	1036	----	----	39.1	1.17	4.20	29	84.0
PHY 485 WRF	936			38.7	1.10	4.25	28.5	84.0
Mean	1174	1476	1357	40.3	1.13	4.39	28.1	83.3
LSD (P=.05)	100	129	112	0.10	0.03	0.27	1.5	1.03
CV	6.7	7.0	8.2	2.0	1.9	4.3	3.5	0.9

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Early season varieties included for comparison.

[†]Planted 24 April 2008, harvested 19 September, 2008.

Winnsboro Non-irrigated Silt Loam Tests

Table 11. Performance of early maturing cotton varieties on non-irrigated Gigger silt loam at the LSU AgCenter Macon Ridge Research Station, Winnsboro, La. in 2007-2008.

Variety	Lint yield			2008 Fiber Properties				
	2008 [†]	2007	2-yr avg	Lint	UHM	Micronaire	Strength	Uniformity
	-----lb/ac-----			%	ln.		g/tex	%
DP 141 B2RF	513	-----	-----	40.0	1.03	5.1	26.1	81.2
PHY 375 WRF	493	550	432	42.8	1.03	4.8	25.2	81.6
NG 4370 B2RF	493	-----	-----	40.8	0.99	5.0	26.0	81.1
BCSX 0704 B2F	478	-----	-----	38.2	1.00	4.9	25.2	81.7
DP 161 B2RF	443	-----	-----	41.3	1.02	5.1	25.3	80.6
ST 4427B2RF	442	654	489	40.2	1.03	4.9	27.1	81.4
PHY 370 WR	436	571	440	40.3	1.04	5.0	26.9	81.1
DP 555 BG/RR*	427	370	390	43.2	1.03	4.7	26.2	81.6
NG 3331 B2RF	424	-----	-----	41.3	1.03	5.0	28.4	82.1
CG 3035 RF	418	483	408	42.3	1.01	5.0	26.9	81.9
AM 1550 B2RF	404	-----	-----	40.7	1.01	5.1	26.7	80.8
FM 1740 B2F	404	-----	-----	43.3	1.03	4.9	25.9	81.7
PHY 425 RF	401	783	538	40.0	1.04	4.9	27.2	81.4
PHY 485 WRF	400	595	451	39.4	1.05	5.0	28.3	81.3
DG 2570 B2RF	399	-----	-----	42.6	1.00	5.1	25.1	81.4
HQ 210 CT	381	-----	-----	40.9	1.02	5.1	26.3	81.2
PHY 315 RF	380	645	483	42.4	1.04	4.9	26.9	81.7
ST 5599 BR*	379	698	524	41.1	1.03	4.9	27.0	82.1
DP 0924 B2RF	376	-----	-----	39.5	1.03	5.1	26.3	81.2
NG 4377 B2RF	373	-----	-----	41.2	1.03	5.1	26.1	81.2
CG 3220 B2RF	361	613	464	41.1	1.04	4.9	25.9	82.0
ST 4554 B2RF	360	-----	-----	40.9	1.00	5.4	27.2	81.9
CG 3020 B2RF	350	438	367	38.2	1.04	4.7	26.0	81.8
ST 4498 B2RF	349	470	378	39.9	1.04	5.3	27.5	81.3
ST 5458 B2RF	347	-----	-----	41.3	1.03	4.9	24.4	80.9
DG 2520 B2RF	329	428	371	40.5	1.00	4.9	25.9	81.0
DP 143 B2RF	327	-----	-----	39.9	1.05	4.8	26.6	81.2
CG 4020 B2RF	320	328	335	40.4	1.04	5.0	27.0	81.3
AM 1532 B2RF	315	-----	-----	39.7	1.03	5.0	27.5	81.4
DP 121 RF	290	704	466	41.7	1.00	5.0	25.9	81.2
CG 3520 B2RF	266	583	421	39.5	1.03	5.0	26.3	80.8
Mean	387	590	435	40.8	1.02	5.0	26.4	81.3
LSD (P=.05)	121	135	65	1.7	0.05ns	0.4ns	2.5ns	1.1ns
CV	22.2	14.0	14.0	2.9	3.7	5.9	6.7	0.9

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

*Full-season varieties included for comparison.

[†]Planted 24 April 2008, harvested 20 September, 2008.

Table 12. Performance of medium maturing cotton varieties on non-irrigated Gigger silt loam at the LSU AgCenter Macon Ridge Research Station, Winnsboro, La. in 2007-2008.

Variety	2008 Fiber Properties							
	Lint yield			Length				
	2008 [†]	2007	2-yr avg	Lint	UHM	Micronaire	Strength	Uniformity
	----- lb/ac -----			%	in.		g/tex	%
DP 174 RF	424	708	566	45.1	1.02	5.12	24.4	80.1
ST 5327 B2RF	406	624	515	42.2	1.00	4.92	24.8	80.6
BCSX 0721 B2F	402	-----	-----	42.8	1.02	5.07	24.9	80.8
DP 141 B2RF	396	578	487	41.1	1.03	4.90	24.7	80.4
BCSX 0102 LLB2	367	-----	-----	40.1	1.11	5.12	27.4	83.1
ST 4554 B2RF	367	-----	-----	41.2	0.99	5.10	24.2	80.7
DP 555 BG/RR	365	616	490	44.0	1.02	4.97	24.1	80.6
BCSX 0727 B2F	341	-----	-----	42.5	1.00	5.35	23.8	80.1
ST 5599 BR	337	777	577	41.6	1.00	5.42	24.0	81.0
DP 0935 B2RF	334	-----	-----	41.4	1.02	5.12	25.7	81.1
BCSX 0614 B2F	334	-----	-----	39.2	1.05	4.97	24.4	81.2
ST 5458 B2RF*	327	639	483	41.3	1.02	5.40	24.6	80.5
PHY 485 WRF	321	-----	-----	39.3	1.03	4.97	26.3	81.1
FM 840 B2F	287	-----	-----	39.1	1.11	4.70	26.6	82.6
DP 161 B2RF*	285	582	433	40.1	1.06	5.07	25.0	81.1
DP 164 B2RF	280	596	438	40.2	1.03	5.08	23.2	80.9
FM 1735 LLB2	271	-----	-----	40.8	1.03	4.80	22.5	81.6
BCSX 0187 LLB2	269	-----	-----	41.0	1.01	4.90	23.1	80.9
FM 835 LLB2	261	532	397	38.5	1.09	4.97	26.3	82.2
BCSX 0888 LLB2	253	-----	-----	41.6	1.01	5.30	24.2	81.5
Mean	331	612	466	41.2	1.03	5.1	24.7	81.1
LSD (P=.05)	95	89	54	1.5	0.04	0.2	2.0	0.9
CV	20.2	9.0	10.8	2.6	2.6	2.3	5.7	0.8

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

* Early season varieties included for comparison.

[†]Planted 24 April 2008, harvested 20 September, 2008.

St. Joseph Silt Loam Tests

Table 13. Performance of early maturing cotton varieties on Commerce silt loam at the LSU AgCenter Northeast Research Station, St. Joseph, LA in 2006 and 2007.

Variety	Lint yield			2007 Fiber Properties				
	2007	2006	2-yr. avg	Lint %	Length	Micronaire	Strength	Uniformity
	----- lb/ac -----				UHM			
					In.			
Deltapine DP 555 BG/RR	1185	1519	1352	40.7	1.08	4.8	25.5	81.8
FiberMax FM 1600 LL	1105	----	----	36.9	1.14	4.4	28.6	83.6
Stoneville ST 4678B2RF	1098	----	----	35.9	1.14	4.8	28.4	84.0
Phytogen PHY 485 WRF	1037	1485	1261	37.5	1.12	4.7	29.2	83.7
Phytogen PHY 425 RF	1034	1493	1263	37.2	1.11	4.9	29.3	83.5
Croplan CG 3035 RF	1020	----	----	38.9	1.09	4.9	28.1	82.8
Dynagro DG CT07343 RF	1006	----	----	38.3	1.07	4.8	27.1	82.5
Phytogen PHY 370 WR	1001	1343	1172	36.6	1.08	4.9	28.8	82.2
Dynagro DG CT07550 B2RF	984	----	----	36.7	1.08	5.0	27.7	82.4
Phytogen PHY 315 RF	980	----	----	37.8	1.08	4.2	26.2	81.9
Phytogen PHY 375 WRF	978	----	----	36.8	1.07	4.7	27.1	82.4
Croplan CG 4020 B2RF	972	1343	1157	35.0	1.10	4.4	27.0	83.1
Stoneville ST 5599 BR	964	1542	1253	38.0	1.11	4.7	27.0	82.6
Deltapine DP 117 B2RF	963	1327	1145	39.1	1.11	4.3	27.5	82.1
Deltapine DP 121 RF	956	1339	1148	38.2	1.08	4.7	27.7	82.5
Stoneville ST 4664 RF	950	1502	1226	36.8	1.05	4.8	28.3	82.1
Stoneville ST 4427 B2RF	946	1422	1184	35.2	1.08	4.7	26.3	82.7
Deltapine DP 434 RR	942	----	----	37.0	1.09	4.6	25.9	82.7
FiberMax FM 1735 LLB2	942	----	----	35.9	1.12	4.5	27.3	82.6
Phytogen PHY 480 WR	928	1415	1172	35.8	1.12	4.5	29.6	83.7
Dynagro DG 2383 RF	926	----	----	34.9	1.08	4.4	27.8	82.7
Stoneville ST 6351 B2RF	922	----	----	34.8	1.12	4.4	26.9	82.4
Croplan CG 3520 B2RF	911	1125	1018	34.4	1.07	4.5	25.3	82.2
Croplan CG 3220 B2RF	905	----	----	36.2	1.10	4.8	28.2	83.6
Stoneville ST 4498 B2RF	901	----	----	35.5	1.08	4.6	30.6	82.4
Stoneville ST 4357 B2RF	899	1423	1161	35.2	1.11	4.4	25.9	83.0
Stoneville ST 5242 BR	899	1395	1147	37.2	1.08	4.4	26.0	82.5
Stoneville ST 4596 B2RF	898	----	----	36.1	1.08	4.7	27.9	82.8
Deltapine DP 445 BG/RR	889	1441	1165	36.8	1.09	4.7	28.8	82.7
Dynagro DG 2520 B2RF	886	----	----	34.2	1.10	4.4	26.4	82.0
Phytogen PHY 310 R	884	1363	1123	37.5	1.05	4.7	27.6	82.1
Stoneville ST 4554 B2RF	879	1542	1210	36.0	1.08	5.1	29.8	82.7
Dynagro DG 2490 B2RF	873	----	----	33.9	1.06	3.9	25.6	81.5
Dynagro DG 2242 B2RF	872	1270	1071	33.9	1.08	4.4	25.5	82.1
Stoneville ST 5327 B2RF	829	----	----	36.2	1.09	4.7	29.3	82.9
Dynagro DG 2100 B2RF	829	1331	1080	32.3	1.04	4.0	24.9	82.2
Croplan CG 3020 B2RF	767	1248	1007	32.0	1.06	4.0	25.6	82.7
Mean	945	1349		36.3	1.09	4.6	27.4	82.6
LSD (P=.05)	123	196		1.3	0.03	0.2	1.5	1.1
CV	8.3	9.4		2.6	1.62	3.5	3.7	0.8

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

Planted May 7, 2007. Harvested October 31, 2007.

Table 14. Performance of medium maturing cotton varieties on Commerce silt loam at LSU AgCenter Northeast Research Station, St. Joseph, LA in 2006 and 2007.

Variety	Lint Yield			2007 Fiber Properties				
	2007	2006	2-yr. avg	Length		Micronaire	Strength	Uniformity
	----- lb/ac -----			Lint %	UHM In.			
Deltapine DP 174 RF	1229	----	----	41.0	1.14	4.7	26.5	82.7
Deltapine DP 515 BG/RR	1166	1405	1286	39.4	1.10	4.9	26.9	82.2
Deltapine DP 555 BG/RR	1155	1502	1328	41.9	1.08	5.0	25.9	81.6
FiberMax FM 835 LLB2	1145	----	----	35.7	1.15	4.3	28.9	83.8
Stoneville ST 5458 B2RF	1127	----	----	37.6	1.11	4.9	26.9	81.5
Deltapine DP 161 B2RF	1100	----	----	36.3	1.14	4.9	28.7	83.0
Americot AM 1550 B2RF	1080	----	----	37.2	1.07	4.6	25.5	81.9
Deltapine DP 141 B2RF	1035	----	----	37.7	1.15	4.6	28.0	81.8
FiberMax FMX 4330 B2F	1029	----	----	38.3	1.13	4.2	28.2	83.6
Stoneville ST 5283 RF	995	1403	1199	37.2	1.09	4.7	29.1	82.5
Deltapine DP 167 RF	974	1284	1129	34.5	1.13	4.7	28.4	82.4
Americot AM 1532 B2RF	966	----	----	34.7	1.11	4.3	26.4	82.2
Deltapine DP 164 B2RF	962	1445	1203	35.3	1.13	4.9	28.3	82.8
FiberMax FMX 4327 B2F	942	----	----	37.1	1.15	4.5	28.2	82.7
Deltapine DP 445 BG/RR	941	----	----	37.4	1.09	4.9	29.1	82.3
Stoneville ST 5327 B2RF	932	1367	1150	36.6	1.10	4.7	29.6	82.9
Deltapine DP 147 RF	925	1423	1174	37.7	1.14	4.4	26.8	81.6
Stoneville ST 5599 BR	917	1383	1150	37.9	1.10	4.8	26.7	82.1
Stoneville ST 5242 BR	900	1357	1129	37.3	1.07	4.4	25.0	82.9
FiberMax FM 820 F	888	----	----	34.6	1.18	3.9	27.9	83.3
Deltapine DP 143 B2RF	848	1410	1129	36.7	1.16	4.5	26.9	82.1
FiberMax FM 1880 B2F	780	----	----	33.7	1.12	4.2	28.3	82.3
Mean	1002	1315		37.2	1.12	4.6	27.5	82.5
LSD (P=.05)	159	148		1.8	0.02	0.2	1.1	0.8
CV	10	7.4		3.2	1.46	2.4	2.7	0.6

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

Planted May 7, 2007. Harvested November 1, 2007.

St. Joseph Sharkey Clay Tests

Table 15. Performance of early maturing cotton varieties on Sharkey clay at LSU AgCenter Northeast Research Station, St. Joseph, LA in 2006 and 2007.

Variety	Lint yield			2007 Fiber Properties				
	2007	2006	2-yr. avg	Lint	Length	Micronaire	Strength	Uniformity
	----- lb/ac -----			%	In.			
Deltapine DP 434 RR	1470	1568	1519	37.9	1.14	4.2	26.9	82.8
Stoneville ST 5242 BR	1464	1402	1433	37.6	1.09	4.5	26.5	83.5
Deltapine DP 121 RF	1463	1548	1506	39.2	1.13	4.6	29.1	83.5
Stoneville ST 4678B2RF	1428	----	----	36.3	1.15	4.8	28.4	84.0
Phytogen PHY 370 WR	1427	1554	1491	38.2	1.11	4.7	29.0	83.4
Phytogen PHY 480 WR	1419	1481	1450	35.3	1.15	4.5	30.4	84.0
Croplan CG 3035 RF	1417	----	----	40.4	1.13	4.3	28.4	82.8
Phytogen PHY 485 WRF	1408	1657	1533	37.9	1.12	4.6	30.1	83.6
Phytogen PHY 425 RF	1398	1775	1587	37.3	1.15	4.8	30.7	84.1
Phytogen PHY 310 R	1388	1591	1489	38.0	1.10	4.4	29.1	83.7
Stoneville ST 5599 BR	1381	1753	1567	38.1	1.12	4.8	27.0	82.9
Dynagro DG 2490 B2RF	1380	----	----	35.5	1.10	3.7	26.0	82.2
Deltapine DP 117 B2RF	1376	1719	1548	38.4	1.16	4.5	29.9	83.5
Phytogen PHY 315 RF	1370	----	----	38.6	1.12	4.2	27.5	82.9
Stoneville ST 5327 B2RF	1364	----	----	37.4	1.12	4.4	30.3	83.4
Deltapine DP 445 BG/RR	1356	1544	1450	37.9	1.13	4.4	30.9	83.7
Dynagro DG CT07343 RF	1352	----	----	38.7	1.12	4.4	28.3	82.7
Stoneville ST 4664 RF	1332	1668	1500	37.2	1.12	4.4	30.4	83.4
Deltapine DP 555 BG/RR	1325	1836	1580	40.2	1.11	4.5	26.5	82.6
Stoneville ST 4554 B2RF	1316	1605	1461	36.0	1.13	4.4	30.4	82.8
Dynagro DG CT07550 B2RF	1313	----	----	38.6	1.11	4.6	28.9	83.0
FiberMax FM 1600 LL	1304	----	----	36.1	1.15	4.4	27.6	83.4
FiberMax FM 1735 LLB2	1283	----	----	34.5	1.14	4.6	28.9	83.2
Dynagro DG 2242 B2RF	1265	1278	1271	34.2	1.14	3.9	26.7	83.8
Phytogen PHY 375 WRF	1264	----	----	38.5	1.12	4.3	27.3	82.4
Dynagro DG 2383 RF	1247	----	----	35.2	1.12	4.1	28.8	83.4
Stoneville ST 4427 B2RF	1238	1631	1434	35.7	1.12	4.2	29.3	83.2
Croplan CG 3220 B2RF	1229	----	----	35.9	1.14	4.4	28.8	83.5
Dynagro DG 2520 B2RF	1204	----	----	34.3	1.13	4.0	26.3	82.2
Croplan CG 3520 B2RF	1187	1265	1226	35.8	1.14	4.2	27.1	83.9
Stoneville ST 6351 B2RF	1165	----	----	34.7	1.13	4.5	28.6	82.5
Stoneville ST 4498 B2RF	1165	----	----	37.6	1.11	4.5	29.4	83.1
Croplan CG 3020 B2RF	1160	1380	1270	32.4	1.09	3.8	26.7	82.5
Stoneville ST 4596 B2RF	1141	----	----	36.0	1.13	4.5	30.2	82.8
Stoneville ST 4357 B2RF	1135	1392	1264	34.8	1.13	4.1	26.8	82.6
Dynagro DG 2100 B2RF	1127	1367	1247	33.9	1.10	4.0	26.2	82.8
Croplan CG 4020 B2RF	1034	1334	1184	34.6	1.14	4.1	26.4	82.4
Mean	1305	1501		36.7	1.12	4.3	28.4	83.1
LSD (P=.05)	228	168		1.8	0.03	0.3	1.9	1.2
CV	9.6	7.8		3.1	1.58	3.8	4.2	0.7

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

Planted May 3, 2007. Harvested October 3, 2007.

Table 16. Performance of medium maturing cotton varieties on Sharkey clay at LSU AgCenter Northeast Research Station, St. Joseph, LA in 2006 and 2007.

Variety	Lint yield			2007 Fiber Properties				
	2007	2006	2-yr. avg	Lint	UHM	Micronaire	Strength	Uniformity
	----- lb/ac -----	----- lb/ac -----	----- lb/ac -----	%	In.		g/tex	%
Deltapine DP 174 RF	1783	----	----	42.1	1.13	4.8	26.5	82.7
Deltapine DP 515 BG/RR	1699	1735	1717	39.0	1.13	4.8	28.5	83.8
Stoneville ST 5599 BR	1694	1732	1713	38.5	1.12	4.9	27.4	83.4
Deltapine DP 445 BG/RR	1575	----	----	39.0	1.15	4.6	31.3	83.7
Stoneville ST 5458 B2RF	1542	----	----	37.8	1.14	4.7	28.2	83.1
Americot AM 1532 B2RF	1505	----	----	36.9	1.14	4.3	27.0	83.1
Deltapine DP 555 BG/RR	1503	1833	1668	41.8	1.11	4.7	25.9	82.0
Deltapine DP 147 RF	1495	1620	1558	39.0	1.17	4.4	27.8	83.1
Deltapine DP 161 B2RF	1487	----	----	37.2	1.17	4.4	29.7	83.5
Deltapine DP 141 B2RF	1485	----	----	37.7	1.16	4.4	28.8	82.3
Americot AM 1550 B2RF	1473	----	----	36.2	1.11	4.4	26.9	82.4
Stoneville ST 5283 RF	1465	1484	1474	37.4	1.13	4.3	30.7	83.5
Deltapine DP 455 BG/RR	1459	1735	1597	39.5	1.12	4.2	28.2	81.3
Stoneville ST 5327 B2RF	1425	1536	1481	37.6	1.12	4.5	29.8	83.2
Deltapine DP 167 RF	1385	1590	1488	36.8	1.15	4.5	28.3	82.7
FiberMax FMX 4330 B2F	1376	----	----	37.3	1.16	4.3	29.1	83.9
Deltapine DP 164 B2RF	1352	1628	1490	36.3	1.14	4.3	27.8	82.6
Deltapine DP 143 B2RF	1333	1577	1455	37.0	1.18	4.3	28.0	83.1
FiberMax FM 820 F	1327	----	----	36.1	1.19	4.1	28.8	84.0
FiberMax FMX 4327 B2F	1282	----	----	36.6	1.17	4.6	28.7	82.8
FiberMax FM 1880 B2F	1189	----	----	34.2	1.14	4.0	29.2	83.0
Mean	1458	1481		37.8	1.14	4.4	28.3	83.0
LSD (P=.05)	263	111		1.6	0.04	0.2	1.9	1.1
CV	9	5.7		2.6	1.69	3.3	3.7	0.7

Lint yields in bold type within a column are not significantly different from the highest-yielding variety based on the Least Significant Difference Test at P= 0.05.

Planted April 27, 2007. Harvested October 4, 2007.

Root-knot Nematode Gall Ratings (Red River Research Station)

Table 17. Root-knot nematode gall ratings for selected early maturing cotton varieties at the Red River Research Station in 2007 and 2008.

Variety	Gall ratings		
	2008	2007	Average
ST 5599 BR	1.8	3	2.4
Acala	2.0	2.1	2.1
LA 887	2.0	2.2	2.1
DP 121 RF	3.3	3.2	3.3
CG 3020 B2RF	3.3	3.7	3.5
BCSX 0704 B2F	3.4	----	----
ST 4498 B2RF	3.6	2.9	3.3
DP 0924 B2RF	3.7	----	----
DG 2570	3.8	----	----
PHY 315 RF	3.8	3.4	3.6
CG 3035 RF	3.8	3.3	3.6
DP 143 B2RF	3.9	----	----
ST 4427B2RF	3.9	----	----
DP 161 B2RF	4.0	----	----
DG 2520	4.0	3.4	3.7
CG 3520 B2RF	4.0	3.3	3.7
NG 3331 B2RF	4.1	----	----
FM 1740 B2F	4.1	----	----
AM 1550 B2RF	4.1	----	----
DP 141 B2RF	4.1	----	----
CG 3220 B2RF	4.1	----	----
AM 1532 B2RF	4.1	----	----
PHY 485 WRF	4.1	3.5	3.8
PHY 375 WRF	4.1	3.6	3.9
NG 4370 B2RF	4.1	----	----
DP 555 BG/RR	4.1	3.2	3.7
NG 4377 B2RF	4.3	----	----
PHY 425 RF	4.3	3.6	4
PHY 370 WR	4.3	3.5	3.9
CG 4020 B2RF	4.3	----	----
ST 4554 B2RF	4.3	3.2	3.8
HQ 210 CT	4.4	----	----
LSD (P=0.05)	0.9		
C.V. (%)	16.6		

Root-gall rating on a scale of zero to 5; zero = no root galling, 5 = severe root galling

Table 18. Root-knot nematode gall ratings for selected medium maturing cotton varieties at the Red River Research Station in 2007 and 2008.

Variety	Gall ratings		
	2008	2007	Average
DP 174 RF	0.9	2.5	1.7
LA 887	1.3	2.5	1.9
NEMEX	1.4	2.8	2.1
ST 5599 BR	1.6	3	2.3
ST 5458 B2RF	2.0	3.1	2.6
FM 835 LLB2	2.0	4.2	3.1
DP 164 B2RF	3.4	4.2	3.8
DP 555 BG/RR	3.5	4.3	3.9
ST 4554 B2RF	3.6	----	----
DP 0935 B2RF	3.6	----	----
DP 141 B2RF	3.7	3.9	3.8
DP 161 B2RF	3.7	3.4	3.6
BCSX 0187 LLB2	3.7	----	----
PHY 485 WRF	3.8	----	----
FM 1735 LLB2	3.8	----	----
ST 5327 B2RF	3.9	4	4
BCSX 0888 LLB2	3.9	----	----
BCSX 0102 LLB2	4.0	----	----
FM 840 B2F	4.0	----	----
BCSX 0727 B2F	4.0	----	----
BCSX 0721 B2F	4.2	----	----
BCSX 0614 B2F	4.5	----	----
LSD (P=0.05)	0.8	----	
C.V. (%)	17.5	----	

Root-gall rating on a scale of zero to 5: zero = no root galling, 5 = severe root galling

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