

2018

Cotton Varieties for Louisiana

Variety Trials and On-Farm Demonstrations

Table of Contents

Introduction; Choosing Varieties; Fiber Properties; Using the Data	3
Selecting Varieties; Transgenic Traits	4
Seeding Rate and Stand	5
Table 1. Cultural practices for the cotton official variety trials (OVT)	6
Table 2. Participating seed companies and varieties entered	6
Table 3. Two-year lint yield performance for the cotton varieties across seven locations	7
Table 4. One-year lint yield performance for the cotton varieties across seven locations	8
Table 5. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Dean Lee Research Station OVT, nonirrigated, Latanier clay	9
Table 6. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Dean Lee Research Station OVT, nonirrigated, Coushatta silt loam.....	10
Table 7. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Macon Ridge Research Station OVT, irrigated, Gigger silt loam.	11
Table 8. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Northeast Research Station OVT, irrigated, Sharkey clay	12
Table 9. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Northeast Research Station OVT, irrigated, Commerce silt loam	13
Table 10. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Red River Research Station OVT, irrigated, Moreland clay	14
Table 11. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Red River Research Station OVT, irrigated, Caplis very fine sandy loam.....	15
Table 12. Summary of lint yield performance for the on-farm core block demonstrations across locations.....	16
Table 13. Summary of percent turnout for the on-farm core block demonstrations across locations.....	16
Table 14. Summary of fiber length values for the on-farm core block demonstrations across locations.....	16
Table 15. Summary of fiber uniformity values for the on-farm core block demonstrations across locations.....	17
Table 16. Summary of fiber strength values for the on-farm core block demonstrations across locations.....	17
Table 17. Summary of fiber micronaire values for the on-farm core block demonstrations across locations	17
Table 18. Summary of loan values for the on-farm core block demonstrations across locations	18
Table 19. Summary of dollar return per acre for the on-farm core block demonstrations across locations.....	18
Table 20. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Avoyelles Parish on-farm core block demonstration	19
Table 21. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Avoyelles Parish on-farm core block demonstration	19
Table 22. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Catahoula Parish on-farm core block demonstration	20
Table 23. Lint yield performance, fiber characteristics, loan values and dollar return per acre, East Carroll Parish on-farm core block demonstration	20
Table 24. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Franklin Parish on-farm core block demonstration	21
Table 25. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Morehouse Parish on-farm core block demonstration	21
Table 26. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Pointe Coupee Parish on-farm core block demonstration.....	22
Table 27. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Rapides Parish on-farm core block demonstration	22
Table 28. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Rapides Parish on-farm core block demonstration	23
Table 29. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Tensas Parish on-farm core block demonstration	23

Introduction

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

These AgCenter locations are the Red River Research Station at Bossier City, Dean Lee Research Station at Alexandria, Macon Ridge Research Station at Winnsboro and Northeast Research Station at St. Joseph.

Cotton varieties are managed using practices that follow LSU AgCenter recommendations and demonstrate commercial operations as closely as possible. All entries in the trials are replicated four times, and results are compiled for average performance after one or two years of testing.

Choosing Varieties

Variety selection is one of the most important decisions a cotton producer will make for the entire growing season. The variety and its associated traits set the stage for harvest at the time of planting. All other input decisions affect the performance of the variety selected.

Variety selection has become increasingly important since the introduction of transgenic cottons and the accompanying increases in seed costs and associated technology fees. Moreover, variety selection is the one decision a producer makes that is not influenced by environmental factors. Therefore, choosing a high-yielding variety with acceptable fiber quality that is adapted to local growing conditions should be considered carefully because of the tremendous importance the decision plays for the entire season.

Choosing a variety can be difficult, and the availability of different transgenic traits often complicates the process. The more informed the decision, the better. Therefore, this publication strives to provide growers as much information as possible concerning cotton variety performance over a range of soil textures and conditions. The information reported concerning measured performance of cotton varieties in Louisiana should be useful as a primary source of information for choosing varieties.

Producers should be mindful that these LSU AgCenter official variety trials never can identify the best single variety for soils and conditions. As such, producers should plant multiple varieties that are selected from the top performers in the variety trials closest to their production region. This strategy will help mitigate risks from adverse environmental conditions.

Individual varieties always differ in performance from one year to the next. However, in most years those among the top 10 percent of the highest-yielding varieties generally remain there for several seasons. The best variety for a particular farm likely resides among the top yielders in the official variety trials, but no one can be certain which of those top-yielding varieties will be the highest yielder for the upcoming year. This actually is a good thing because it gives producers the option to select from as many as five to 10 varieties with different traits, knowing that one of those may be the best for next year's crop.

The majority of a grower's acreage should be devoted to proven varieties. Newer varieties should be evaluated on limited acreage until further testing is completed.

Fiber Properties

Fiber quality has become a more important consideration in marketing cotton and choosing varieties. Because the domestic textile industry has become very limited, most U.S. cotton is exported to foreign mills that generally demand cotton with the most consistent and highest fiber quality properties.

The quality of Louisiana cotton has been a concern in recent years, particularly with regard to high micronaire. While premiums are small, discounts for high micronaire and other factors can be significant. Variety selection plays the largest role in fiber properties and is increasingly important for U.S. cotton to maintain and increase presence in the world market.

Fiber parameters in the LSU AgCenter's official variety trials were determined with the same high-volume instrumentation classing system used by the U.S. Department of Agriculture's classing offices. Physical properties, including staple length (reported as the upper half mean length), fiber strength, uniformity index and micronaire were evaluated and are reported for each variety. Seed cotton samples were ginned with small plot research gins that do not have lint cleaners. This method will produce higher lint percentages than would normally be received from a commercial gin. A 41-4 color and leaf grade was used on all fiber samples to determine loan values.

Using the Data

Yield should be the primary factor when selecting a variety, followed by fiber quality and maturity. Top-yielding varieties should be considered first.

Top-yielding varieties often have no statistical differences between them in a given trial. The least significant difference (LSD) reported at the bottom of each table is the smallest difference in yield that can be considered a "true" difference.

The most important factor is not the absolute number reported for a cotton variety's yield or fiber quality. The most important question to consider is, "How did a variety yield in relation to other varieties in the same trial?" Another important number to look for is the average yield from the variety trials. Considering a variety's performance compared to the average for the entire trial will help identify varieties that are above average for a given location.

Cotton varieties should be chosen by considering their performances across several locations and multiple years of testing. Superior performance in one year often can indicate a good variety, but superior performance over multiple years indicates consistency and reliability. Varieties currently are introduced at a rapid pace and have shorter life spans than in the past, so information

about some of the newest varieties often is not available for multiple years. For those new varieties that do not have multiyear performance records, it is best to consider performance averaged across several locations during a variety's first year of testing.

Grower experience with a variety is important for several reasons. Cotton varieties have different growth habits and can be locally adapted to a small area. Experience with a variety should be considered, but newer varieties that perform well in the official variety trials also should be considered.

Selecting Varieties

The LSU AgCenter identifies the top tier of high-yielding varieties at each location using a statistical test called the "least significant difference." A probability level of 5 percent is used, which means the test correctly identifies variety performance for that location with 95 percent certainty.

The group of varieties that is statistically the highest yielding is shown in each table in bold print. To identify promising varieties that are new to the market and have only one year of testing in the LSU AgCenter's official variety trials, a multilocation analysis should be performed. Producers should review the data tables for variety performance at the closest location that most represents their individual farms, and they also should review statewide multilocation yield averages for consistency of performance over a range of environments.

Transgenic Traits

Roundup Ready: Transgenic traits are available for glyphosate tolerance, usually indicated by Roundup Ready Flex (sometimes shown simply as "RF" or "F"). The Flex varieties have been available commercially since 2006 and completely replaced the older Roundup Ready ("R" or "RR") varieties. Roundup Ready Flex varieties exhibit increased tolerance, particularly in the fruiting stage, to glyphosate applications.

Roundup Ready Flex labeling allows over-the-top applications of glyphosate to Flex varieties into the bloom stage and does not restrict contact with the stem for applications. Read and follow the label closely for specific restrictions, and be sure to consult the label for the specific glyphosate formulations permitted for use on Roundup Ready Flex varieties.

Weed control is a major factor in producing high-yielding, high-quality cotton. Because of the increased flexibility of applying glyphosate over the top to Roundup Ready Flex varieties, some growers may opt to wait until weeds emerge and gain some size before making applications. However, 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 to other factors. Even more, reliance on one mode of action for weed control is not

recommended and has led to herbicide-resistant weeds.

Due to the concerns with glyphosate-resistant weeds, the use of other herbicides in addition to glyphosate is strongly encouraged. Growers should note that glyphosate-resistant Palmer amaranth was identified in Louisiana in 2009 and resistant johnsongrass in 2010. Consult the LSU AgCenter 2018 Louisiana Suggested Chemical Weed Management Guide for more information.

LibertyLink: Varieties with the designation "LL" in their brand names are transgenic varieties tolerant to over-the-top applications of Liberty (glufosinate). These varieties can be managed in a LibertyLink weed control program, which is covered in more detail in the LSU AgCenter 2018 Louisiana Suggested Chemical Weed Management Guide publication.

LibertyLink cotton is tolerant to Liberty herbicide but will be injured by applications or drift from glyphosate. On farms or in areas where LibertyLink cotton is grown near Roundup Ready Flex cotton, care should be taken to avoid confusion of the herbicide systems and to reduce the potential for mistaken applications or drift.

GlyTol LibertyLink: Varieties with the designation "GL" in their brand names are transgenic varieties tolerant to over-the-top applications of both glyphosate and glufosinate. These varieties offer potential to alternate from one class of chemistry to another, particularly where producers are concerned about herbicide-resistant weed populations. In any case, weeds still should be controlled early, when weeds are small and actively growing. Producers are cautioned to avoid late, low-dose applications of these nonselective herbicides when existing weeds are large and well-developed.

XTendFlex: In 2015, Delta Pine varieties with the designation "XF" became available, and they are transgenic cotton lines that are tolerant to over-the-top applications of dicamba, glyphosate and glufosinate. This was the first cotton technology with tolerance to three herbicides. These varieties offer the potential of alternating from one class of chemistry to another, particularly where producers are concerned about herbicide-resistant weed populations. In any case, weeds still should be controlled early, when weeds are small and actively growing. Producers are cautioned to avoid late, low-dose applications of these nonselective herbicides when these weeds are large and well-developed.

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

Bollgard II: Varieties with the designation "B2" or "BG2" in their brand names are cotton lines tolerant to the Louisiana caterpillar pest known as the tobacco budworm. After the successful introduction of Bollgard

II technology into the market, the U.S. Environmental Protection Agency in 2010 required that all Bollgard-only technology be prohibited from future planting due to its single-gene-site activity.

Varieties that include Bollgard II technology should not need any supplemental insecticide sprays for control of tobacco budworms. They also are tolerant to the bollworm, soybean looper, fall armyworm and beet armyworm. For those and other caterpillar pests, note that supplemental chemical control strategies will be necessary to provide satisfactory management with high and persistent populations. In addition, the insecticidal traits in Bollgard II varieties have no activity against noncaterpillar pests, such as thrips, aphids, plant bugs, stink bugs and spider mites. Those pests must be managed with conventional integrated pest management practices.

Bollgard 3: In 2017, varieties with the designation “B3” in their brand names became available. Bollgard 3 offers three Bt proteins for greater technology durability and improved resistance management. The addition of the third protein reinforces the Bt proteins found in Bollgard II. Having three proteins will increase the longevity of the technology because each has a different mode of action or kills the larvae in a different way. There is a decreased likelihood of supplemental applications to control worm pests because of enhanced three-gene activity.

WideStrike: PhytoGen varieties with the designation “W” or “W3” in their brand names are cotton lines tolerant to the Louisiana caterpillar pests known as tobacco budworms and fall armyworms. These varieties should not need any supplemental insecticidal sprays for controlling those pests. The characteristics and insect management recommendations previously mentioned for Bollgard II traits remain the same for the WideStrike trait in PhytoGen varieties.

TwinLink: In 2014, Stoneville varieties with the designation “T” in their brand names became available and are tolerant to the tobacco budworm. Also, they provide reduced bollworm damage through superior bollworm protection comparable to Bollgard II and significant reduction in damage caused by armyworms when compared to non-Bt cotton. Under high and persistent populations of bollworms and armyworms, supplemental chemical control strategies will be necessary for satisfactory management practices.

TwinLink Plus: In 2016, Stoneville varieties with the designation “TP” in their brand names became available. TwinLink plus offers three Bt proteins for greater technology durability and improved resistance management. There is a decreased likelihood of supplemental applications to control worm pests as a result of enhanced three-gene activity.

Root-knot nematode: Since 2015, several companies have been marketing cotton varieties with tolerance to the root-knot nematode. This is not a transgenic technology. Planting these varieties on sandier soils with known root-knot nematode populations is a new option, especially with the loss of Temik.

Seeding Rate and Stand

Two to three plants per foot of row is the ideal final plant population in 30- to 40-inch rows. To achieve this “stand,” seeding rates should be slightly higher based on the actual stated germination.

Seed sizes vary, and the number of cotton seeds per pound ranges from a low of 3,700 up to a high of 5,800. Therefore, seeding rates have to be based on seed numbers per acre and not pounds of seed per acre.

To ensure the best seedling emergence, planting should be scheduled during the most favorable conditions possible based on current and forecast temperatures and soil moisture levels.

Being aware of the cool germination test results, however, is more important than determining what actually is the good or bad cool germination rate. For example, a seed lot with 85 percent cool germination is more vigorous than one with a 65 percent cool germination test result. If the 65 percent cool germination lot is planted in warm and otherwise good conditions, however, overall germination is likely to be as high as the 85 percent lot. Under adverse conditions, the 85 percent cool germination lot is likely to germinate at a much higher rate than the 65 percent cool germination lot. A somewhat arbitrary division of the cool germination test results is shown the following table.

Cool Germination %	Vigor
>80	Excellent
65-80	Good
50-65	Acceptable – plant under good conditions
<50	Poor – most seed companies will not sell this seed

Most planting date studies indicate the ideal planting window in Louisiana for cotton is between April 15 and May 15. Earlier plantings are possible without causing significant yield loss, but there is a risk of cold damage or reduced ability of the plants to recover from thrips pressure. Two LSU AgCenter planting date studies have demonstrated that planting after June 1 can reduce yield potential significantly.

Most cotton seed sold will have at least an 80 percent germination reported on the bag. This is the result of the warm germination test. However, field conditions typically are more adverse than laboratory tests. The cool germination test can approximate adverse field conditions and is a measure of seed vigor. Results from the cool germination test are not reported on the bag but can be obtained from the seed company. Growers are encouraged to request this information.

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

Table 1. Cultural practices for the cotton official variety trials managed at the LSU AgCenter Research Stations, 2017.

Event	Dean Lee Alexandria		Northeast St. Joseph		Macon Ridge Winnsboro	Red River Bossier City	
	silt loam	clay	silt loam	clay	silt loam	v. fine sandy loam	clay
Planting date	4/27	5/9	5/8	5/8	4/26	5/1	5/3
Emergence	5/2	5/14	5/14	5/15	5/1	5/6	5/8
Row spacing	38	38	40	40	40	40	40
Seeding rate	45850	45850	45850	45850	45850	45850	45850
Previous crop	soybeans	soybeans	cotton	corn	soybeans	soybeans	gr. sorghum
Irrigation	No	No	Yes	Yes	Yes	No	No
No. Irrigation events	0	0	1	2	1	0	0
N, P, K (lbs)	90-32-63-6	90-32-63-6	60-0-0-4	80-0-0-5	90-50-50-6	65-0-0	65-0-0
Defoliation dates	9/11	10/4	10/3 & 10/10	9/21 & 9/26	9/21 & 9/29	9/21	9/29
Harvest date	9/23	9/21	10/20	10/5	10/6	10/2	10/11

Trial	GPS Location						
Dean Lee-clay	31.179567N, 92.387436W						
Dean Lee-silt loam	31.170203N, 92.406156W						
Northeast-clay	31.93828N, 91.23256W						
Northeast-silt loam	31.94140N, 91.226787W						
Macon Ridge-silt loam	32.141919N, 91.699397W						
Red River-silt loam	32.419587N, 93.639048W						
Red River-clay	32.416170N, 93.638078W						

Table 2. Participating seed companies and varieties entered, 2017.

Company								
All Tex (1)	Americot (5)	CropLan (1)	Deltapine (7)	Dyna-Gro (7)	Fiber Max (1)	Phytogen (18)	Seed Source Genetics (2)	Stoneville (7)
AT585	NG4601B2XF	CL9608B3XF	DP1835B3XF	DG3605B2XF	FM1953GLTP	PX4A52W3FE	UA222	ST4949GLT
	NG3522B2XF		DP1518B2XF	DG3526B2XF		PX4A54W3FE	HQ210	ST4946GLB2
	AMX1714B2XF		DP1646B2XF	CPS16214B2XF		PX3A99W3FE		ST5020GLT
	NG4689B2XF		DP1555B2RF	CPS17251NR-B2XF		PHY330W3FE		ST6182GLT
	NG5007B2XF		DP1845B3XF	DG3757B2XF		PX4A57W3FE		ST4848GLT
			DP1522B2XF	CPS1702GLT		PHY300W3FE		ST6448GLB2
			16R346B3XF	CPS17330B3XF		PX3A82W3FE		ST5517GLTP
						PX3A96W3FE		
						PHY312WRF		
						PHY340W3FE		
						PX4A62W3FE		
						PHY450W3FE		
						PX5B76W3FE		
						PHY444WRF		
						PHY490W3FE		
						PX5B73W3FE		
						PX2A28W3FE		
						PX5A57W3FE		

Table 3. Two-year lint yield performance for the cotton varieties across seven locations.

Variety	2016 Lint Yield (Lbs. Acre)										2017 Lint Yield (Lbs. Acre)										Average across locations
	Alexandria		Winnsboro		St. Joseph		Bossier City		2016 Average		Alexandria		Winnsboro		St. Joseph		Bossier City		2017 Average		
	Clay	Silt loam	Silt loam	Silt loam	Clay	Silt loam	Clay	Sandy loam		Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Clay	Silt loam	Clay	Sandy loam		
DP1646B2XF	1802	1841	1718	1432	1212	1060	1166	1462	1781	1320	1462	1014	1064	830	1234	1348					
DG3605B2XF	2070	1582	1800	1513	1202	886	939	1427	1783	1076	1321	1035	906	1192	1310						
DP1555B2RF	1830	1553	1713	1455	1092	1015	1094	1393	1780	1089	1333	1040	693	1183	1288						
DP1518B2XF	1886	1349	1638	1276	1009	1052	881	1299	1877	1406	1294	1236	924	1264	1281						
PHY312WRF	1629	1434	1653	1569	1020	885	877	1295	1839	1279	1211	1027	810	1163	1229						
DG3526B2XF	1760	1572	1636	1188	909	879	1029	1282	1790	1162	1211	989	952	1162	1222						
DP1522B2XF	1484	1484	1586	1341	1202	1139	936	1310	1708	1150	1159	1128	742	1123	1216						
ST4949GLT	1521	1196	1477	1399	1147	1020	1066	1261	1703	1073	1257	1013	916	1154	1207						
PHY444WRF	1789	1499	1537	1207	987	1163	1016	1314	1592	1085	1157	833	770	1096	1205						
ST4848GLT	1591	1241	1724	1290	851	1213	1136	1292	1656	1114	1091	945	819	1054	1173						
ST5020GLT	1605	1223	1289	1270	1019	1084	972	1209	1788	1298	1149	1134	788	1115	1162						
ST4946GLB2	1596	1120	1435	1227	882	1158	969	1198	1826	975	1148	1137	948	1123	1160						
NG5007B2XF	1888	1471	1495	1055	928	1063	1025	1275	1640	974	1138	892	641	1037	1156						
ST6182GLT	1698	1419	1441	1141	928	972	889	1212	1568	1087	1180	823	549	1066	1139						
DG3757B2XF	1730	1381	1610	1157	880	770	1077	1229	1643	869	1186	935	533	1032	1131						
UA222	1513	1197	1398	1121	967	517	528	1034	1682	1105	1186	1077	477	1063	1049						
HQ210CT	1475	1041	1225	1159	694	620	294	930	1617	668	844	802	550	887	908						
Overall mean	1698	1388	1551	1282	996	970	935	1260	1722	1102	1196	1114	923	990	1115	1187					

Table 4. One-year lint yield performance for the cotton varieties planted across seven locations, 2017.

	Alexandria		Winnsboro	St. Joseph		Bossier City		Average across locations
	Clay	Silt loam	Silt loam	Clay	Silt loam	Clay	Sandy loam	
Variety	Lint yield (pounds/acre)							
DP1835B3XF	1871	1038	1374	1325	1133	1196	1341	1325
PX4A52W3FE	1830	913	1347	1274	1237	1308	1131	1291
DP1518B2XF	1877	1406	1294	1153	961	1236	924	1264
DP1646B2XF	1781	1320	1462	1167	1014	1064	830	1234
PX4A54W3FE	1750	1319	1264	1422	844	1116	846	1223
PX3A99W3FE	1733	972	1197	1180	1226	1211	1013	1219
PHY330W3FE	1754	1344	1287	1163	861	1134	958	1214
CL9608B3XF	1765	1011	1245	1118	1094	1195	1031	1208
PX4A57W3FE	1699	1088	1350	1221	936	1200	906	1200
DG3605B2XF	1783	1076	1321	1131	1095	1035	906	1192
PHY300W3FE	1911	1037	1135	1197	908	1172	944	1186
PX3A82W3FE	1709	1260	1152	1130	1093	1034	916	1185
DP1555B2RF	1780	1089	1333	988	1363	1040	693	1183
PX3A96W3FE	1706	1061	1212	1132	1011	1189	881	1170
PHY312WRF	1839	1279	1211	1208	764	1027	810	1163
DG3526B2XF	1790	1162	1211	1081	950	989	952	1162
ST4949GLT	1703	1073	1257	1074	1039	1013	916	1154
PHY340W3FE	1795	1292	1190	1188	754	1060	746	1147
NG4601B2XF	1707	1062	1302	1206	895	1010	753	1134
DP1845B3XF	1715	984	1282	1098	846	1131	825	1126
CPS16214B2XF	1683	1319	1217	862	823	1057	909	1124
PX4A62W3FE	1823	987	1108	1226	941	1063	721	1124
ST4946GLB2	1826	975	1148	1125	701	1137	948	1123
DP1522B2XF	1708	1150	1159	1110	863	1128	742	1123
NG3522B2XF	1820	1053	1149	1108	856	1047	776	1115
ST5020GLT	1788	1298	1149	865	784	1134	788	1115
PHY450W3FE	1725	1229	1271	876	835	1100	758	1113
PX5B76W3FE	1666	824	1148	1010	1120	1089	904	1109
PHY444WRF	1592	1085	1157	1337	902	833	770	1096
CPS17251NR-B2XF	1663	780	1238	1034	804	1100	986	1086
ST6182GLT	1568	1087	1180	1352	902	823	549	1066
UA222	1682	1105	1186	1077	1116	797	477	1063
AMX1714B2XF	1803	864	1101	961	753	1097	851	1061
ST4848GLT	1656	1114	1091	992	759	945	819	1054
NG4689B2XF	1565	1408	1057	1052	719	959	530	1041
ST6448GLB2	1476	996	1217	1116	778	926	773	1040
NG5007B2XF	1640	974	1138	1036	941	892	641	1037
PHY490W3FE	1637	839	1287	1042	545	1141	771	1037
ST5517GLTP	1593	851	1113	1079	876	1035	682	1033
DG3757B2XF	1643	869	1186	1103	957	935	533	1032
CPS1702GLT	1637	913	1099	1001	828	1071	613	1023
PX5B73W3FE	1533	767	1073	945	966	946	868	1014
16R346B3XF	1485	802	1204	1037	811	1046	609	999
CPS17330B3XF	1679	764	1219	992	536	950	673	973
PX2A28W3FE	1506	756	1018	839	895	945	793	965
PX5A57W3FE	1484	784	1103	1080	874	677	494	928
FM1953GLTP	1443	711	941	1048	635	930	597	901
HQ210CT	1617	668	844	1136	589	802	550	887
AT585	1288	690	830	719	808	706	464	786
Overall mean	1692	1031	1183	1091	888	1035	796	
LSD (0.05)	216.63	246.99	209.29	229.62	274.78	186.08	282.33	
C.V. (%)	9.16	14.77	10.91	15.04	24.8	12.86	25.36	

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 5. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Dean Lee Research Station OVT, non-irrigated, Latanier clay, Alexandria, La., 2017.

Variety	Lint Yield (lbs./ac.)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢)	Dollar Return (Acre)
PHY300W3FE	1911	45.32	1.15	84.2	33.3	4.1	52.37	1000.66
DP1518B2XF	1877	44.18	1.18	84.3	32.8	4.0	52.49	985.19
DP1835B3XF	1871	46.97	1.19	83.4	33.2	4.1	52.42	980.77
PHY312WRF	1839	44.54	1.17	85.0	33.4	4.0	52.52	966.09
PX4A52W3FE	1830	45.44	1.16	85.1	35.8	3.9	52.57	962.03
ST4946GLB2	1826	42.54	1.14	83.5	34.7	4.2	52.27	954.52
PX4A62W3FE	1823	45.73	1.22	85.2	36.5	3.9	52.67	960.02
NG3522B2XF	1820	44.51	1.10	82.3	29.1	4.2	51.12	930.03
AMX1714B2XF	1803	42.92	1.14	83.9	31.3	4.2	52.12	939.78
PHY340W3FE	1795	46.82	1.18	85.5	32.1	4.3	52.39	940.54
DG3526B2XF	1790	46.97	1.13	84.2	31.6	4.3	51.94	929.43
ST5020GLT	1788	42.43	1.19	84.3	34.6	4.0	52.54	939.23
DG3605B2XF	1783	45.63	1.25	84.7	32.4	4.0	52.52	936.24
DP1646B2XF	1781	45.62	1.24	85.2	32.1	4.2	52.54	935.61
DP1555B2RF	1780	47.01	1.19	85.1	35.3	4.2	52.59	935.59
CL9608B3XF	1765	48.22	1.18	84.5	31.7	4.1	52.39	924.81
PHY330W3FE	1754	46.61	1.16	85.1	33.7	4.1	52.57	921.93
PX4A54W3FE	1750	45.08	1.15	84.7	35.8	4.2	52.42	917.27
PX3A99W3FE	1733	44.24	1.17	84.4	34.5	3.8	52.52	910.00
PHY450W3FE	1725	44.12	1.15	85.0	38.8	4.7	52.37	903.31
DP1845B3XF	1715	45.42	1.23	84.7	34.9	3.7	52.57	901.50
PX3A82W3FE	1709	45.24	1.15	85.3	37.4	4.1	52.54	897.81
DP1522B2XF	1708	43.25	1.15	84.1	33.4	4.6	52.27	892.64
NG4601B2XF	1707	45.41	1.18	85.1	35.8	4.3	52.52	896.74
PX3A96W3FE	1706	43.74	1.19	85.3	34.2	4.2	52.59	897.09
ST4949GLT	1703	46.73	1.11	83.4	31.1	4.1	51.54	877.37
PX4A57W3FE	1699	46.14	1.13	84.1	35.8	4.0	52.29	888.53
CPS16214B2XF	1683	43.75	1.16	85.3	33.7	4.6	52.44	882.42
UA222	1682	42.02	1.18	84.9	35.8	4.1	52.62	885.13
CPS17330B3XF	1679	48.68	1.17	85.0	35.4	4.6	52.49	881.30
PX5B76W3FE	1666	44.10	1.15	84.8	33.1	4.2	52.39	872.67
CPS17251NR-B2XF	1663	46.11	1.21	84.9	34.0	4.3	52.57	874.11
ST4848GLT	1656	45.05	1.15	84.4	32.4	4.3	52.32	866.22
DG3757B2XF	1643	46.52	1.16	84.4	32.8	4.4	52.34	859.85
NG5007B2XF	1640	45.80	1.16	83.9	30.8	4.3	52.14	855.12
PHY490W3FE	1637	43.65	1.15	84.0	36.8	4.3	52.29	856.07
CPS1702GLT	1637	42.30	1.15	82.9	33.1	3.7	52.20	853.98
HQ210CT	1617	40.08	1.11	82.3	32.8	4.5	51.53	833.69
ST5517GLTP	1593	41.54	1.16	83.5	33.9	4.0	52.39	833.66
PHY444WRF	1592	45.28	1.27	86.1	34.4	3.6	52.22	830.40
ST6182GLT	1568	48.03	1.16	84.4	31.9	4.2	52.29	819.70
NG4689B2XF	1565	43.61	1.13	82.6	34.2	4.3	51.92	812.93
PX5B73W3FE	1533	44.63	1.17	84.1	33.0	4.1	52.44	804.75
PX2A28W3FE	1506	43.28	1.19	85.0	34.2	4.0	52.59	792.07
16R346B3XF	1485	44.37	1.26	86.2	35.8	3.8	52.69	782.27
PX5A57W3FE	1484	42.70	1.17	85.1	35.5	3.9	52.57	780.58
ST6448GLB2	1476	42.28	1.22	85.4	32.7	4.2	52.64	777.23
FM1953GLTP	1443	40.21	1.19	84.3	34.4	3.9	52.54	758.45
AT585	1288	41.23	1.19	85.3	38.8	4.3	52.62	677.37
Overall mean	1691.56	44.61	1.17	84.5	34	4.1	52.363	885.62
LSD (0.05)	216.63	1.37	0.0275	1.287	1.529	0.197	0.4405	113.2721
C.V. (%)	9.16	2.20	1.68	1.09	3.22	3.4	0.6	9.15

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 6. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Dean Lee Research Station OVT, non-irrigated, Coushatta silt loam, Alexandria, La., 2017.

Variety	Lint Yield (lbs./ac.)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢)	Dollar Return (Acre)
NG4689B2XF	1408	39.7	1.17	84.4	34.7	4.3	52.46	738.56
DP1518B2XF	1406	40.6	1.16	84.9	32.0	4.1	52.52	738.52
PHY330W3FE	1344	44.0	1.18	84.4	33.7	4.1	52.46	705.07
DP1646B2XF	1320	44.5	1.24	85.2	31.6	4.1	52.49	693.13
CPS16214B2XF	1319	41.1	1.18	84.7	33.1	4.3	52.59	693.50
PX4A54W3FE	1319	43.1	1.15	84.2	35.3	4.2	52.36	690.36
ST5020GLT	1298	40.3	1.23	85.2	34.9	4.2	52.59	682.63
PHY340W3FE	1292	44.0	1.16	83.8	33.2	3.6	52.46	677.74
PHY312WRF	1279	42.1	1.18	84.1	34.5	3.7	52.49	671.35
PX3A82W3FE	1260	41.9	1.16	84.9	36.3	3.6	51.82	652.32
PHY450W3FE	1229	42.2	1.14	84.8	36.8	4.4	52.29	642.63
DG3526B2XF	1162	43.3	1.13	84.3	31.9	4.4	52.16	605.96
DP1522B2XF	1150	41.5	1.17	83.1	34.6	4.4	52.36	601.90
ST4848GLT	1114	44.7	1.14	83.2	33.6	4.4	52.19	581.37
UA222	1105	39.6	1.21	84.9	34.7	4.3	52.59	581.42
DP1555B2RF	1089	44.7	1.20	84.6	35.8	4.3	52.52	571.83
PX4A57W3FE	1088	43.2	1.13	83.4	35.7	3.7	52.02	566.18
ST6182GLT	1087	45.0	1.14	83.3	31.6	4.2	52.26	568.55
PHY444WRF	1085	42.7	1.25	85.2	34.0	3.7	52.62	570.97
DG3605B2XF	1076	42.9	1.26	84.8	33.0	3.8	52.56	565.39
ST4949GLT	1073	44.5	1.11	83.3	32.6	4.2	51.51	552.56
NG4601B2XF	1062	43.3	1.18	84.1	35.4	3.9	52.56	557.94
PX3A96W3FE	1061	41.5	1.18	84.4	33.9	3.9	52.49	556.82
NG3522B2XF	1053	41.0	1.13	83.1	31.6	4.2	52.07	546.39
DP1835B3XF	1038	44.9	1.21	84.2	33.7	4.2	52.52	545.13
PHY300W3FE	1037	43.4	1.14	83.6	32.9	4.0	52.16	540.87
CL9608B3XF	1011	43.0	1.16	82.6	31.4	3.9	52.16	527.81
ST6448GLB2	996	39.5	1.20	83.8	32.3	4.2	52.46	522.52
PX4A62W3FE	987	42.6	1.21	84.5	37.3	3.7	51.16	506.19
DP1845B3XF	984	43.0	1.23	83.7	35.1	3.6	51.76	509.74
ST4946GLB2	975	40.3	1.14	83.9	35.3	4.3	52.36	510.41
NG5007B2XF	974	41.1	1.18	83.7	31.4	4.1	52.32	509.79
PX3A99W3FE	972	41.5	1.17	83.7	33.2	3.7	51.69	501.89
PX4A52W3FE	913	41.2	1.16	84.6	34.1	4.2	52.46	478.97
CPS1702GLT	913	40.8	1.15	83.7	34.4	4.1	52.29	477.33
DG3757B2XF	869	42.3	1.15	83.2	32.5	4.4	52.12	453.27
AMX1714B2XF	864	41.9	1.15	83.8	32.0	4.2	52.36	452.58
ST5517GLTP	851	39.4	1.16	83.6	35.2	4.2	52.22	444.42
PHY490W3FE	839	42.6	1.17	84.2	37.3	4.1	52.39	439.40
PX5B76W3FE	824	40.3	1.17	84.9	34.2	3.9	52.56	433.41
16R346B3XF	802	43.4	1.23	84.5	34.4	3.4	51.86	414.67
PX5A57W3FE	784	41.0	1.16	84.4	35.3	3.4	51.82	407.17
CPS17251NR-B2XF	780	43.3	1.20	83.7	33.8	4.4	52.36	408.41
PX5B73W3FE	767	40.6	1.17	84.2	33.8	4.0	52.49	402.45
CPS17330B3XF	764	46.3	1.17	83.8	36.0	4.1	52.39	400.65
PX2A28W3FE	756	40.2	1.17	83.3	32.7	3.6	52.26	394.82
FM1953GLTP	711	38.6	1.19	83.9	33.1	4.0	52.42	372.96
AT585	690	39.0	1.21	85.1	39.1	4.0	52.66	363.15
HQ210CT	668	37.7	1.14	82.7	33.4	4.3	52.22	349.13
Overall mean	1031.38	42.00	1.17	84.1	34	4	52.28	539.38
LSD (0.05)	246.99	1.49	0.0291	1.263	1.522	0.302	NS	130.2558
C.V. (%)	14.77	2.54	1.77	1.07	3.2	5.35	0.95	14.89

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 7. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Macon Ridge Research Station OVT, irrigated, Gigger silt loam, Winnsboro, La., 2017.

Variety	Lint Yield (lbs./ac.)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢)	Dollar Return (Acre)
DP1646B2XF	1462	44.1	1.21	83.7	30.1	4.4	52.06	761.34
DP1835B3XF	1374	44.0	1.17	83.8	31.6	4.4	52.16	716.89
PX4A57W3FE	1350	43.3	1.12	83.5	34.0	3.8	51.91	700.97
PX4A52W3FE	1347	41.8	1.15	85.0	33.9	4.2	52.32	704.96
DP1555B2RF	1333	42.5	1.16	83.1	32.8	4.3	52.39	698.36
DG3605B2XF	1321	43.2	1.22	83.7	30.6	4.1	52.16	689.31
NG4601B2XF	1302	41.7	1.19	84.7	34.2	4.3	52.49	683.42
DP1518B2XF	1294	42.0	1.17	83.8	28.7	4.0	51.89	672.60
PHY330W3FE	1287	42.1	1.18	84.0	32.3	3.9	52.49	675.74
PHY490W3FE	1287	41.3	1.15	84.6	36.4	4.3	52.29	672.76
DP1845B3XF	1282	42.8	1.26	84.7	32.9	3.7	52.29	670.96
PHY450W3FE	1271	41.3	1.14	83.4	36.8	4.2	52.29	664.80
PX4A54W3FE	1264	41.2	1.15	84.1	34.7	4.2	52.29	660.70
ST4949GLT	1257	43.7	1.12	83.7	30.6	4.4	51.42	646.37
CL9608B3XF	1245	43.7	1.14	83.1	29.3	4.4	51.66	643.34
CPS17251NR-B2XF	1238	42.0	1.19	82.5	31.1	4.5	52.07	644.04
CPS17330B3XF	1219	45.0	1.18	85.1	35.0	4.5	52.52	640.11
CPS16214B2XF	1217	41.4	1.16	84.8	31.4	4.3	52.29	636.47
ST6448GLB2	1217	38.8	1.20	83.7	30.0	4.4	51.89	631.61
PX3A96W3FE	1212	40.7	1.18	84.0	31.6	4.0	52.36	634.49
DG3526B2XF	1211	43.4	1.13	83.7	29.7	4.4	51.82	627.74
PHY312WRF	1211	40.7	1.17	83.1	30.8	4.0	52.06	630.35
16R346B3XF	1204	42.2	1.24	84.6	33.5	4.1	52.42	631.09
PX3A99W3FE	1197	41.2	1.15	83.9	31.8	3.7	52.32	626.16
PHY340W3FE	1190	42.4	1.14	84.0	31.1	4.3	52.19	621.23
UA222	1186	39.0	1.21	84.9	33.7	4.0	52.62	624.29
DG3757B2XF	1186	42.7	1.14	83.6	30.2	4.7	51.62	612.33
ST6182GLT	1180	44.0	1.15	83.1	29.0	4.6	51.96	613.30
DP1522B2XF	1159	40.9	1.13	83.3	31.0	4.7	51.81	600.59
PHY444WRF	1157	41.9	1.24	85.8	33.0	3.6	52.42	607.08
PX3A82W3FE	1152	42.1	1.13	85.3	34.4	3.8	52.52	605.15
NG3522B2XF	1149	42.5	1.09	81.9	27.8	4.5	50.47	579.78
ST5020GLT	1149	39.4	1.19	85.1	34.1	4.2	52.29	601.09
PX5B76W3FE	1148	39.6	1.17	83.9	33.0	3.8	52.49	602.59
ST4946GLB2	1148	40.0	1.14	82.9	31.5	4.2	51.92	596.52
NG5007B2XF	1138	40.3	1.16	82.9	28.5	4.1	51.69	588.31
PHY300W3FE	1135	43.7	1.13	83.0	31.5	4.3	51.81	588.92
ST5517GLTP	1113	39.2	1.18	83.2	34.3	4.0	51.24	573.05
PX4A62W3FE	1108	42.3	1.22	85.0	35.8	3.6	51.31	568.14
PX5A57W3FE	1103	39.9	1.16	84.4	33.2	3.6	52.49	579.24
AMX1714B2XF	1101	39.7	1.12	83.1	30.0	4.2	51.42	566.79
CPS1702GLT	1099	39.4	1.14	82.2	31.7	4.0	51.86	569.61
ST4848GLT	1091	42.3	1.14	82.9	31.0	4.2	52.04	567.47
PX5B73W3FE	1073	39.8	1.16	84.0	32.4	3.8	52.36	561.13
NG4689B2XF	1057	41.0	1.12	82.8	30.4	4.4	52.26	551.87
PX2A28W3FE	1018	40.1	1.18	83.6	32.0	3.7	50.82	518.21
FM1953GLTP	941	35.3	1.18	83.7	31.4	3.8	52.36	492.39
HQ210CT	844	37.4	1.12	82.7	33.2	4.7	52.06	439.55
AT585	830	39.1	1.18	84.1	36.9	4.3	52.52	436.25
Overall mean	1183.00	41.40	1.16	83.8	32.1	4.1	52.05	616.06
LSD (0.05)	209.29	1.47	0.031	1.287	1.85	0.342	0.9419	111.5407
C.V. (%)	10.91	2.53	1.91	1.1	4.1	5.92	1.12	11.17

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 8. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Northeast Research Station OVT, irritated, Sharkey clay, St. Joseph, La., 2017.

Variety	Lint Yield (lbs./ac.)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢)	Dollar Return (Acre)
PX4A54W3FE	1422	42.8	1.16	84.7	33.1	4.6	52.32	743.72
ST6182GLT	1352	44.2	1.14	82.5	29.8	4.5	51.78	699.32
PHY444WRF	1337	40.7	1.23	85.3	31.9	4.0	52.62	703.20
DP1835B3XF	1325	43.0	1.17	83.2	32.2	4.5	52.15	691.32
PX4A52W3FE	1274	39.8	1.14	84.6	33.2	4.4	52.27	665.62
PX4A62W3FE	1226	40.2	1.23	85.3	35.4	4.4	52.54	644.36
PX4A57W3FE	1221	41.7	1.12	82.9	33.9	4.4	52.04	635.13
PHY312WRF	1208	38.7	1.14	84.8	32.4	4.4	52.34	632.37
NG4601B2XF	1206	41.0	1.16	84.0	34.2	4.7	52.39	631.98
PHY300W3FE	1197	41.4	1.16	84.2	32.4	4.5	52.33	626.16
PHY340W3FE	1188	41.8	1.16	83.0	30.4	4.5	51.93	617.01
PX3A99W3FE	1180	40.4	1.15	83.9	32.9	4.5	52.24	616.29
DP1646B2XF	1167	43.1	1.22	84.2	30.5	4.4	52.12	607.82
PHY330W3FE	1163	42.0	1.14	83.9	32.6	4.5	52.19	606.99
DP1518B2XF	1153	39.4	1.17	84.9	31.4	4.5	52.29	602.90
HQ210CT	1136	40.0	1.12	82.5	33.5	4.9	51.15	586.02
PX3A96W3FE	1132	37.7	1.14	83.5	31.3	4.6	51.84	587.15
DG3605B2XF	1131	39.8	1.22	83.5	31.0	4.3	52.27	592.55
PX3A82W3FE	1130	39.3	1.12	83.7	34.3	4.5	51.93	589.91
ST4946GLB2	1125	37.8	1.14	83.6	33.5	4.7	52.17	586.87
CL9608B3XF	1118	44.1	1.16	83.2	30.3	4.3	52.00	581.46
ST6448GLB2	1116	39.2	1.20	83.7	30.5	4.7	51.54	572.98
DP1522B2RF	1110	40.5	1.15	82.8	31.5	4.9	51.40	571.25
NG3522B2XF	1108	39.0	1.09	81.9	29.3	4.7	50.85	564.58
DG3757B2XF	1103	42.2	1.14	83.7	30.8	4.7	52.07	574.06
DP1845B3XF	1098	40.8	1.24	85.4	34.6	4.1	52.69	578.23
DG3526B2XF	1081	42.1	1.12	82.9	29.9	4.7	51.05	551.37
PX5A57W3FE	1080	40.6	1.17	83.3	33.5	4.2	52.32	564.92
ST5517GLTP	1079	36.6	1.17	83.0	33.2	4.3	52.28	564.30
UA222	1077	39.1	1.16	83.3	33.7	4.8	52.22	560.87
ST4949GLT	1074	41.6	1.10	82.3	31.0	4.7	51.33	550.63
NG4689B2XF	1052	38.3	1.13	82.2	32.4	4.7	51.74	544.44
FM1953GLTP	1048	36.3	1.20	84.1	32.9	4.3	52.39	550.69
PHY490W3FE	1042	41.1	1.13	82.9	35.4	4.7	51.47	536.27
16R346B3XF	1037	40.6	1.24	85.0	34.0	4.3	52.57	545.18
NG5007B2XF	1036	40.1	1.17	83.8	30.1	4.4	51.92	538.03
CPS17251NR-B2XF	1034	42.2	1.21	83.6	32.4	4.7	52.34	541.29
PX5B76W3FE	1010	40.3	1.16	84.1	33.2	4.5	52.37	529.02
CPS1702GLT	1001	39.0	1.15	82.1	31.6	4.1	52.12	521.56
ST4848GLT	992	40.8	1.13	83.8	30.8	4.8	51.92	514.96
CPS17330B3XF	992	43.6	1.16	84.3	33.8	4.9	51.79	513.26
DP1555B2RF	988	41.5	1.19	83.8	33.9	4.5	52.39	517.48
AMX1714B2XF	961	40.8	1.15	83.6	30.1	4.6	51.92	498.87
PX5B73W3FE	945	39.8	1.13	83.2	31.7	4.5	51.89	490.44
PHY450W3FE	876	38.5	1.12	83.7	35.9	4.9	50.79	444.10
ST5020GLT	865	36.8	1.20	84.6	33.3	4.7	52.44	453.53
CPS16214B2XF	862	40.7	1.17	84.6	32.6	4.8	52.37	451.52
PX2A28W3FE	839	37.1	1.17	83.1	32.0	4.4	52.12	436.46
AT585	719	38.0	1.20	84.7	38.2	4.6	52.49	377.07
Overall mean	1091.00	40.30	1.16	83.7	32.5	4.5	52.03	567.83
LSD (0.05)	229.62	1.44	0.0288	1.373	1.473	0.189	0.7803	120.1474
C.V. (%)	15.04	2.56	1.77	1.17	3.24	2.98	1.07	15.12

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 9. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Northeast Research Station OVT, irrigated, Commerce silt loam, St. Joseph, La., 2017.

Variety	Lint Yield (lbs./ac.)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢)	Dollar Return (Acre)
DP1555B2RF	1363	41.1	1.21	84.3	34.3	4.2	52.53	715.46
PX4A52W3FE	1237	37.8	1.17	83.8	33.3	4.1	52.41	647.93
PX3A99W3FE	1226	37.2	1.18	84.1	32.6	4.0	52.43	642.67
DP1835B3XF	1133	43.3	1.17	83.2	31.6	4.4	52.15	590.94
PX5B76W3FE	1120	37.0	1.18	84.2	32.7	3.9	52.43	587.28
UA222	1116	36.2	1.21	85.0	33.9	4.7	52.03	582.26
DG3605B2XF	1095	40.9	1.26	84.1	31.1	4.0	52.33	572.78
CL9608B3XF	1094	42.3	1.17	83.5	30.0	4.4	51.97	568.53
PX3A82W3FE	1093	37.6	1.16	84.8	35.4	3.8	52.09	573.52
ST4949GLT	1039	40.7	1.13	82.6	31.7	4.2	51.82	538.72
DP1646B2XF	1014	40.2	1.25	84.6	31.2	4.3	52.35	530.76
PX3A96W3FE	1011	35.8	1.15	83.8	32.6	3.9	52.35	529.39
PX5B73W3FE	966	38.9	1.15	83.8	32.0	4.0	52.23	504.38
DP1518B2XF	961	37.7	1.15	82.6	30.5	3.5	50.44	484.83
DG3757B2XF	957	38.4	1.16	83.7	30.8	4.8	52.07	498.09
DG3526B2XF	950	39.2	1.13	83.1	31.8	4.4	51.98	493.99
PX4A62W3FE	941	39.3	1.22	83.9	34.9	3.2	48.96	462.03
NG5007B2XF	941	37.6	1.14	82.1	30.1	4.4	51.52	484.43
PX4A57W3FE	936	41.8	1.10	83.6	33.7	4.0	51.60	483.18
PHY300W3FE	908	40.7	1.14	82.0	30.6	3.6	51.73	469.81
PHY444WRF	902	38.1	1.24	85.5	33.1	3.4	50.91	461.93
ST6182GLT	902	41.6	1.16	83.3	30.1	4.4	51.93	468.33
NG4601B2XF	895	39.7	1.18	84.4	35.4	4.5	52.43	469.49
PX2A28W3FE	895	37.3	1.19	84.1	33.5	3.9	52.49	469.99
ST5517GLTP	876	37.7	1.19	82.9	34.5	4.1	52.40	459.35
PX5A57W3FE	874	38.9	1.15	83.1	32.6	3.6	51.83	451.96
DP1522B2XF	863	39.5	1.16	83.8	32.7	4.4	52.25	450.90
PHY330W3FE	861	41.3	1.17	82.2	31.5	3.4	50.52	436.58
NG3522B2XF	856	37.6	1.09	81.9	28.7	3.9	50.96	436.61
DP1845B3XF	846	37.1	1.26	84.9	35.2	3.9	52.61	445.17
PX4A54W3FE	844	39.4	1.16	84.2	34.0	3.9	52.39	441.60
PHY450W3FE	835	36.9	1.13	84.0	37.3	4.4	52.09	434.44
CPS1702GLT	828	37.4	1.14	81.1	32.2	3.8	51.62	428.12
CPS16214B2XF	823	38.4	1.18	85.5	32.6	4.6	52.03	428.30
16R346B3XF	811	40.0	1.24	84.9	34.3	4.2	52.63	426.61
AT585	808	34.8	1.21	84.7	37.6	4.7	52.03	421.03
CPS17251NR-B2XF	804	39.3	1.21	84.0	32.3	4.6	52.41	421.47
ST5020GLT	784	36.2	1.22	84.4	34.0	4.2	52.55	411.86
ST6448GLB2	778	36.8	1.18	83.6	30.8	4.5	52.13	405.71
PHY312WRF	764	36.0	1.17	83.4	32.3	3.7	52.31	399.99
ST4848GLT	759	39.2	1.15	83.4	32.2	4.4	52.11	395.49
PHY340W3FE	754	41.7	1.15	82.0	30.3	3.7	51.89	391.11
AMX1714B2XF	753	37.3	1.14	83.4	30.8	4.2	52.05	392.01
NG4689B2XF	719	35.8	1.17	83.8	33.3	4.1	52.39	376.37
ST4946GLB2	701	37.8	1.15	82.2	32.9	4.2	52.15	365.51
FM1953GLTP	635	35.3	1.19	83.4	32.5	3.8	52.37	332.73
HQ210CT	589	35.9	1.11	82.6	33.1	5.1	49.53	290.67
PHY490W3FE	545	38.5	1.15	83.5	36.1	4.1	52.38	285.38
CPS17330B3XF	536	43.2	1.18	83.4	34.8	4.4	52.40	280.92
Overall mean	888.00	38.60	1.17	83.6	32.8	4.1	51.94	461.47
LSD (0.05)	274.78	2.00	0.0269	1.194	1.322	0.285	0.7907	144.2154
C.V. (%)	24.80	4.14	1.84	1.14	3.23	5.54	1.22	25.04

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 10. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Red River Research Station OVT, irrigated, Moreland clay, Bossier City, La., 2017.

Variety	Lint Yield (lbs./ac.)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢)	Dollar Return (Acre)
PX4A52W3FE	1308	42.3	1.15	83.1	33.4	4.8	51.62	674.51
DP1518B2XF	1236	41.7	1.19	84.0	31.7	4.6	52.32	646.44
PX3A99W3FE	1211	44.5	1.17	83.1	32.6	4.6	51.58	624.85
PX4A57W3FE	1200	44.9	1.11	82.2	33.6	4.8	51.54	618.12
DP1835B3XF	1196	43.6	1.20	84.5	33.0	4.7	51.87	621.99
CL9608B3XF	1195	44.6	1.15	83.2	30.9	4.7	51.77	618.96
PX3A96W3FE	1189	42.3	1.16	83.3	32.5	4.6	52.18	620.34
PHY300W3FE	1172	44.3	1.14	83.2	32.7	4.7	51.54	604.54
PHY490W3FE	1141	43.4	1.15	83.9	34.9	4.6	52.17	595.06
ST4946GLB2	1137	42.1	1.15	83.4	35.0	4.7	52.15	593.22
ST5020GLT	1134	40.5	1.16	84.7	34.2	4.7	52.44	594.61
PHY330W3FE	1134	44.9	1.15	83.6	32.8	4.8	52.22	592.00
DP1845B3XF	1131	42.7	1.17	83.4	33.5	5.0	51.04	577.37
DP1522B2XF	1128	43.0	1.11	82.7	32.3	5.0	50.04	564.14
PX4A54W3FE	1116	42.7	1.17	84.3	33.8	4.8	51.77	576.95
PHY450W3FE	1100	43.8	1.12	84.0	36.9	5.0	50.67	556.13
CPS17251NR-B2XF	1100	42.8	1.20	84.1	34.6	4.8	52.37	575.98
AMX1714B2XF	1097	41.8	1.13	83.1	31.6	4.8	51.39	563.96
PX5B76W3FE	1089	42.8	1.14	83.5	32.1	4.8	51.12	555.77
CPS1702GLT	1071	41.1	1.15	82.8	33.7	4.7	52.17	558.53
DP1646B2XF	1064	42.0	1.21	83.5	32.2	4.7	51.67	549.17
PX4A62W3FE	1063	40.9	1.18	84.0	34.8	4.7	52.32	555.63
PHY340W3FE	1060	43.9	1.16	83.6	32.4	4.6	51.62	547.45
CPS16214B2XF	1057	42.8	1.13	84.1	33.6	5.2	49.32	521.09
NG3522B2XF	1047	41.0	1.13	82.6	30.2	4.6	51.44	538.16
16R346B3XF	1046	42.6	1.19	83.8	33.1	4.7	51.48	538.68
DP1555B2RF	1040	44.2	1.17	83.4	34.2	4.9	51.17	532.02
DG3605B2XF	1035	43.3	1.20	83.6	32.1	4.6	51.97	537.27
ST5517GLTP	1035	39.8	1.16	83.0	35.0	4.8	51.09	527.95
PX3A82W3FE	1034	43.0	1.15	83.9	34.6	4.7	51.69	534.74
PHY312WRF	1027	41.0	1.15	83.2	32.9	4.7	52.22	536.17
ST4949GLT	1013	43.0	1.13	83.4	32.5	4.9	51.47	521.44
NG4601B2XF	1010	43.5	1.15	83.4	33.5	4.7	52.19	527.13
DG3526B2XF	989	41.9	1.14	83.7	32.6	4.8	51.62	509.69
NG4689B2XF	959	43.2	1.14	83.7	32.4	4.8	50.71	486.45
CPS17330B3XF	950	43.5	1.15	83.5	33.8	4.7	51.97	496.43
PX5B73W3FE	946	40.7	1.14	83.2	32.5	4.7	51.52	487.33
ST4848GLT	945	41.3	1.12	82.7	33.1	5.0	50.10	472.98
PX2A28W3FE	945	40.1	1.18	83.8	33.8	4.7	52.37	494.75
DG3757B2XF	935	44.0	1.17	83.6	33.0	5.0	51.07	477.77
FM1953GLTP	930	40.7	1.20	84.4	33.7	4.6	52.44	487.46
ST6448GLB2	926	40.5	1.18	84.7	32.3	4.7	51.65	477.22
NG5007B2XF	892	42.2	1.16	84.4	31.2	4.8	52.24	465.90
PHY444WRF	833	41.6	1.19	84.7	33.6	4.5	52.40	436.16
ST6182GLT	823	42.7	1.14	83.2	32.3	4.7	52.09	428.30
HQ210CT	802	40.9	1.11	82.8	32.5	5.0	50.03	402.62
UA222	797	43.3	1.18	83.8	34.1	4.9	51.24	408.00
AT585	706	40.4	1.20	85.1	38.9	4.9	51.97	367.57
PX5A57W3FE	677	40.7	1.19	84.0	35.3	4.5	52.37	354.43
Overall mean	1035.45	42.40	1.16	83.6	33.3	4.8		
LSD (0.05)	186.08	2.65	0.0516	NS	2.056	0.318		
C.V. (%)	12.86	4.48	3.19	1.44	4.42	4.8		

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 11. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Red River Research Station OVT, irrigated, Caplis very fine sandy loam, Bossier City, La., 2017.

Variety	Lint Yield (lbs./ac.)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢)	Dollar Return (Acre)
DP1835B3XF	1341	44.3	1.21	84.0	33.5	4.5	52.42	702.95
PX4A52W3FE	1131	40.7	1.20	85.5	34.5	4.3	52.64	595.11
CL9608B3XF	1031	41.2	1.18	84.1	31.3	4.5	52.29	538.93
PX3A99W3FE	1013	40.0	1.18	84.1	33.9	4.2	52.47	531.05
CPS17251NR-B2XF	986	41.2	1.21	84.7	34.9	4.5	52.42	516.85
PHY330W3FE	958	42.5	1.19	85.0	34.3	4.4	52.54	503.29
DG3526B2XF	952	42.3	1.16	84.0	32.5	4.9	51.67	491.86
ST4946GLB2	948	41.9	1.19	83.9	35.2	4.8	50.89	483.05
PHY300W3FE	944	41.8	1.17	83.9	33.4	4.7	52.34	493.94
DP1518B2XF	924	40.9	1.16	83.6	31.6	5.0	50.39	465.00
ST4949GLT	916	43.4	1.18	84.7	33.4	4.3	52.49	480.82
PX3A82W3FE	916	38.8	1.17	84.8	35.0	4.5	52.44	480.20
CPS16214B2XF	909	40.3	1.19	85.3	34.1	4.8	51.89	471.70
PX4A57W3FE	906	42.3	1.15	83.9	35.4	4.5	52.32	474.28
DG3605B2XF	906	40.4	1.24	84.2	32.5	4.4	52.39	474.78
PX5B76W3FE	904	40.6	1.19	84.6	34.1	4.7	51.89	468.82
PX3A96W3FE	881	39.2	1.22	84.8	34.4	4.4	52.57	463.12
PX5B73W3FE	868	39.5	1.18	84.4	35.1	4.6	52.49	455.41
AMX1714B2XF	851	41.0	1.18	84.6	32.8	4.8	51.84	441.25
PX4A54W3FE	846	40.5	1.18	84.4	35.3	4.6	52.39	442.96
DP1646B2XF	830	38.4	1.26	84.4	32.8	4.7	52.39	435.35
DP1845B3XF	825	42.6	1.25	84.2	34.6	4.3	52.48	432.76
ST4848GLT	819	41.1	1.17	84.4	34.1	4.9	51.49	424.43
PHY312WRF	810	39.0	1.19	84.7	35.2	4.5	52.52	425.29
PX2A28W3FE	793	38.8	1.22	85.3	34.7	4.1	52.59	417.09
ST5020GLT	788	38.5	1.21	84.3	34.6	4.6	51.92	410.59
NG3522B2XF	776	40.7	1.15	83.3	31.3	4.5	52.04	403.56
ST6448GLB2	773	38.6	1.20	83.6	31.0	4.6	52.15	402.75
PHY490W3FE	771	40.8	1.18	84.9	37.5	4.5	52.54	404.85
PHY444WRF	770	40.2	1.23	85.4	34.4	4.7	52.52	404.41
PHY450W3FE	758	38.7	1.17	84.3	35.8	4.7	51.82	392.74
NG4601B2XF	753	40.5	1.17	83.7	35.3	4.5	51.82	388.19
PHY340W3FE	746	38.6	1.17	84.1	32.5	4.8	52.24	389.82
DP1522B2XF	742	39.9		85.0	34.5	5.2	49.97	374.80
PX4A62W3FE	721	40.1	1.24	85.2	39.0	4.0	52.09	374.98
DP1555B2RF	693	42.4	1.21	84.7	35.4	4.5	51.94	361.10
ST5517GLTP	682	39.8	1.19	84.0	35.6	4.8	52.39	357.63
CPS17330B3XF	673	43.4	1.21	84.9	36.0	4.8	52.52	353.11
NG5007B2XF	641	39.7	1.20	83.8	31.7	4.7	52.24	334.66
CPS1702GLT	613	43.4	1.18	84.0	33.2	4.8	51.765	320.87
16R346B3XF	609	40.0	1.24	83.2	33.9	4.1	52.415	319.17
FM1953GLTP	597	39.2	1.20	84.8	33.4	4.8	51.89	308.14
HQ21OCT	550	37.2	1.15	83.4	34.4	4.6	51.59	283.07
ST6182GLT	549	42.9	1.19	85.2	33.4	4.5	52.54	288.42
DG3757B2XF	533	41.3	1.19	84.8	33.6	4.8	51.29	273.43
NG4689B2XF	530	40.7	1.17	85.1	34.1	4.9	50.99	269.70
PX5A57W3FE	494	38.7	1.17	84.3	34.6	4.1	52.44	260.28
UA222	477	37.9	1.19	84.5	33.1	4.9	51.84	248.45
AT585	464	37.8	1.21	85.5	37.1	4.8	52.02	241.21
Overall mean	796.24	40.5	1.19	84.4	34.2	4.6	52.06	414.97
LSD (0.05)	282.33	3.39	0.0378	1.358	2.011	0.407	1.2196	148.8497
C.V. (%)	25.36	5.98	2.27	1.15	4.21	6.35	1.68	

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 12. Summary of lint yield performance for the on-farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
DP1646B2XF	725	751	1142	841	1453	1145	519	1552	1036		1018
PHY330W3FE	748	607	1045	860	1390	1269	435	1674	1234	883	1015
DP1725B2XF	715	656	1062	853	1298	1427	537	1533	963	876	992
PHY340W3FE	697	610	978	766	1336	1236	407	1691	1279	879	988
PHY300W3FE	660	629	1078	800	1267	1197	426	1766	1047	828	970
ST5020GLT	595	627	994	775	1136	1267	410	1530	1200	964	950
ST5517GLTP	569	772	1018	699	1314	1203	395	1423	830	1043	927
PHY450W3FE	657	799	963	776	1080	1286	418	1305	907	936	913
ST4949GLT	587	859	1009	702	1072	1096	439	1326	1006	708	900
ST4848GLT	545	599	916	699	984	1243	471	1424	1068	708	866
Average	650	691	1021	777	1233	1237	446	1522	1057	890	

Table 13. Summary of percent turn-out for the on farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
DP1725B2XF	42.6	45.5	44.6	44.0	44.8	45.7	47.8	46.3	42.5	42.2	44.6
ST4949GLT	42.6	44.7	43.9	43.5	44.8	45.3	47.0	44.8	43.8		44.5
PHY330W3FE	44.3	42.0	43.7	44.3	44.6	45.1	45.9	44.9	42.7	42.9	44.0
PHY340W3FE	41.2	44.6	43.1	43.0	43.8	45.2	45.6	44.8	44.0	41.4	43.7
DP1646B2XF	40.6	44.6	43.8	42.4	43.7	45.2	44.6	45.2	42.2		43.6
PHY300W3FE	41.1	40.0	43.8	42.9	43.7	44.9	45.9	45.2	42.1	40.1	43.0
ST4848GLT	41.0	41.3	42.0	43.3	42.7	44.4	45.6	44.5	43.0	41.7	43.0
PHY450W3FE	42.1	43.8	41.9	41.9	42.1	44.1	43.5	42.3	40.8	42.3	42.5
ST5020GLT	37.1	44.1	41.4	38.7	40.9	41.1	42.7	42.2	40.6	42.5	41.1
ST5517GLTP	38.1	44.3	39.5	38.0	40.3	41.2	41.9	40.0	39.9	43.1	40.6
Average	41.1	43.5	42.8	42.2	43.1	44.2	45.1	44.0	42.2	42.0	

Table 14. Summary of fiber length values for the on-farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
DP1646B2XF	1.23	1.24	1.22	1.26	1.21	1.29	1.19	1.24	1.19		1.23
ST5020GLT	1.20	1.18	1.15	1.24	1.19	1.26	1.20	1.21	1.19	1.18	1.20
ST5517GLTP	1.18	1.20	1.14	1.18	1.17	1.21	1.17	1.18	1.14	1.18	1.18
DP1725B2XF	1.19	1.18	1.14	1.18	1.16	1.16	1.15	1.16	1.12	1.22	1.17
PHY330W3FE	1.16	1.14	1.16	1.20	1.14	1.21	1.13	1.17	1.13	1.18	1.16
PHY340W3FE	1.18	1.14	1.14	1.20	1.15	1.15	1.15	1.17	1.14	1.20	1.16
PHY300W3FE	1.13	1.19	1.13	1.21	1.14	1.21	1.15	1.17	1.12	1.17	1.16
ST4848GLT	1.15	1.22	1.13	1.18	1.13	1.19	1.13	1.16	1.12	1.18	1.16
PHY450W3FE	1.15	1.20	1.10	1.17	1.11	1.18	1.10	1.14	1.11	1.17	1.14
ST4949GLT	1.15	1.21	1.11	1.13	1.11	1.13	1.14	1.15	1.12	1.17	1.14
Average	1.17	1.19	1.14	1.20	1.15	1.20	1.15	1.18	1.14	1.19	

Table 15. Summary of fiber uniformity values for the on-farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
ST5020GLT	83.9	84.8	82.6	86.0	83.2	84.6	85.0	85.3	83.9	82.3	84.2
DP1646B2XF	83.2	84.6	84.4	85.0	84.0	83.8	84.5	84.9	83.0		84.2
PHY450W3FE	85.6	84.6	82.9	85.1	83.3	83.7	83.7	84.5	83.6	83.2	84.0
PHY340W3FE	84.2	84.2	83.4	85.4	83.5	84.0	84.6	84.6	81.5	82.7	83.8
PHY330W3FE	83.3	84.6	84.7	85.9	83.2	85.5	83.8	84.2	81.3	81.4	83.8
PHY300W3FE	83.1	83.9	83.4	86.5	83.4	84.4	84.2	85.2	82.3	81.4	83.8
ST4848GLT	82.0	85.2	83.2	84.2	83.7	85.6	83.4	84.0	82.7	83.7	83.8
ST5517GLTP	83.4	84.0	82.6	83.5	82.5	84.5	83.0	84.2	82.9	82.4	83.3
ST4949GLT	84.3	85.5	81.6	82.7	82.3	82.0	83.8	84.2	82.3		83.2
DP1725B2XF	81.6	84.1	82.0	84.3	83.2	83.5	82.7	84.0	81.7	81.8	82.9
Average	83.5	84.6	83.1	84.9	83.2	84.2	83.9	84.5	82.5	82.4	

Table 16. Summary of fiber strength values for the on-farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
PHY450W3FE	37.0	33.9	35.0	39.6	35.4	37.3	36.5	38.6	35.7	31.3	36.0
ST5020GLT	34.9	35.5	32.8	37.6	33.3	35.5	35.3	34.4	33.8	32.5	34.6
ST5517GLTP	33.6	34.2	33.8	36.2	33.9	35.0	33.9	35.0	32.7	29.2	33.8
PHY330W3FE	33.5	37.7	32.0	36.3	32.5	34.4	33.0	33.3	31.7	30.2	33.5
PHY300W3FE	32.5	36.4	33.9	34.3	32.6	34.1	33.0	34.6	31.7	30.8	33.4
ST4848GLT	32.4	35.2	31.5	33.0	32.9	34.6	31.4	34.1	32.5	32.1	33.0
PHY340W3FE	32.5	33.1	32.0	36.5	32.3	36.3	32.5	32.5	31.3	29.8	32.9
ST4949GLT	32.5	35.0	29.3	32.6	31.5	31.3	31.8	33.0	31.3		32.0
DP1646B2XF	30.2	32.4	30.6	33.3	31.1	33.1	32.1	32.6	30.7		31.8
DP1725B2XF	30.9	33.6	31.0	32.6	31.4	32.5	30.7	32.5	30.9	31.3	31.7
Average	33.0	34.7	32.2	35.2	32.7	34.4	33.0	34.1	32.2	30.9	

Table 17. Summary of micronaire values for the on-farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
PHY450W3FE	4.7	3.5	5.1	4.8	4.5	3.7	5.2	4.4	4.7	3.5	4.4
ST4848GLT	4.2	4.3	4.9	4.5	4.6	4.1	4.7	4.2	4.6	3.8	4.4
ST4949GLT	4.3	3.8	4.9	4.3	4.5	4.0	4.7	4.1	4.4		4.3
ST5020GLT	4.1	4.1	4.6	4.6	4.8	3.6	4.7	4.1	4.5	3.8	4.3
PHY300W3FE	4.2	3.9	4.8	4.6	4.4	3.7	4.8	4.0	4.0	4.0	4.2
DP1725B2XF	3.9	3.9	4.9	4.4	4.4	3.9	4.7	4.1	4.3	3.7	4.2
DP1646B2XF	4.4	3.9	4.7	3.9	4.2	4.0	4.6	3.9	4.0		4.2
ST5517GLTP	4.2	3.8	4.6	4.1	4.1	4.2	4.5	3.9	4.5	3.8	4.2
PHY340W3FE	3.7	3.8	4.7	4.4	4.3	3.7	4.7	4.1	4.0	4.2	4.2
PHY330W3FE	3.8	4.4	4.7	4.2	4.0	3.8	4.7	3.9	4.1	3.5	4.1
Average	4.2	3.9	4.8	4.4	4.4	3.9	4.7	4.1	4.3	3.8	

Table 18. Summary of loan values (cents per pound) for the on-farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
ST5020GLT	52.49	52.59	52.09	52.69	52.36	52.49	51.79	52.67	52.39	52.29	52.39
DP1646B2XF	52.09	52.49	52.19	52.69	52.26	52.49	52.33	52.57	52.23	52.26	52.37
ST5517GLTP	52.49	52.59	52.19	52.49	52.32	52.59	52.26	52.54	52.04	51.89	52.34
PHY330W3FE	52.39	52.39	52.29	52.69	52.16	52.69	52.22	52.42	51.99	51.94	52.32
PHY340W3FE	52.49	52.49	52.19	52.59	52.26	52.49	52.22	52.47	51.93	51.89	52.30
ST4848GLT	52.19	52.59	51.99	52.49	52.19	52.69	52.01	52.37	51.75	52.39	52.27
PHY300W3FE	52.09	52.49	52.09	52.69	52.26	52.59	51.52	52.52	51.70	51.94	52.19
DP1725B2XF	52.04	52.59	52.09	52.39	52.06	52.29	51.84	52.37	51.24	52.24	52.12
ST4949GLT	52.29	52.69	51.44	51.89	51.47	51.99	52.19	52.44	51.60	52.00	52.00
PHY450W3FE	52.49	52.49	48.79	52.49	51.46	52.49	49.28	52.35	51.89	52.19	51.59
Average	52.31	52.54	51.74	52.51	52.08	52.48	51.77	52.47	51.88	52.10	

Table 19. Summary of dollar return per acre values for the on-farm core block demonstrations across locations, 2017.

Variety	Avoyelles-1	Avoyelles-2	Catahoula	E. Carroll	Franklin	Morehouse	P. Coupee	Rapides-1	Rapides-2	Tensas	Average
DP1646B2XF	377.66	394.20	595.75	443.37	759.44	601.01	267.15	828.52	516.74	531.54	
PHY330W3FE	392.01	318.01	546.43	452.98	725.14	668.64	227.05	850.77	628.74	458.63	526.84
DP1725B2XF	371.98	344.99	552.94	446.85	675.43	746.18	278.42	816.06	493.42	457.62	518.39
PHY340W3FE	365.92	320.19	510.16	403.07	698.21	648.78	212.37	860.00	656.72	456.11	513.15
PHY300W3FE	343.76	330.16	561.53	421.78	662.11	629.50	219.84	910.38	538.07	430.06	504.72
ST5020GLT	312.52	329.74	517.51	408.27	594.74	665.05	212.30	811.57	576.91	504.08	493.27
ST5517GLTP	298.49	405.99	531.03	366.92	687.65	632.66	206.59	739.11	471.88	541.21	488.15
PHY450W3FE	345.01	419.40	469.85	407.48	555.86	675.02	198.76	740.32	475.19	488.50	477.54
ST4949GLT	307.15	452.61	518.77	364.13	552.18	569.81	229.11	716.60	519.72	470.01	470.01
ST4848GLT	284.47	315.01	476.23	367.15	513.50	654.94	245.19	747.67	557.91	370.92	453.30
Average	339.90	363.03	528.02	408.20	642.43	649.16	229.68	802.10	543.53	463.39	

Table 20. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Avoyelles -1 Parish core block demonstration, 2017.

Parish: Avoyelles-1		Previous crop: Cotton		Irrigation? No				
Community: Moreauville		Soil type: Coushatta silt loam		Pivot or furrow?				
Cooperator: Trent Clark		Tillage Type: Conventional		GPS coord: 31.103540N, 91.93190W				
Agent: Justin Dufour		N rate (lbs/acre): 90		Plot size: 4 rows by 650 feet				
Planting date: 4/25		Seeding rate: 21,000		Misc:				
Harvest date: 9/29		Row spacing: 36						
Variety	Lint Yield (lbs/acre)	Lint %	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
PHY330W3FE	748	44.3	1.16	83.3	33.5	3.8	52.39	392.01
DP1646B2XF	725	40.6	1.23	83.2	30.2	4.4	52.09	377.66
DP1725B2XF	715	42.6	1.19	81.6	30.9	3.9	52.04	371.98
PHY340W3FE	697	41.2	1.18	84.2	32.5	3.7	52.49	365.92
PHY300W3FE	660	41.1	1.13	83.1	32.5	4.2	52.09	343.76
PHY450W3FE	657	42.1	1.15	85.6	37.0	4.7	52.49	345.01
ST5020GLT	595	37.1	1.20	83.9	34.9	4.1	52.49	312.52
ST4949GLT	587	42.6	1.15	84.3	32.5	4.3	52.29	307.15
ST5517GLTP	569	38.1	1.18	83.4	33.6	4.2	52.49	298.49
ST4848GLT	545	41.0	1.15	82.0	32.4	4.2	52.19	284.47

Table 21. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Avoyelles-2 Parish core block demonstration, 2017.

Parish: Avoyelles-2		Previous crop: Sw. Potatoes		Irrigation? No				
Community: Hessmer		Soil type: Calhoun silt loam		Pivot or furrow?				
Cooperator: Fred Collins		Tillage Type: Conventional		GPS coord: 31.05869N, 92.10977W				
Agent: Justin Dufour		N rate (lbs/acre): 110		Plot size: 4 rows by 1,555 feet				
Planting date: 5/26		Seeding rate: 36,000		Misc:				
Harvest date: 10/30		Row spacing: 38						
Variety	Lint Yield (lbs/acre)	Lint %	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
ST4949GLT	859	44.7	1.21	85.5	35.0	3.8	52.69	452.61
PHY450W3FE	799	43.8	1.20	84.6	33.9	3.5	52.49	419.40
ST5517GLTP	772	44.3	1.20	84.0	34.2	3.8	52.59	405.99
DP1646B2XF	751	44.6	1.24	84.6	32.4	3.9	52.49	394.20
DP1725B2XF	656	45.5	1.18	84.1	33.6	3.9	52.59	344.99
PHY300W3FE	629	40.0	1.19	83.9	36.4	3.9	52.49	330.16
ST5020GLT	627	44.1	1.18	84.8	35.5	4.1	52.59	329.74
PHY340W3FE	610	44.6	1.14	84.2	33.1	3.8	52.49	320.19
PHY330W3FE	607	42.0	1.14	84.6	37.7	4.4	52.39	318.01
ST4848GLT	599	41.3	1.22	85.2	35.2	4.3	52.59	315.01

Table 22. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Catahoula Parish core block demonstration, 2017.

Parish: Catahoula	Previous crop: Cotton	Irrigation? No
Community: Foules	Soil type: Sharkey clay	Pivot or furrow?
Cooperator: Matt Myers	Tillage Type: Conventional	GPS coord: 31.815292N, 91.592311W
Agent: Lucas Stamper	N rate (lbs/acre): 120	Plot size: 6 rows by 1,650 feet
Planting date: 4/26	Seeding rate: 40,000	Misc:
Harvest date: 9/25	Row spacing: 38	

Variety	Lint Yield (lbs/acre)	Lint %	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
DP1646B2XF	1142	43.8	1.22	84.4	30.6	4.7	52.19	595.75
PHY300W3FE	1078	43.8	1.13	83.4	33.9	4.8	52.09	561.53
DP1725B2XF	1062	44.6	1.14	82.0	31.0	4.9	52.09	552.94
PHY330W3FE	1045	43.7	1.16	84.7	32.0	4.7	52.29	546.43
ST5517GLTP	1018	39.5	1.14	82.6	33.8	4.6	52.19	531.03
ST4949GLT	1009	43.9	1.11	81.6	29.3	4.9	51.44	518.77
ST5020GLT	994	41.4	1.15	82.6	32.8	4.6	52.09	517.51
PHY340W3FE	978	43.1	1.14	83.4	32.0	4.7	52.19	510.16
PHY450W3FE	963	41.9	1.10	82.9	35.0	5.1	48.79	469.85
ST4848GLT	916	42.0	1.13	83.2	31.5	4.9	51.99	476.23

Table 23. Lint yield performance, fiber characteristics, loan values and dollar return per acre, East Carroll Parish core block demonstration, 2017.

Parish: East Carroll	Previous crop: Corn	Irrigation? Yes
Community: Bowie	Soil type: Newellton silty clay	Pivot or furrow? Furrow
Cooperator: Major Winters	Tillage Type: Conventional	GPS coord: 32.7435N, 91.2760W
Agent: Donna Lee	N rate (lbs/acre): 95	Plot size: 8 rows by 1,650 feet
Planting date: 4/20	Seeding rate: 37,000	Misc:
Harvest date: 9/22	Row spacing: 36	

Variety	Lint Yield (lbs/acre)	Lint %	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
PHY330W3FE	860	44.3	1.20	85.9	36.3	4.2	52.69	452.98
DP1725B2XF	853	44.0	1.18	84.3	32.6	4.4	52.39	446.85
DP1646B2XF	841	42.4	1.26	85.0	33.3	3.9	52.69	443.37
PHY300W3FE	800	42.9	1.21	86.5	34.3	4.6	52.69	421.78
PHY450W3FE	776	41.9	1.17	85.1	39.6	4.8	52.49	407.48
ST5020GLT	775	38.7	1.24	86.0	37.6	4.6	52.69	408.27
PHY340W3FE	766	43.0	1.20	85.4	36.5	4.4	52.59	403.07
ST4949GLT	702	43.5	1.13	82.7	32.6	4.3	51.89	364.13
ST4848GLT	699	43.3	1.18	84.2	33.0	4.5	52.49	367.15
ST5517GLTP	699	38.0	1.18	83.5	36.2	4.1	52.49	366.92

Table 24. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Franklin Parish on-farm core block demonstration, 2017.

Parish: Franklin		Previous crop: Corn			Irrigation? Yes			
Community: Liddieville		Soil type: Necessity silt loam			Pivot or furrow? Furrow			
Cooperator: Adam Faulk		Tillage type: Minimum Tillage			GPS coord: 32.16363N, 91.83445546W			
County Agent: Carol Pinnell-Alison		N rate (lbs/acre): 100			Plot size: 12 rows by 1,200 feet			
Planting date: 5/9		Seeding rate: 44,000			Misc. Replicated 3 times in RCBD			
Harvest date: 10/11		Row spacing: 38						
Variety	Lint Yield (lbs/acre)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tx)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
DP1646B2XF	1453	43.7	1.21	84.0	31.1	4.2	52.26	759.44
PHY330W3FE	1390	44.6	1.14	83.2	32.5	4.0	52.16	725.14
PHY340W3FE	1336	43.8	1.15	83.5	32.3	4.3	52.26	698.21
ST5517GLTP	1314	40.3	1.17	82.5	33.9	4.1	52.32	687.65
DP1725B2XF	1298	44.8	1.16	83.2	31.4	4.4	52.06	675.43
PHY300W3FE	1267	43.7	1.14	83.4	32.6	4.4	52.26	662.11
ST5020GLT	1136	40.9	1.19	83.2	33.3	4.8	52.36	594.74
PHY450W3FE	1080	42.1	1.11	83.3	35.4	4.5	51.46	555.86
ST4949GLT	1072	44.8	1.11	82.3	31.5	4.5	51.47	552.18
ST4848GLT	984	42.7	1.13	83.7	32.9	4.6	52.19	513.50
Mean	1233	43.1	1.15	83.2	32.7	4.4	52.08	642.43
LSD (0.05)	121.91	1.015	0.0285	NS	1.923	0.237	0.5016	64.5858
C.V. (%)	5.76	1.37	1.45	0.7	3.43	3.16	0.56	5.86

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 25. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Morehouse Parish on-farm core block demonstration, 2017.

Parish: Morehouse		Previous crop: Corn			Irrigation? Yes			
Community: Collinston		Soil type: Gallion silt loam			Pivot or furrow? Furrow			
Cooperator: Harper Armstrong		Tillage Type: Conventional			GPS coord:			
Agent: R. Letlow and O. Hill		N rate (lbs/acre): 80			Plot size: 6 rows by 1,116 feet			
Planting date: 4/26		Seeding rate: 41,000			Misc:			
Harvest date: 10/7		Row spacing: 38						
Variety	Lint Yield (lbs/acre)	Lint %	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
DP1725B2XF	1427	45.7	1.16	83.5	32.5	3.9	52.29	746.18
PHY450W3FE	1286	44.1	1.18	83.7	37.3	3.7	52.49	675.02
PHY330W3FE	1269	45.1	1.21	85.5	34.4	3.8	52.69	668.64
ST5020GLT	1267	41.1	1.26	84.6	35.5	3.6	52.49	665.05
ST4848GLT	1243	44.4	1.19	85.6	34.6	4.1	52.69	654.94
PHY340W3FE	1236	45.2	1.15	84.0	36.3	3.7	52.49	648.78
ST5517GLTP	1203	41.2	1.21	84.5	35.0	4.2	52.59	632.66
PHY300W3FE	1197	44.9	1.21	84.4	34.1	3.7	52.59	629.50
DP1646B2XF	1145	45.2	1.29	83.8	33.1	4.0	52.49	601.01
ST4949GLT	1096	45.3	1.13	82.0	31.3	4.0	51.99	569.81

Table 26. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Pointe Coupee on-farm core block demonstration, 2017.

Parish: Pointe Coupee		Previous crop: Cotton			Irrigation? No			
Community: Innis		Soil type: Commerce silty clay loam			Pivot or furrow?			
Cooperator: George Lacour		Tillage type: Conventional			GPS coord: 30.86389N, 091.73649W			
Principal Investigator: Mark Carriere		N rate (lbs/acre):			Plot size: 6 rows by 1,220 feet			
Planting date: 5/11		Seeding rate: 37,000			Misc.			
Harvest date: 9/27		Row spacing: 38						
Variety	Lint Yield (lbs/acre)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tx)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
DP1725B2XF	537	47.8	1.15	82.7	30.7	4.7	51.84	278.42
DP1646B2XF	519	44.6	1.19	84.5	32.1	4.6	52.33	267.15
ST4848GLT	471	45.6	1.13	83.4	31.4	4.7	52.01	245.19
ST4949GLT	439	47.0	1.14	83.8	31.8	4.7	52.19	229.11
PHY330W3FE	435	45.9	1.13	83.8	33.0	4.7	52.22	227.05
PHY300W3FE	426	45.9	1.15	84.2	33.0	4.8	51.52	219.84
PHY450W3FE	418	43.5	1.10	83.7	36.5	5.2	49.28	198.76
ST5020GLT	410	42.7	1.20	85.0	35.3	4.7	51.79	212.30
PHY340W3FE	407	45.6	1.15	84.6	32.5	4.7	52.22	212.37
ST5517GLTP	395	41.9	1.17	83.0	33.9	4.5	52.26	206.59
Mean	445.63	45.067	1.15	83.9	32.9	4.7	51.84	230.25
LSD (0.05)	84.87	1.007	0.0365	NS	1.723	0.233	1.2034	NS
C.V. (%)	11.1	1.3	1.83	1.18	3.02	2.87	1.34	12.24

Table 27. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Rapides-1 Parish on-farm core block demonstration, 2017.

Parish: Rapides-1		Previous crop: Soybeans			Irrigation? No			
Community: LeCompte		Soil type: Latanier clay			Pivot or furrow?			
Cooperator: Dean Lee Res. & Ext. Center		Tillage type: Minimum			GPS coord: 31.179098N, 92.389456W			
Principal Investigator: Dan Fromme		N rate (lbs/acre): 90			Plot size: 4 rows by 45 feet			
Planting date: 5/9		Seeding rate: 42,000			Misc. Replicated 4 times in a RCBD			
Harvest date: 9/23		Row spacing: 38						
Variety	Lint Yield (lbs/acre)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tx)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
PHY300W3FE	1766	45.2	1.17	85.2	34.6	4.0	52.52	926.80
PHY340W3FE	1691	44.8	1.17	84.6	32.5	4.1	52.47	888.13
PHY330W3FE	1674	44.9	1.17	84.2	33.3	3.9	52.42	906.45
DP1646B2XF	1552	45.2	1.24	84.9	32.6	3.9	52.57	815.83
DP1725B2XF	1533	46.3	1.16	84.0	32.5	4.1	52.37	803.36
ST5020GLT	1530	42.2	1.21	85.3	34.4	4.1	52.67	805.81
ST4848GLT	1424	44.5	1.16	84.0	34.1	4.2	52.37	746.19
ST5517GLTP	1423	40.0	1.18	84.2	35.0	3.9	52.54	747.48
ST4949GLT	1326	44.8	1.15	84.2	33.0	4.1	52.44	695.07
PHY450W3FE	1305	42.3	1.14	84.5	38.6	4.4	52.35	645.75
Mean	1522.3	43.99	1.17	84.5	34	4	52.48	799.62
LSD (0.05)	264.97	1.163	0.0233	0.849	1.21	0.224	0.1697	139.5635
C.V. (%)	10.07	1.82	1.36	0.69	2.45	3.81	0.19	10.08

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

Table 28. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Rapides-2 Parish on-farm core block demonstration, 2017.

Parish: Rapides-2		Previous crop: Soybeans			Irrigation? No			
Community: LeCompte		Soil type: Coushatta silt loam			Pivot or furrow?			
Cooperator: Dean Lee Res. & Ext. Center		Tillage type: Minimum			GPS coord: 31.173889N, 92.413611W			
Principal Investigator: Dan Fromme		N rate (lbs/acre): 90			Plot size: 4 rows by 45 feet			
Planting date: 4/27		Seeding rate: 42,000			Misc. Replicated 4 times in a RCBD			
Harvest date: 10/10		Row spacing: 38						
Variety	Lint Yield (lbs/acre)	Lint (%)	Length (inches)	Uniformity (%)	Strength (g/tx)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
PHY340W3FE	1279	44.0	1.14	81.5	31.3	4.0	51.823	662.72
PHY330W3FE	1234	42.7	1.13	81.3	31.7	4.1	51.94	640.987
ST5020GLT	1200	40.6	1.19	83.9	33.8	4.5	52.423	628.68
ST4848GLT	1068	43.0	1.12	82.7	32.5	4.6	51.607	551.707
PHY300W3FE	1047	42.1	1.12	82.3	31.7	4.0	51.973	544.063
DP1646B2XF	1036	42.2	1.19	83.0	30.7	4.1	52.173	540.737
ST4949GLT	1006	43.8	1.12	82.3	31.3	4.4	51.573	518.163
DP1725B2XF	963	42.5	1.12	81.7	30.9	4.3	52.007	500.573
PHY450W3FE	907	40.8	1.11	83.6	35.7	4.7	52.09	471.69
ST5517GLTP	830	39.9	1.14	82.9	32.7	4.5	52.123	432.563
Mean	1063	42.1	1.14	82.5	32.2	4.3	51.97	552.27
LSD (0.05)	194.51	1.378	0.036	1.629	2.012	0.25	NS	97.696
C.V. (%)	10.62	2.24	2.18	1.36	4.31	4.02	0.6	10.27

Numbers shaded within a column are not significantly different from the numerically greatest value.

Table 29. Lint yield performance, fiber characteristics, loan values and dollar return per acre, Tensas Parish on-farm core block demonstration, 2017.

Parish: Tensas		Previous crop: Corn			Irrigation? Yes			
Community: Newellton		Soil type: Commerce silt loam			Pivot or furrow? Pivot			
Cooperator: Dr. L. Stonecipher, B. Kifer		Tillage Type: No till			GPS coord: 32.020597N, 91.13358W			
Agent: Dennis Burns		N rate (lbs/acre): 90			Plot size: 6 rows by 2968			
Planting date: 5/8		Seeding rate: 41,000			Misc:			
Harvest date: 10/19		Row spacing: 38						
Variety	Lint Yield (lbs/acre)	Lint %	Length (inches)	Uniformity (%)	Strength (g/tex)	Micronaire	Loan Value (¢/lb)	Dollar Return (acre)
ST5517GLTP	1043	43.1	1.18	82.4	29.2	3.8	51.89	541.21
ST5020GLT	964	42.5	1.18	82.3	32.5	3.8	52.29	504.08
PHY450W3FE	936	42.3	1.17	83.2	31.3	3.5	52.19	488.50
PHY330W3FE	883	42.9	1.18	81.4	30.2	3.5	51.94	458.63
PHY340W3FE	879	41.4	1.20	82.7	29.8	4.2	51.89	456.11
DP1725B2XF	876	42.2	1.22	81.8	31.3	3.7	52.24	457.62
PHY300W3FE	828	40.1	1.17	81.4	30.8	4.0	51.94	430.06
ST4848GLT	708	41.7	1.18	83.7	32.1	3.8	52.39	370.92
DP1646B2XF*								
ST4949GLT*								

*No results, harvest error.

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