

2018 Mississippi Cotton Official Small Plot Variety Trials



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PREFACE

The main objective of the Mississippi Cotton Official Variety Trials (OVT) is to provide unbiased evaluation of yield and fiber performance of commercial and experimental cotton varieties. The ultimate goal is to provide Mississippi producers with adequate information to make well informed seed selection decisions for cultivation in the major production regions in Mississippi. This Mississippi Agricultural and Forestry Experiment Station bulletin is a summary of research conducted at numerous on and off station locations throughout Mississippi. The interpretation of these data may change after further experimentation over years or environments. The information included is not to be construed as a recommendation for use or as an endorsement of a particular product or variety by Mississippi State University or the Mississippi Agriculture and Forestry Experiment Station. Trade Names of commercial products used in this report are included only to provide greater clarity to the information presented



2018 OVT Testing Locations

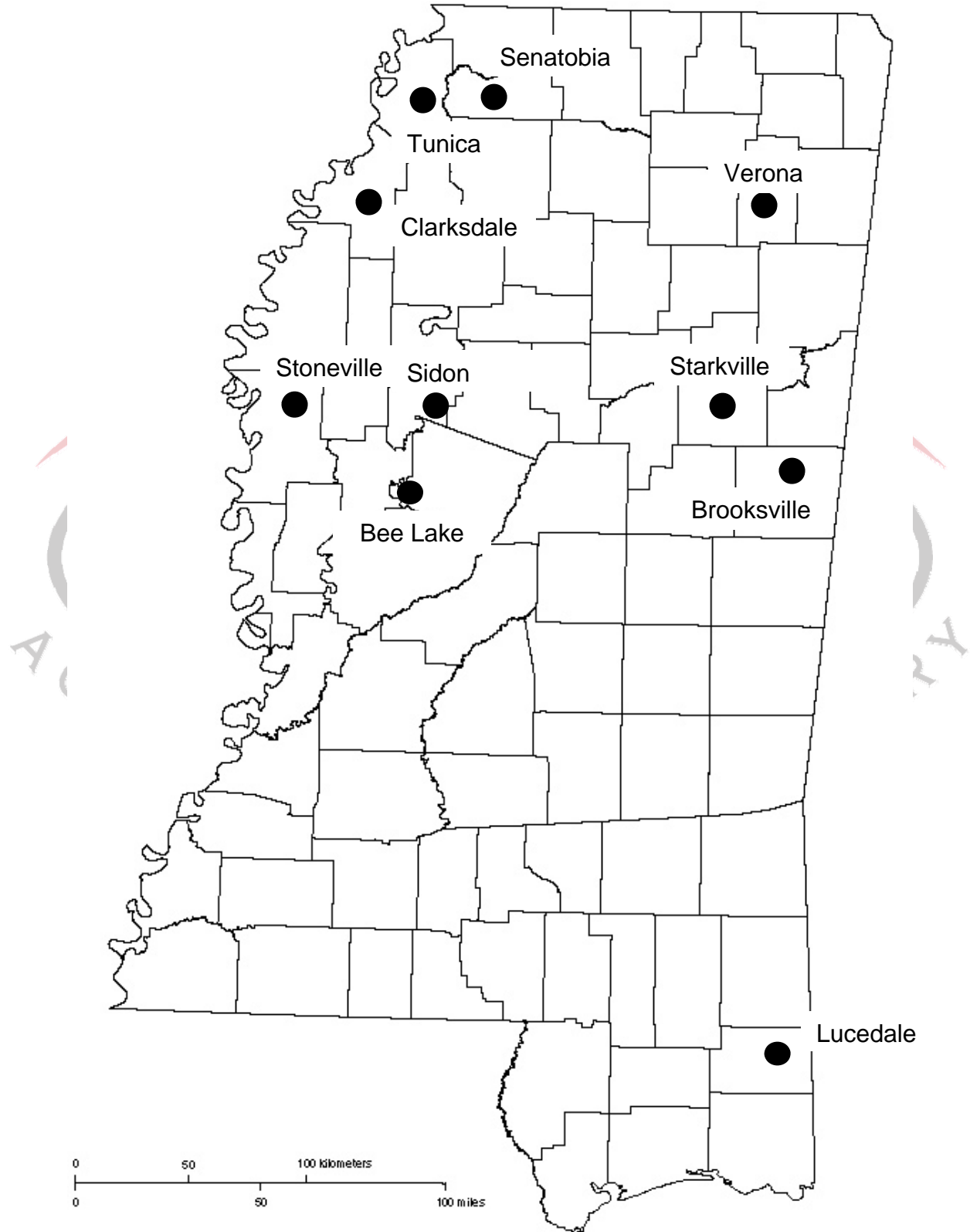


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The authors would like to express their appreciation first and foremost to the five producers who participated in the 2018 Official Cotton Variety Trial locations that were conducted on-farm. The on-farm trials provide an added benefit to the data by expanding the footprint of the trials into differing areas in the state to better represent the environmental, soil textural, and management differences that are present throughout the state of Mississippi. Thank you to Cliff Heaton and Brian Fife (Clarksdale), Michael Thompson (Bee Lake), Kendall and Eddie Stringfellow and Mike Courtney (Lucedale), and Pace Perry (Senatobia and Tunica); your hard work and willingness to participate in the variety trials are deeply valued. We at the Mississippi Agriculture and Forestry Experiment Station look forward to working with you and other willing producers in the future.

Gratitude is expressed to all of the student workers in the Agronomy program in the Department of Plant and Soil Sciences at Mississippi State University for your assistance with all aspects of conducting the trials. Without your diligent work and assistance, the variety trials would not be a success, thanks again for all you do. We would also like to recognize Savana Davis, Lucas Franca, Michael Plumblee, Bradley Wilson, Steven Hall, Jake McNeal, Tyler Soingier, Brent Lindsey, and Joe Hayes for their assistance with hand harvesting, ginning, and preparing fiber quality samples. Your work allows us to provide data in a timely fashion.



Annually, Mississippi State researchers evaluate cotton varieties at numerous locations within the cotton growing regions in the state. The purpose of the Mississippi State Official Variety Trials is to provide an unbiased comparison of varieties across a range of environments. Trial evaluation of standard, commercially available, and new and upcoming cotton cultivars throughout the state provides producers data to make well informed variety selection decisions based upon how a particular cotton variety performed close to their base of operation.

The Official Variety Trial (OVT) for cotton is conducted annually at the Delta Research and Experiment Station, the North Mississippi Research and Extension Center, the R.R. Foil Plant Science Research Center at Mississippi State University, and at the Black Belt Branch Experiment Station in Brooksville as well as at cooperating producer locations in both the Delta and Hill cotton producing regions. At each location, all varieties entered into the trial are treated identical (conventional) with respect to herbicide and insecticide input to strive for unbiased evaluation of genetic potential. Mississippi State personnel attempt to conduct at minimum eight small-plot official variety trials per year in areas that well represent the majority of the state's cotton producing acreage.

Testing Procedures

All varieties submitted for testing are grown utilizing conventional chemical control for insect and weed pests. Each test plot consists of two rows of cotton 35 to 40 ft in length with a row spacing of 38" or 40". Each plot is analyzed statistically as a randomized complete block with four blocks or replications.

Management practices are determined and implemented by cooperators at each location based on soil texture, soil test value, and scouting for pest pressures. However, seeding rate and operation is controlled by the cotton variety testing coordinator. In addition, all locations are maintained free of lepidopteran insect pests in order to create parity among varieties with differing *Bt* technologies.

All fiber parameters such as lint percent as well as HVI fiber quality assessment are based upon a hand-picked 25 boll sample or a random grab sample from each replicated plot at each location. Samples from all locations are ginned on the same 10-saw Continental laboratory gin to determine gin turnout. Utilization of the same gin for all samples is important to not bias fiber quality across locations. High Volume Instrumentation analysis for fiber property determinations are conducted by the United States Department of Agriculture Classing Office in Memphis, TN.

Lint yields are calculated using the seed cotton weight mechanically harvested from each plot, and the turnout percentage determined from hand-picked boll samples. Mean lint yields are presented as pounds lint per acre.

Interpreting the Data

Field variability is inherent to production research with any cropping system. Unlike strip trials, small plot research allows for replication with a very minimal footprint. The smaller area and replication of treatments helps reduce variability due to various factors commonly found in the field (i.e. soil textural changes, pest variations). Reduced variability lends us a greater understanding of a variety's genetic potential cultivated under uniform conditions. However, strip trial research may lend greater information about how a variety will perform across a range of conditions (e.g. low spot in the field). Data from both small plot and strip trials should be considered when making final variety selection decisions.

Mississippi State separates the greatest performing varieties by use of a Fishers Protected Least Significant Difference (LSD) at a five percent level of significance. The LSD associated with the five percent level, lends us 95 percent positive identification of the greatest yielding varieties at each specific location. In each individual trial the collection of varieties that yield the greatest statistically is represented in bold. These varieties will all have a numerical difference less than the LSD value shown at the bottom of the data variable columns.

The varieties listed in bold may have slightly differing numerical yields, but will perform very similar at a given location. Statistical analysis is not conducted for across location averages. Producers should review data tables for the geographical closest location that is representative of their operation, but should also review yield information across locations to get an idea of a variety's yield stability over a wide range of production environments.

Selecting a Variety/Trait

Cultivar selection is one of the most important management decisions a producer must make each growing season. Improper variety selection generally cannot be overcome with management. Starting with the greatest genetic potential will generally yield the highest yield with all other things being considered equal. Careful consideration should go into selecting varieties that are well adapted to the Mid-South growing region and to certain geographical regions within the state due to the rising cost of seed and associated technology fees.

Multiple available transgenic traits can make selecting a variety cumbersome. At most locations the top yielding varieties represent a range of available trait packages. This lends the producer multiple options to choose from with respect to herbicide and insecticide traits. Below is a synopsis of the transgenic traits that were represented in this year's trials.

Glyphosate tolerance – generally indicated on the seed bag with either a G, RF, XF, or FE. Varieties with these designations can tolerate over the top applications of glyphosate. XtendFlex (XF) varieties are tolerant also tolerant to glufosinate and dicamba. Enlist (FE) varieties are also tolerant to glufosinate and 2,4-D.

Glufosinate tolerance: - generally indicated on the seed bag with an LL. These varieties can withstand over the top applications of Liberty. XtendFlex (XF) varieties are tolerant also tolerant to glyphosate and dicamba. Enlist (FE) varieties are also tolerant to glyphosate and 2,4-D.

It is important to note that producers utilizing a multitude of varieties with differing herbicide tolerant traits in close proximity must use caution to avoid crop injury from spray drift, improperly cleaned applicators, and or a combination of both. For more information on utilizing herbicide resistant traits and alternative weed control practices consult MSU extension publication # 1532 “Weed Control Guidelines for Mississippi” available online at

http://extension.msstate.edu/sites/default/files/publications/publications/p1532_1.pdf

Bollgard 2 – Varieties with designations B2 on the seed bag or in the brand name contain genes that produce protein toxic to heliothis. However, under high and persistent pressure supplemental chemical control strategies are necessary to prevent economic damage from caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication # 2471 “Insect control guide for agronomic crops” available online at

https://extension.msstate.edu/sites/default/files/publications/publications/p2471_0.pdf

Bollgard 3 – Varieties with designations B3 on the seed bag or in the brand name contain genes that produce protein toxic to heliothis. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication # 2471 “Insect control guide for agronomic crops” available online at

https://extension.msstate.edu/sites/default/files/publications/publications/p2471_0.pdf

WideStike – Phytogen varieties with the designation W on the bag or in the variety name. Like Bollgard 2, Widestrike varieties contain two genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication # 2471 “Insect control guide for agronomic crops” available online at

https://extension.msstate.edu/sites/default/files/publications/publications/p2471_0.pdf

WideStike 3 – Phytogen varieties with the designation W3 on the bag or in the variety name. Like Bollgard 3, Widestrike varieties contain three genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication # 2471 “Insect control guide for agronomic crops” available online at

https://extension.msstate.edu/sites/default/files/publications/publications/p2471_0.pdf

TwinLink – Bayer varieties with the designation T on the bag or in the variety name. Like Bollgard 2 or Widestrike, TwinLink varieties contain two genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication # 2471 “ Insect control guide for agronomic crops” available online at https://extension.msstate.edu/sites/default/files/publications/publications/p2471_0.pdf

TwinLink Plus – Bayer varieties with the designation TP on the bag or in the variety name. Like Bollgard 3 or Widestrike 3, TwinLink Plus varieties contain three genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication # 2471 “ Insect control guide for agronomic crops” available online at https://extension.msstate.edu/sites/default/files/publications/publications/p2471_0.pdf

Considerations for Selection

Yield performance among common varieties evaluated over multiple locations, environments or years will normally vary. Therefore, selection decisions should be made from within the range of top yielding varieties. Newer varieties with limited available data should be cultivated to minimal acreage until further testing validates performance across multiple years and locations. Generally, there is no one variety that is the ‘silver bullet’; therefore, choosing multiple varieties allows for flexibility in relative maturity, management decisions, and risk aversion.

Lint yield and potential profitability should be the primary factor when attempting to select a variety, but do not discount fiber quality and traits contained within a given variety. Do not underestimate the discounts associated with high micronaire which can be significant.

A good performance indicator when selecting a variety is the overall mean of the trial. Comparing an individual variety to the trial mean can lend an indication of how that particular variety “stacked up” to the trial as a whole. A variety with a mean lint yield greater or much greater than the overall trial mean generally will perform well.

Remember, there can be a full 14 day difference in maturity between cotton varieties. However, most leading varieties including those submitted to this year’s trial tend to be more mid to early maturing than varieties of the past.

Loan Valuation Decision Aid

For each trial conducted in 2018, data was submitted to the upland cotton loan valuation aid. This tool was developed by Dr. Larry Falconer and is supported by Cotton Incorporated. The tool allows for calculation of Commodity Credit Corporation cotton loan premium and discount values based on yields and HVI classing information.

Top Yielding Varieties

There are numerous methods to pick or highlight the top yielding varieties across locations to develop a “short list” of promising varieties for future plantings. For soybean and corn, the short list is a powerful aid in selecting varieties due to the sheer number of available varieties. However, for cotton the list of available varieties that perform well, and are adapted to the Mid-South is short on its own. The recent trend in cotton varieties submitted for testing to University OVT trials across the Mid-South has declined over the last ten years with changes in the cotton industry. Therefore, it is important to select a variety that has performed well in the Mississippi OVT or other Mid-South University OVT trials.

Planting and Harvest Dates

Location	Planting Date	Harvest Date	Seeding Rate
Bee Lake	03 May	03 October	45,000
Brooksville	09 May	21 October	45,000
Clarksdale	10 May	23 October	45,000
Lucedale	23 May	28 November	45,000
Senatobia	08 May	12 October	45,000
Sidon	11 May	12 October	45,000
Starkville	10 May	29 October	45,000
Stoneville	15 May	23 October	45,000
Tunica	08 May	09 October	45,000
Verona	09 May	08 October	45,000

Table 1. Varieties submitted for testing by participating industry partners in 2018.

Industry Contact	Official Variety Trial Entries	
Americot Inc. – NexGen Varieties <i>Tom Brooks</i>	AMX 1816 B3XF AMX 1817 B3XF AMX 1818 B3XF AMX 1819 B3XF NG 2982 B3XF NG 3699 B2XF NG 3729 B2XF	NG 3780 B2XF NG 4689 B2XF NG 4777 B2XF NG 4936 B3XF NG 5007 B2XF NG 5711 B2XF
BASF <i>Andy White</i>	BX 1973GLTP BX 1974GLTP BX 1975GLTP BX 1976GLTP	ST 4949GLT ST 5020GLT ST 5122GLT ST 5471GLTP ST 5517GLTP ST 5818GLTP
Crop Production Services/Dyna-Gro Seed <i>Scott Cummings</i>	CPS 18501-C CPS 18502-C CPS 18503-D CPS 18R817 CPS 18R827 CPS 118507-D	DG 3214 B2XF DG 3385 B2XF DG 3433 B2XF DG 3526 B2XF DG 1702 GLT
DeltaPine <i>Dave Albers</i>	DP 17R818 B3XF DP 1518 B2XF DP 1555 B2RF DP 1646 B2XF DP 1725 B2XF DP 1820 B3XF	DP 1823 NR B2XF DP 1835 B3XF DP 1845 B3XF DP 1851 B3XF DP 1916 B3XF
PhytoGen Seed Co. <i>Tom Eubank</i>	PX 3B07 W3FE PX 3B09 W3FE PX 3C06 W3FE PX 4A64 W3FE PX 4A69 W3FE PX 5B73 W3FE PX 5D28 W3FE PHY 300 W3FE PHY 312 WRF	PHY 320 W3FE PHY 350 W3FE PHY 330 W3FE PHY 340 W3FE PHY 430 W3FE PHY 440 W3FE PHY 444 WRF PHY 480 W3FE PHY 580 W3FE
Seed Source Genetics <i>Ed Jungmann</i>	SSG CT 210 SSG UA 222	
Winnfield Solutions, LLC <i>Marlon Nichols</i>	CG 9608 B3XF CG 9178 B3XF	

Table 2. Two-year mean yield performance of varieties cultivated at 4 locations in the Delta region during 2017 and 2018.

	Location and Year								Average across location and year
	Bee Lake		Clarksdale		Stoneville		Tunica		
	2017	2018	2017	2018	2017	2018	2017	2018	
	----- Lint yield (lb lint/acre) -----								
PHY 312 WRF	1125	1627	1388	1947	1791	1824	1133	1993	1604
DP 1646 B2XF	1214	1353	1333	1873	1573	1935	1132	2120	1567
DG 3526 B2XF	886	1516	1494	1769	1801	1944	843	2084	1542
DP 1555 B2RF	1195	1543	1402	1599	1386	2042	1060	1957	1523
DP 1725 B2XF	1205	1431	1192	1572	1428	2027	985	2282	1515
PHY 340 W3FE	1273	1507	1140	1597	1672	1786	906	2017	1487
ST 4949GLT	1184	1454	1170	1769	1495	1697	979	2046	1474
CG 9608 B3XF	1125	1635	1284	1866	1269	1769	883	1961	1474
PHY 444 WRF	1086	1422	1221	1643	1495	1795	1133	1939	1467
PHY 330 W3FE	1043	1386	1083	1709	1626	1880	1019	1944	1461
PHY 350 W3FE	1115	1284	1206	1654	1666	1817	992	1957	1461
PHY 480 W3FE	1248	1330	1390	1558	1442	1745	946	1981	1455
PHY 320 W3FE	1175	1525	1254	1495	1257	1721	1087	2024	1442
DP 1851 B2XF	995	1590	1157	1488	1442	1711	826	2281	1436
DP 1823 NRB2XF	1018	1321	1276	1520	1533	1963	955	1882	1434
DP 1845 B3XF	1064	1609	1270	1464	1428	1811	886	1915	1431
PHY 300 W3FE	1064	1360	1200	1601	1532	1777	1065	1806	1426
DP 1518 B2XF	1129	1181	898	1622	1382	1909	1169	1993	1410
DP 1835 B3XF	1120	1310	1310	1763	1223	1827	877	1797	1403
NG 5007 B2XF	1166	1302	1132	1408	1554	1811	805	1990	1396
ST 5517GLTP	1101	1388	1155	1610	1493	1610	872	1906	1392
ST 5020GLT	1108	1282	1032	1600	1617	1823	851	1812	1391
SSG UA 222	1008	1150	1027	1560	1524	1453	984	2130	1355
NG 5711B2XF	904	1400	1133	1647	1212	1720	795	1833	1331
PHY 440 W3FE	1138	1345	1048	1238	1366	1692	1010	1580	1302

Table is sorted based on average lint yield means across location and year (i.e. from greatest to lowest lint yield).

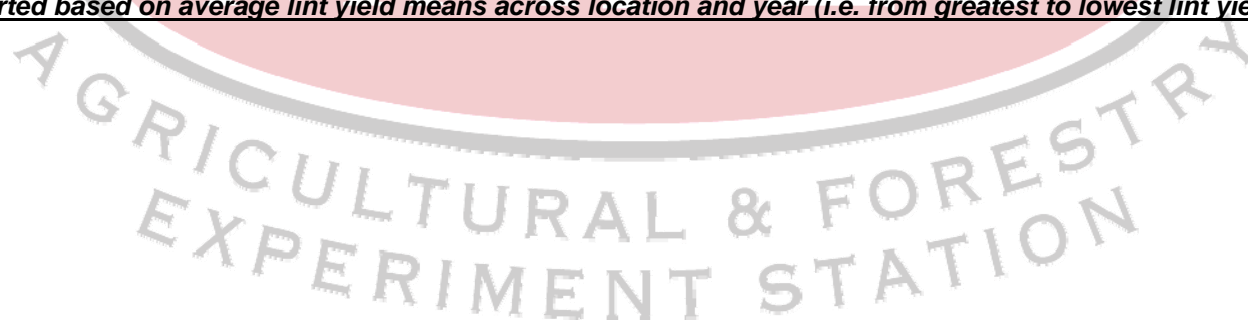


Table 3. Two-year mean yield performance of varieties cultivated at 5 locations in the Hill region during 2017 and 2018.

	Location and Year										Average across location and year
	Brooksville		Lucedale		Senatobia		Starkville		Verona		
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	
	----- Lint yield (lb lint/acre) -----										
DG 3526 B2XF	837	1195	967	711	1145	1850	1432	1171	1580	1905	1279
DP 1646 B2XF	884	1216	1030	726	1098	1955	1007	1018	1653	2078	1267
PHY 444 WRF	941	924	861	794	973	1794	1454	899	1716	2091	1245
DP 1845 B3XF	895	1346	1027	1017	755	1714	1143	1037	1543	1954	1243
PHY 312 WRF	826	1082	746	524	1099	1919	1203	961	1853	2124	1234
CG 9608 B3XF	886	1202	871	628	1023	1667	1352	796	1747	2044	1222
DP 1555 B2RF	908	1008	1109	392	903	1813	1089	871	1852	2116	1206
NG 5007 B2XF	734	995	719	553	1102	1586	1259	1253	1755	1977	1193
PHY 350 W3FE	882	1344	610	557	1145	1834	888	999	1694	1946	1190
DP 1851 B2XF	725	1450	658	795	836	1636	805	1032	1749	2189	1188
PHY 340 W3FE	760	861	763	724	1053	1700	1280	967	1581	2131	1182
DP 1725 B2XF	805	1279	668	543	965	2026	1062	859	1488	1882	1158
PHY 480 W3FE	951	1041	959	627	1064	1516	973	853	1725	1851	1156
PHY 300 W3FE	827	1203	888	557	953	1546	1160	871	1517	1883	1141
DP 1835 B3XF	820	1085	923	526	941	1532	1232	857	1645	1724	1129
ST 5517GLTP	744	1248	755	699	1000	1639	1114	1073	1391	1611	1127
PHY 330 W3FE	843	754	800	640	913	1574	1219	858	1652	1973	1123
PHY 320 W3FE	693	956	949	613	1108	1700	905	874	1749	1671	1122
DP 1823 NRB2XF	822	1143	1017	530	1066	1679	970	602	1495	1811	1114
NG 5711B2XF	583	1120	695	872	784	1606	995	760	1767	1844	1103
ST 4949GLT	815	1235	707	618	936	1797	1003	833	1519	1541	1100
SSG UA 222	908	1085	647	323	1025	1555	1002	902	1633	1819	1090
ST 5020GLT	594	886	681	501	1042	1700	1014	1028	1501	1737	1068
PHY 440 W3FE	966	828	603	553	924	1380	1241	763	1586	1771	1062
DP 1518 B2XF	702	831	529	803	1131	1827	809	706	1371	1708	1042

Table is sorted based on average lint yield means across location and year (i.e. from greatest to lowest lint yield).

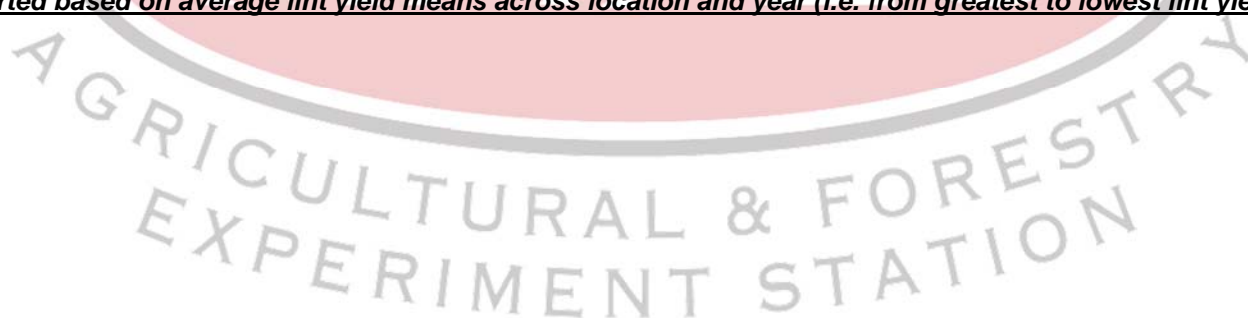


Table 4. One-year mean yield performance and fiber characteristics for OVT varieties submitted for testing in 2018 averaged across all (10) testing locations.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	----	(g/tex)	(%)	¢/LB
DP 1646 B2XF	3393	1536	45.0	1.24	4.7	30.2	83.9	54.03
PHY 580 W3FE	3334	1527	45.9	1.15	4.7	32.0	83.7	53.59
DG 3526 B2XF	3364	1523	45.2	1.14	4.9	29.4	84.1	52.89
PX 3B09 W3FE	3437	1519	44.3	1.17	4.5	32.2	82.9	53.82
CPS 18R827	3376	1499	44.3	1.16	4.8	30.5	82.2	53.15
DP 1845 B3XF	3361	1485	44.2	1.26	4.5	32.7	84.4	54.49
PHY 312 WRF	3453	1481	42.8	1.18	4.6	31.3	84.2	53.88
BX 1973GLTP	3231	1476	45.6	1.16	4.7	32.8	83.9	53.54
CG 9178 B3XF	3246	1466	45.0	1.18	5.0	30.4	84.0	51.68
DP 1851 B3XF	3244	1461	45.0	1.18	4.7	33.1	84.2	53.87
PX 5D28B W3FE	3290	1460	44.5	1.16	4.5	33.2	83.9	54.06
PHY 430 W3FE	3243	1460	45.0	1.11	4.8	31.2	83.6	52.30
CG 9608 B3XF	3172	1454	46.0	1.17	4.5	29.9	83.1	53.76
PX 3B07 W3FE	3249	1453	44.8	1.18	4.6	32.5	83.1	53.65
DP 1725 B2XF	3159	1452	45.9	1.17	4.8	30.5	82.9	53.34
ST 5471GLTP	3386	1436	42.4	1.16	4.6	31.8	82.8	53.83
DP 1555 B2RF	3145	1432	45.2	1.18	4.8	32.7	83.6	53.76
PHY 340 W3FE	3197	1431	44.7	1.16	4.7	30.9	83.5	53.22
PHY 350 W3FE	3307	1427	43.2	1.18	4.8	31.4	84.4	53.26
CPS 18R817	3208	1417	44.0	1.15	4.8	31.0	84.0	53.11
ST 5122GLT	3335	1416	42.5	1.14	4.6	30.9	82.1	53.66
PX 4A64 W3FE	3214	1413	44.1	1.14	4.7	32.6	84.1	53.72
PHY 444 WRF	3227	1412	43.8	1.24	4.4	32.0	84.9	54.49
DG 3214 B2XF	3287	1403	42.6	1.18	5.0	31.1	84.4	52.34
ST 4949GLT	3059	1395	45.5	1.13	4.7	30.1	83.2	52.95
DG 1702 GLT	3275	1391	42.5	1.14	4.5	31.5	82.6	53.92
PX 5B73 W3FE	3208	1388	43.4	1.15	4.7	30.6	83.4	53.10
PHY 320 W3FE	3227	1382	42.8	1.15	4.6	31.7	84.7	53.24
ST 5517GLTP	3355	1381	41.1	1.18	4.6	32.3	82.9	54.23
DG 3385 B2XF	3205	1379	43.0	1.15	4.9	29.9	84.6	52.73
CPS 18501-C	3322	1375	41.3	1.23	4.1	31.7	84.6	54.28
NG 5007 B2XF	3136	1363	43.4	1.16	4.6	29.6	83.2	53.88
PHY 330 W3FE	3053	1361	44.8	1.15	4.6	31.2	83.3	53.37
BX 1974GLTP	3009	1360	45.2	1.18	4.8	31.3	84.0	53.66
ST 5818GLTP	3273	1359	41.5	1.19	4.6	32.0	83.2	54.10
PX 3C06 W3FE	3112	1356	43.5	1.16	4.7	29.7	82.1	52.42
CPS 18503-D	3133	1356	43.3	1.18	4.8	32.1	83.5	53.91
NG 5711 B3XF	3132	1351	43.0	1.21	4.7	31.7	83.7	54.12
PHY 300 W3FE	3041	1349	44.5	1.15	4.7	31.2	83.4	53.64
DP 1916 B3XF	2991	1348	44.9	1.17	4.8	32.4	83.8	53.44
PHY 480 W3FE	3122	1346	43.0	1.17	4.7	31.2	84.7	53.73
CPS 18507-D	3047	1344	44.0	1.16	5.1	31.7	84.2	52.23
DP 1823 NR B2XF	3027	1343	44.4	1.19	4.4	31.7	84.6	53.90
DP 1518 B2XF	3207	1339	41.7	1.17	4.5	29.9	83.5	53.71
NG 3729 B2XF	3159	1332	42.1	1.19	4.9	31.1	84.2	52.86
DP 1820 B3XF	2945	1325	44.7	1.22	4.8	33.5	83.6	53.63
PX 4A69 W3FE	2936	1313	44.8	1.18	4.5	31.7	83.6	54.31
DP 1835 B3XF	2889	1312	45.4	1.18	4.7	31.9	83.4	54.13
ST 5020GLT	3199	1310	41.0	1.23	4.7	33.6	84.8	54.15
NG 4936 B3XF	3084	1302	42.2	1.21	4.8	30.7	84.5	53.62
BX 1976GLTP	2882	1291	44.8	1.17	5.1	33.1	84.2	52.83
AMX 1817 B3XF	2886	1289	44.5	1.16	4.9	30.3	82.7	52.41
NG 4689 B2XF	3058	1285	42.0	1.14	4.9	32.5	83.2	52.63
BX 1975GLTP	2861	1279	44.6	1.17	4.8	31.9	83.9	53.28
SSG UA 222	3081	1261	41.0	1.21	4.7	32.1	84.0	53.95
CPS 18502-C	2911	1235	42.5	1.18	4.5	30.9	83.9	54.05

DP 17R818 B3XF	2839	1233	43.3	1.19	4.9	32.2	83.8	52.66
NG 4777 B2XF	2916	1221	41.9	1.16	4.9	32.2	83.0	52.75
DG 3433 B2XF	2920	1217	41.8	1.10	4.6	27.6	81.3	51.48
SSG UA 114	3065	1217	39.5	1.20	4.9	32.4	84.9	53.08
PHY 440 W3FE	2721	1196	43.9	1.20	4.5	33.9	83.4	54.55
AMX 1818 B3XF	2856	1181	41.3	1.20	4.7	33.2	84.6	53.57
NG 3780 B2XF	2831	1144	40.6	1.19	5.0	32.9	83.2	52.59
AMX 1816 B3XF	2916	1137	39.0	1.20	4.3	31.0	83.5	54.32
NG 3699 B2XF	2810	1131	40.4	1.19	4.7	31.8	82.8	53.59
AMX 1819 B3XF	2719	1109	40.8	1.16	4.8	30.7	84.1	53.30
NG 2982 B3XF	2710	1072	39.5	1.14	4.2	33.4	83.8	53.01
Overall Mean	3119	1354	43.4	1.17	4.7	31.6	83.7	53.44
LSD(0.05)	N.S.	217	0.9	0.02	0.1	0.8	0.6	0.88
C.V. (%)	N.S.	36.1	4.5	4.2	6.8	6.1	1.7	3.7

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

N.S. = No significant differences between treatments.



Table 5. 2018 mean yield performance of varieties cultivated at 5 locations in the Delta Region.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	----	(g/tex)	(%)	¢/LB
PX 3B09 W3FE	3941	1728	44.0	1.18	4.5	32.6	83.0	54.88
PHY 580 W3FE	3751	1677	44.8	1.17	4.7	32.7	83.8	54.64
DP 1646 B2XF	3808	1673	44.0	1.26	4.7	30.3	84.5	54.72
PHY 312 WRF	3975	1668	42.1	1.20	4.6	32.1	84.6	54.67
PX 5D28B W3FE	3813	1662	43.8	1.18	4.4	33.5	84.0	54.57
CPS 18R827	3800	1657	43.7	1.17	4.8	31.1	82.3	54.31
DG 3526 B2XF	3716	1654	44.7	1.15	4.8	29.9	84.1	53.77
BX 1973GLTP	3648	1636	45.0	1.18	4.6	33.5	84.3	54.29
PX 4A64 W3FE	3793	1636	43.5	1.16	4.6	33.3	84.4	54.68
PX 3B07 W3FE	3700	1633	44.3	1.19	4.7	33.1	83.4	54.37
CG 9178 B3XF	3681	1630	44.4	1.20	5.1	30.8	84.2	52.48
CG 9608 B3XF	3586	1615	45.3	1.19	4.4	30.2	83.5	54.41
DP 1916 B3XF	3605	1598	44.5	1.19	4.8	33.2	84.3	54.43
PHY 430 W3FE	3619	1591	44.3	1.14	4.7	31.7	83.9	53.84
PHY 320 W3FE	3775	1586	42.1	1.18	4.6	32.3	85.1	54.13
DP 1725 B2XF	3510	1585	45.4	1.19	4.7	31.0	83.2	54.33
PHY 340 W3FE	3620	1585	44.1	1.17	4.7	31.3	83.5	53.74
ST 5471GLTP	3787	1583	41.9	1.18	4.6	32.1	83.0	54.67
ST 5122GLT	3788	1578	41.9	1.15	4.5	31.6	82.1	54.57
DP 1845 B3XF	3624	1569	43.4	1.29	4.4	33.0	84.8	55.15
ST 4949GLT	3475	1562	45.1	1.14	4.6	30.7	83.5	53.86
DP 1555 B2RF	3474	1559	44.9	1.20	4.7	33.2	83.8	54.74
DG 3214 B2XF	3672	1550	42.4	1.19	5.0	31.7	84.7	53.46
DP 1820 B3XF	3462	1542	44.6	1.23	4.8	33.8	83.5	54.41
PHY 330 W3FE	3545	1539	43.7	1.16	4.5	31.6	83.4	54.24
DP 1835 B3XF	3423	1534	45.1	1.20	4.5	32.4	83.7	55.03
DP 1823 NR B2XF	3516	1534	43.8	1.21	4.4	32.3	84.9	54.86
PHY 444 WRF	3554	1523	43.1	1.26	4.2	32.3	85.0	54.99
PHY 350 W3FE	3620	1523	42.2	1.20	4.7	31.9	84.4	54.09
AMX 1817 B3XF	3467	1521	44.1	1.17	4.9	30.8	82.7	53.45
ST 5818GLTP	3702	1521	41.2	1.20	4.5	32.8	83.3	55.21
CPS 18503-D	3546	1520	43.0	1.20	4.7	32.5	84.0	54.71
ST 5517GLTP	3730	1516	40.7	1.19	4.5	33.0	83.3	54.82
PHY 480 W3FE	3580	1515	42.5	1.19	4.6	31.6	85.0	54.78
DP 1518 B2XF	3666	1504	41.3	1.19	4.4	30.3	83.6	54.64
DP 1851 B3XF	3412	1504	44.2	1.21	4.6	34.0	84.5	54.98
DG 3385 B2XF	3577	1499	41.9	1.17	4.8	30.7	84.9	54.05
DG 1702 GLT	3578	1497	42.0	1.16	4.4	32.2	82.5	54.62
CPS 18507-D	3423	1487	43.5	1.17	5.1	32.2	84.3	52.94
PHY 300 W3FE	3417	1486	43.7	1.17	4.6	32.1	83.6	54.55
CPS 18R817	3423	1485	43.4	1.17	4.8	31.6	84.1	54.32
NG 3729 B2XF	3571	1485	41.8	1.21	4.8	31.5	84.6	53.76
PX 3C06 W3FE	3471	1479	42.7	1.17	4.7	30.2	82.2	53.51
NG 4936 B3XF	3587	1478	41.6	1.22	4.8	31.0	84.6	54.12
BX 1974GLTP	3347	1473	44.3	1.19	4.7	31.6	84.2	54.76
NG 5711 B3XF	3477	1472	42.5	1.24	4.7	32.2	83.9	55.00
PX 5B73 W3FE	3470	1469	42.7	1.16	4.7	31.1	83.4	53.69
CPS 18501-C	3596	1466	40.8	1.25	4.0	31.8	84.8	55.13
ST 5020GLT	3596	1457	40.7	1.24	4.7	33.8	85.2	54.93
NG 5007 B2XF	3424	1453	42.6	1.18	4.6	30.1	83.5	54.38
CPS 18502-C	3452	1451	42.3	1.20	4.5	31.5	84.5	54.58
DP 17R818 B3XF	3321	1430	43.2	1.19	5.0	32.0	83.8	53.17
BX 1975GLTP	3234	1419	44.0	1.19	4.7	32.8	84.2	54.36
PX 4A69 W3FE	3225	1408	44.0	1.21	4.3	32.3	84.0	55.16
SSG UA 222	3424	1384	40.8	1.22	4.7	32.3	84.4	54.60
NG 4689 B2XF	3335	1373	41.4	1.17	4.9	33.7	83.7	53.49
BX 1976GLTP	3085	1365	44.4	1.19	5.0	33.9	84.4	53.71
SSG UA 114	3413	1346	39.5	1.21	4.8	32.8	85.3	54.47

PHY 440 W3FE	3072	1321	43.0	1.22	4.4	34.3	83.4	55.08
DG 3433 B2XF	3199	1304	40.9	1.11	4.5	27.8	81.4	52.38
NG 4777 B2XF	3196	1302	41.0	1.18	4.8	33.1	83.3	53.91
AMX 1818 B3XF	3167	1293	40.9	1.21	4.7	33.4	84.8	54.50
NG 3780 B2XF	3224	1276	40.1	1.21	5.0	33.5	83.9	53.52
AMX 1819 B3XF	3174	1276	40.3	1.18	4.8	31.6	84.4	54.27
AMX 1816 B3XF	3228	1237	38.5	1.21	4.3	31.4	83.8	54.85
NG 2982 B3XF	3072	1209	39.4	1.15	4.3	33.7	83.9	53.67
NG 3699 B2XF	2983	1174	39.6	1.22	4.7	32.5	82.9	54.34
Overall Mean	3510	1497	42.8	1.19	4.6	32.1	83.9	54.31
LSD(0.05)	N.S.	258	0.9	0.03	0.2	1.1	0.8	1.04
C.V. (%)	N.S.	27.6	3.3	4.3	5.5	5.5	1.6	3.1

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 6. 2018 mean yield performance of varieties cultivated at 5 locations in the Hill region.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	----	(g/tex)	(%)	¢/LB
DP 1646 B2XF	3077	1445	46.0	1.22	4.8	30.0	83.4	53.33
DP 1851 B3XF	3084	1420	45.8	1.15	4.8	32.3	83.9	52.76
DP 1845 B3XF	3110	1406	44.9	1.24	4.6	32.4	84.0	53.83
DG 3526 B2XF	3012	1392	45.7	1.13	5.0	28.9	84.0	52.01
PHY 580 W3FE	2917	1377	46.9	1.14	4.8	31.4	83.6	52.60
BX 1973GLTP	2925	1365	46.2	1.14	4.8	32.1	83.6	52.79
CPS 18R817	3004	1353	44.6	1.13	4.9	30.4	83.8	51.90
CPS 18R827	2951	1340	45.0	1.14	4.9	30.0	82.1	52.00
PHY 350 W3FE	3010	1336	44.2	1.16	5.0	30.9	84.4	52.43
PHY 430 W3FE	2867	1329	45.7	1.09	4.9	30.8	83.4	50.75
DP 1725 B2XF	2809	1318	46.4	1.15	4.8	29.9	82.6	52.35
PX 3B09 W3FE	2933	1309	44.5	1.15	4.5	31.8	82.7	52.81
PX 5B73 W3FE	2945	1308	44.2	1.14	4.8	30.0	83.4	52.51
CG 9178 B3XF	2810	1303	45.7	1.17	5.0	30.0	83.8	50.89
PHY 444 WRF	2899	1300	44.4	1.22	4.5	31.7	84.7	54.00
CG 9608 B3XF	2758	1294	46.7	1.14	4.7	29.5	82.7	53.11
PHY 312 WRF	2931	1293	43.5	1.17	4.7	30.6	83.9	53.13
CPS 18501-C	3062	1289	41.8	1.22	4.3	31.5	84.3	53.47
ST 5471GLTP	2984	1288	42.9	1.15	4.7	31.6	82.7	52.99
DG 1702 GLT	2971	1285	42.9	1.12	4.6	30.9	82.7	53.21
PHY 340 W3FE	2775	1276	45.3	1.15	4.8	30.5	83.4	52.71
PX 3B07 W3FE	2799	1273	45.3	1.16	4.6	32.0	82.9	52.93
NG 5007 B2XF	2848	1273	44.3	1.14	4.6	29.1	82.9	53.38
DG 3385 B2XF	2870	1272	44.0	1.14	5.0	29.1	84.3	51.42
ST 5122GLT	2905	1263	43.2	1.13	4.7	30.2	82.1	52.79
PX 5D28B W3FE	2766	1258	45.2	1.14	4.5	32.9	83.8	53.58
DG 3214 B2XF	2901	1256	42.9	1.16	5.0	30.5	84.2	51.23
ST 5517GLTP	2998	1254	41.5	1.16	4.6	31.5	82.5	53.64
PX 4A64 W3FE	2772	1248	44.7	1.12	4.8	32.0	83.8	52.81
BX 1974GLTP	2672	1247	46.1	1.16	4.9	31.0	83.9	52.56
DP 1555 B2RF	2673	1240	45.5	1.17	4.9	32.3	83.3	52.78
PX 3C06 W3FE	2753	1234	44.3	1.14	4.8	29.3	82.0	51.44
ST 4949GLT	2643	1227	46.0	1.12	4.9	29.6	83.0	52.04
NG 5711 B3XF	2770	1223	43.5	1.19	4.7	31.2	83.5	53.23
PX 4A69 W3FE	2647	1217	45.6	1.15	4.6	31.1	83.2	53.46
BX 1976GLTP	2679	1216	45.2	1.15	5.2	32.4	83.9	51.96
PHY 300 W3FE	2664	1212	45.3	1.13	4.8	30.4	83.2	52.73
CPS 18507-D	2671	1202	44.4	1.15	5.1	31.1	84.1	51.52
ST 5818GLTP	2845	1197	41.8	1.17	4.6	31.3	83.0	53.00
NG 4689 B2XF	2781	1197	42.6	1.12	4.9	31.4	82.6	51.77
CPS 18503-D	2721	1192	43.6	1.15	4.8	31.7	83.0	53.11
PHY 330 W3FE	2561	1183	45.9	1.14	4.7	30.7	83.1	52.51
NG 4936 B3XF	2721	1182	42.9	1.19	4.8	30.3	84.4	53.13
NG 3729 B2XF	2748	1180	42.5	1.17	4.9	30.7	83.9	52.01
PHY 480 W3FE	2664	1178	43.5	1.14	4.8	30.8	84.4	52.69
PHY 320 W3FE	2679	1178	43.5	1.12	4.7	31.1	84.2	52.34
DP 1518 B2XF	2749	1175	42.2	1.15	4.5	29.5	83.4	52.79
ST 5020GLT	2822	1171	41.2	1.22	4.6	33.4	84.3	53.41
DP 1820 B3XF	2556	1165	44.8	1.21	4.8	33.1	83.6	52.81
DP 1823 NR B2XF	2538	1153	45.0	1.18	4.5	31.1	84.2	52.94
DP 1835 B3XF	2480	1145	45.7	1.16	4.9	31.4	83.2	53.27
NG 4777 B2XF	2636	1141	42.8	1.13	4.9	31.4	82.6	51.59
BX 1975GLTP	2488	1139	45.2	1.16	4.9	31.0	83.7	52.21
SSG UA 222	2738	1137	41.1	1.20	4.7	32.0	83.6	53.29
DG 3433 B2XF	2655	1135	42.6	1.09	4.6	27.4	81.2	50.59
AMX 1817 B3XF	2430	1113	45.0	1.15	5.0	29.7	82.7	51.38
DP 1916 B3XF	2378	1097	45.4	1.14	4.8	31.5	83.2	52.41
NG 3699 B2XF	2638	1088	41.2	1.17	4.8	31.2	82.7	52.85

SSG UA 114	2717	1088	39.6	1.18	4.9	32.0	84.4	51.75
PHY 440 W3FE	2388	1077	44.7	1.17	4.6	33.5	83.3	54.02
AMX 1818 B3XF	2561	1074	41.8	1.19	4.8	32.9	84.4	52.69
AMX 1816 B3XF	2587	1031	39.4	1.19	4.3	30.5	83.3	53.79
DP 17R818 B3XF	2331	1025	43.4	1.18	4.9	32.3	83.9	52.16
NG 3780 B2XF	2438	1011	41.1	1.16	5.0	32.2	82.5	51.61
CPS 18502-C	2342	1007	42.7	1.15	4.4	30.4	83.4	53.53
AMX 1819 B3XF	2265	943	41.4	1.15	4.7	29.8	83.8	52.33
NG 2982 B3XF	2365	941	39.6	1.13	4.1	33.1	83.8	52.36
Overall Mean	2742	1216	43.9	1.16	4.8	31.1	83.4	52.59
LSD(0.05)	N.S.	N.S.	1.4	0.02	0.2	1.2	0.9	1.19
C.V. (%)	N.S.	N.S.	5.1	3.6	7.6	6.3	1.7	3.7

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 7. Mean yield performance and fiber characteristics for cotton varieties cultivated on a furrow irrigated Dundee Silt Loam at Michael Thompson Farms in Bee Lake, Mississippi in 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	---	(g/tex)	(%)	¢/LB
CPS 18R827	3957	1741	44.1	1.17	4.8	31.4	82.1	54.58
PX 4A64 W3FE	3667	1639	44.6	1.15	4.9	32.1	84.2	53.92
CG 9608 B3XF	3622	1635	45.2	1.20	4.6	30.0	84.7	54.49
PHY 312 WRF	3814	1627	42.6	1.19	4.8	32.2	84.0	54.73
DP 1845 B3XF	3703	1609	43.4	1.29	4.5	33.5	84.6	54.81
PX 3B09 W3FE	3587	1598	44.5	1.17	4.7	32.9	82.3	54.84
PHY 580 W3FE	3512	1597	45.5	1.18	4.8	33.1	83.9	55.13
DP 1851 B3XF	3561	1590	44.7	1.21	4.7	34.1	84.8	55.14
ST 5471GLTP	3768	1587	42.1	1.18	4.9	32.1	83.3	54.11
DP 1555 B2RF	3385	1543	45.6	1.20	4.9	31.8	84.3	54.11
PX 5D28B W3FE	3434	1527	44.4	1.16	4.6	33.2	83.8	53.42
PHY 320 W3FE	3615	1525	42.1	1.19	4.7	33.1	85.4	53.49
DG 3526 B2XF	3372	1516	45.0	1.14	5.0	29.4	83.5	52.28
PHY 340 W3FE	3411	1507	44.2	1.19	4.8	32.0	84.5	54.48
DP 1916 B3XF	3303	1485	45.2	1.19	5.0	33.4	84.8	52.94
PX 3B07 W3FE	3276	1470	44.9	1.21	4.9	34.3	84.3	53.65
DG 3385 B2XF	3405	1457	42.8	1.17	5.1	30.3	85.2	52.28
ST 4949GLT	3189	1454	45.6	1.15	4.9	30.7	83.9	53.69
DP 17R818 B3XF	3389	1442	42.7	1.21	5.2	32.4	84.2	52.05
CG 9178 B3XF	3219	1438	44.7	1.20	5.3	30.5	84.1	50.09
DP 1725 B2XF	3153	1431	45.4	1.17	4.9	30.2	82.2	54.21
PHY 444 WRF	3262	1422	43.6	1.26	4.5	32.5	84.8	54.61
BX 1973GLTP	3105	1409	45.3	1.18	4.8	33.7	84.5	51.79
NG 5711 B3XF	3320	1400	42.2	1.24	4.7	32.8	84.0	54.69
ST 5517GLTP	3387	1388	40.9	1.19	4.9	33.6	83.8	53.55
ST 5122GLT	3315	1387	42.0	1.13	4.8	30.9	82.0	53.19
PHY 330 W3FE	3146	1386	44.1	1.18	4.6	31.7	83.9	54.70
PHY 430 W3FE	3062	1384	45.3	1.14	4.9	31.8	84.5	54.00
ST 5818GLTP	3279	1366	41.6	1.18	4.7	33.2	82.6	54.56
PHY 300 W3FE	3140	1360	43.3	1.18	4.8	32.7	84.3	54.55
DP 1820 B3XF	3048	1359	44.7	1.23	4.9	33.7	83.5	54.10
CPS 18502-C	3155	1359	43.1	1.20	4.9	32.0	84.8	53.68
CPS 18501-C	3327	1355	40.8	1.25	4.2	31.7	84.9	54.53
DP 1646 B2XF	3069	1353	44.1	1.26	4.8	31.3	84.8	54.46
CPS 18503-D	3099	1352	43.7	1.20	5.0	31.9	84.1	53.53
PHY 440 W3FE	3052	1345	44.1	1.22	4.6	33.6	84.0	54.76
PX 5B73 W3FE	3082	1336	43.3	1.17	5.0	30.9	82.9	52.60
DG 3214 B2XF	3162	1332	42.1	1.20	5.1	32.2	84.5	52.44
PHY 480 W3FE	3071	1330	43.3	1.19	4.8	32.3	85.3	54.01
DP 1823 NR B2XF	2974	1321	44.5	1.22	4.4	32.1	85.2	54.95
DP 1835 B3XF	2899	1310	45.2	1.21	4.7	32.8	83.7	54.73
AMX 1817 B3XF	3013	1309	43.5	1.18	5.1	32.0	83.2	53.05
NG 4936 B3XF	3116	1306	41.9	1.22	5.0	30.6	83.8	53.36
NG 5007 B2XF	3064	1302	42.5	1.17	4.7	29.6	83.1	54.09
CPS 18507-D	2991	1299	43.5	1.16	5.2	32.3	84.5	51.96
PHY 350 W3FE	3022	1284	42.5	1.21	5.0	32.5	84.4	52.08
ST 5020GLT	3097	1282	41.4	1.23	5.0	34.4	84.7	53.62
CPS 18R817	2882	1272	44.2	1.14	5.0	30.8	83.9	52.40
DG 1702 GLT	3049	1271	41.7	1.16	4.6	32.3	83.0	54.34
SSG UA 114	3142	1231	39.1	1.23	5.1	33.3	85.1	52.60
PX 3C06 W3FE	2907	1227	42.2	1.18	4.8	30.9	82.0	53.60
BX 1974GLTP	2785	1227	44.2	1.19	4.8	31.4	84.3	54.75
BX 1975GLTP	2736	1192	43.7	1.18	4.9	33.1	83.9	53.68
DP 1518 B2XF	2841	1181	41.5	1.18	4.4	29.9	83.1	54.70
NG 3729 B2XF	2744	1156	42.2	1.21	5.1	32.3	84.9	52.46
SSG UA 222	2832	1150	40.6	1.23	5.1	33.7	85.0	52.59
AMX 1818 B3XF	2791	1141	40.8	1.23	4.7	34.4	85.1	54.93

PX 4A69 W3FE	2542	1130	44.4	1.22	4.5	32.9	84.3	54.71
DG 3433 B2XF	2660	1096	41.2	1.10	4.6	27.5	81.0	52.76
NG 2982 B3XF	2722	1069	39.0	1.18	4.5	34.7	84.6	54.56
AMX 1816 B3XF	2763	1050	38.0	1.21	4.4	31.6	83.4	54.69
BX 1976GLTP	2318	1022	44.2	1.20	5.2	34.7	84.8	52.15
NG 4689 B2XF	2413	998	41.4	1.14	5.0	33.7	83.3	53.51
AMX 1819 B3XF	2243	907	39.9	1.19	4.7	32.6	84.5	54.91
NG 4777 B2XF	2101	867	41.2	1.18	4.9	32.4	83.3	53.18
NG 3699 B2XF	1933	760	39.3	1.20	4.7	33.2	82.9	53.68
NG 3780 B2XF	1858	744	40.1	1.20	5.0	34.4	84.6	52.91
Overall Mean	3087	1330	43.0	1.19	4.8	32.2	94.0	53.72
LSD(0.05)	660	284	1.1	0.03	0.2	1.5	1.3	1.69
C.V. (%)	15.2.	15.2	1.8	1.8	3.1	3.3	1.1	2.2

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 8. Mean yield performance and fiber characteristics for cotton varieties cultivated on non-irrigated Brooksville silty clay at the Black Belt Branch Experiment Station in Noxubee County, Mississippi in 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	----	(g/tex)	(%)	¢/LB
DP 1851 B3XF	3335	1450	43.4	1.17	4.5	33.5	83.6	54.89
PX 3B09 W3FE	3389	1413	42.1	1.16	4.1	32.5	82.6	53.66
PHY 580 W3FE	3056	1408	45.9	1.13	4.7	31.0	82.4	53.00
DP 1845 B3XF	3161	1346	42.4	1.26	4.5	32.8	84.4	54.54
PHY 350 W3FE	3123	1344	43.1	1.16	5.0	31.6	84.1	53.36
PX 4A69 W3FE	2977	1325	44.5	1.16	4.4	30.7	83.5	54.16
DP 1820 B3XF	3171	1308	40.0	1.22	4.3	33.6	83.1	53.68
BX 1976GLTP	2942	1295	44.1	1.13	5.1	32.1	82.7	52.68
PX 5B73 W3FE	3032	1285	42.3	1.13	4.6	29.4	81.3	53.06
DP 1725 B2XF	2873	1279	44.5	1.15	4.7	29.6	82.2	53.93
AMX 1818 B3XF	3327	1272	38.3	1.22	4.5	35.3	85.1	55.05
ST 5517GLTP	3067	1248	40.4	1.15	4.6	32.3	82.1	54.60
ST 4949GLT	2648	1235	46.4	1.11	5.0	28.8	82.7	52.29
DP 1646 B2XF	2836	1216	42.9	1.24	4.6	29.0	82.9	52.85
ST 5471GLTP	2905	1209	41.6	1.14	4.5	32.7	81.9	54.31
PHY 300 W3FE	2763	1203	43.5	1.14	4.6	31.4	81.6	53.88
CG 9608 B3XF	2792	1202	43.6	1.15	4.5	31.3	83.1	53.60
DG 3526 B2XF	2686	1195	44.5	1.13	4.8	29.0	83.8	53.84
CPS 18R827	2761	1194	43.2	1.12	4.8	30.1	81.6	53.68
PX 3B07 W3FE	2570	1159	45.1	1.13	4.5	31.4	82.0	53.33
NG 4936 B3XF	2813	1154	41.2	1.19	4.8	30.4	84.3	52.96
PHY 430 W3FE	2538	1152	45.4	1.09	4.8	31.3	83.1	52.83
PX 5D28B W3FE	2632	1151	43.7	1.14	4.3	32.6	83.6	54.43
DP 1823 NR B2XF	2669	1143	42.8	1.17	4.3	32.4	84.0	54.48
CPS 18R817	2727	1129	41.8	1.14	4.5	31.1	83.2	53.56
NG 5711 B3XF	2741	1120	40.6	1.20	4.4	32.1	83.6	54.81
CG 9178 B3XF	2521	1098	43.7	1.17	4.7	30.7	83.6	52.34
ST 5122GLT	2622	1094	41.6	1.13	4.5	31.4	81.3	54.25
DP 1835 B3XF	2486	1085	43.6	1.18	4.6	33.3	83.6	54.79
SSG UA 222	2714	1085	40.0	1.22	4.6	32.1	83.6	54.45
PHY 312 WRF	2559	1082	41.3	1.17	4.4	30.8	83.9	52.53
PX 4A64 W3FE	2450	1077	43.4	1.12	4.5	31.7	83.1	52.93
NG 3699 B2XF	2807	1062	37.9	1.17	4.9	31.1	82.9	52.96
CPS 18501-C	2736	1058	39.0	1.21	4.0	31.7	83.2	52.90
DG 3214 B2XF	2634	1057	40.2	1.12	4.9	30.2	83.5	51.83
BX 1973GLTP	2359	1050	44.5	1.14	4.7	32.3	82.8	53.41
PHY 480 W3FE	2486	1041	40.5	1.15	4.5	31.3	83.8	53.23
DG 3433 B2XF	2576	1033	40.3	1.11	4.6	29.6	82.1	52.01
BX 1974GLTP	2344	1026	43.6	1.16	4.9	32.5	83.8	54.05
CPS 18507-D	2351	1019	43.3	1.16	5.2	31.6	83.8	51.95
DG 1702 GLT	2431	1015	41.8	1.13	4.3	31.1	82.4	54.05
NG 2982 B3XF	2667	1011	37.7	1.13	4.2	34.1	82.9	54.38
DP 1555 B2RF	2271	1008	44.4	1.18	4.9	32.9	83.6	53.80
ST 5818GLTP	2460	999	40.2	1.16	4.4	32.0	81.8	53.44
DG 3385 B2XF	2361	998	42.4	1.14	4.8	29.7	82.9	51.75
NG 5007 B2XF	2430	995	40.9	1.15	4.3	30.6	82.7	53.74
NG 4777 B2XF	2447	993	40.3	1.14	4.8	32.2	82.0	53.41
PHY 320 W3FE	2316	956	40.8	1.13	4.4	32.3	83.8	53.31
NG 4689 B2XF	2344	940	40.3	1.10	4.8	32.6	81.2	52.53
PHY 444 WRF	2151	924	43.2	1.22	4.4	30.5	83.8	54.53
AMX 1816 B3XF	2471	922	37.4	1.19	4.3	31.1	84.1	55.11
CPS 18503-D	2153	918	42.2	1.15	4.6	31.7	83.1	54.53
AMX 1817 B3XF	2080	907	43.5	1.15	4.9	30.4	81.5	53.31
ST 5020GLT	2191	886	40.1	1.23	4.4	35.3	83.7	52.35
NG 3729 B2XF	2234	886	39.5	1.16	4.8	31.3	83.3	53.48
SSG UA 114	2248	883	39.3	1.19	4.9	32.5	84.0	53.98
BX 1975GLTP	2054	876	42.6	1.16	4.7	32.0	83.7	53.29

PHY 340 W3FE	1991	861	41.8	1.15	4.4	30.5	83.5	53.99
CPS 18502-C	2056	836	40.7	1.15	4.3	30.6	83.2	54.33
DP 1518 B2XF	2060	831	40.2	1.13	4.5	29.3	82.0	53.73
PX 3C06 W3FE	1938	830	42.8	1.12	4.6	29.0	79.7	51.09
PHY 440 W3FE	1961	828	41.8	1.18	4.4	35.1	83.3	54.03
AMX 1819 B3XF	1994	814	40.5	1.14	4.6	30.3	84.1	54.26
DP 17R818 B3XF	1897	779	41.2	1.17	4.9	33.8	83.6	53.61
PHY 330 W3FE	1718	754	43.9	1.14	4.3	31.7	82.1	54.25
NG 3780 B2XF	1869	750	39.8	1.15	5.1	32.9	80.5	50.68
DP 1916 B3XF	1637	710	43.4	1.14	4.8	32.0	82.8	53.78
Overall Mean	2531	1066	42.0	1.16	4.6	31.6	83.0	53.52
LSD(0.05)	N.S.	N.S.	2.0	0.04	0.4	1.8	1.7	1.82
C.V. (%)	N.S.	N.S.	3.5	2.2	6.2	4.1	1.5	2.4

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 9. Mean yield performance and fiber characteristics for cotton varieties cultivated on non-irrigated Dubbs/Dundee very fine sandy loam on Cliff Heaton Farms near Clarksdale, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	---	(g/tex)	(%)	¢/LB
CPS 18R827	4499	1950	43.4	1.18	4.8	31.0	82.0	55.26
PHY 312 WRF	4690	1947	41.6	1.22	4.6	32.0	85.1	55.14
DP 1916 B3XF	4392	1899	43.3	1.17	4.7	33.3	83.5	54.56
PX 5D28B W3FE	4452	1886	42.3	1.20	4.3	34.6	84.3	55.28
DP 1646 B2XF	4360	1873	42.8	1.31	4.5	30.7	85.1	55.49
BX 1976GLTP	4241	1868	44.1	1.19	5.0	33.4	84.9	54.85
CG 9608 B3XF	4276	1866	43.6	1.23	4.2	31.5	83.9	55.89
AMX 1817 B3XF	4358	1863	43.1	1.19	5.0	31.7	83.3	54.08
PHY 580 W3FE	4183	1808	43.1	1.20	4.4	33.9	84.2	55.43
ST 5122GLT	4383	1785	40.8	1.15	4.5	32.3	82.3	55.43
CPS 18503-D	4319	1781	41.4	1.24	4.5	33.9	84.6	55.98
PX 3B07 W3FE	4169	1770	42.5	1.20	4.5	33.9	83.8	55.55
DG 3526 B2XF	4099	1769	43.2	1.19	4.6	30.9	85.3	55.68
ST 4949GLT	4040	1769	43.8	1.18	4.5	31.9	84.3	55.64
DP 1835 B3XF	3972	1763	44.3	1.23	4.5	34.2	83.7	55.73
PX 3B09 W3FE	4034	1743	43.3	1.19	4.4	32.6	83.5	55.30
DG 3385 B2XF	4299	1732	40.4	1.21	4.6	32.0	85.4	55.88
BX 1974GLTP	4013	1730	43.0	1.21	4.7	32.9	84.5	55.18
PHY 330 W3FE	3918	1709	43.7	1.17	4.6	31.6	83.7	54.31
DP 17R818 B3XF	3982	1697	42.7	1.20	5.0	31.6	83.5	53.39
PX 4A64 W3FE	4027	1689	42.2	1.18	4.7	33.3	84.5	54.61
CG 9178 B3XF	3839	1672	43.5	1.25	5.0	31.7	85.3	53.84
DG 1702 GLT	4092	1667	40.7	1.18	4.3	32.5	82.8	55.83
NG 3780 B2XF	4261	1665	39.0	1.23	5.1	34.3	84.4	52.96
ST 5818GLTP	4129	1664	40.3	1.22	4.4	33.2	84.0	55.71
DP 1820 B3XF	3807	1661	43.6	1.24	4.8	33.4	83.0	54.56
PX 4A69 W3FE	3870	1659	42.7	1.22	4.3	32.1	83.9	55.46
PHY 350 W3FE	4058	1654	40.9	1.22	4.5	33.0	84.6	55.78
NG 5711 B3XF	3923	1647	42.0	1.24	4.8	33.2	84.4	55.14
PHY 444 WRF	3922	1643	41.9	1.27	4.1	32.4	84.9	55.50
CPS 18502-C	3978	1635	41.2	1.22	4.5	32.4	85.0	55.29
ST 5471GLTP	3996	1630	40.8	1.20	4.4	33.0	83.3	55.48
DP 1518 B2XF	4220	1622	38.4	1.23	4.4	32.1	84.2	55.38
CPS 18507-D	3861	1616	41.8	1.20	4.7	32.8	84.9	55.43
PHY 430 W3FE	3824	1611	42.1	1.16	4.6	32.7	84.3	54.73
ST 5517GLTP	4077	1610	39.5	1.21	4.3	33.5	83.4	55.58
BX 1973GLTP	3722	1608	43.2	1.22	4.4	34.2	84.8	55.85
PHY 300 W3FE	3775	1601	42.3	1.19	4.6	33.1	83.9	55.55
ST 5020GLT	4066	1600	39.4	1.23	4.7	33.3	85.2	55.25
DP 1555 B2RF	3674	1599	43.5	1.23	4.4	33.3	84.3	55.95
PHY 340 W3FE	3684	1597	43.5	1.17	4.8	32.0	83.3	53.39
NG 4936 B3XF	3875	1597	41.3	1.25	4.8	30.9	85.0	53.94
DG 3214 B2XF	3846	1595	41.5	1.22	5.0	31.2	85.5	53.88
NG 3699 B2XF	4086	1589	38.9	1.25	4.7	32.7	83.0	55.10
PX 3C06 W3FE	3811	1583	41.5	1.21	4.4	31.1	83.4	55.03
DP 1725 B2XF	3583	1572	44.3	1.20	4.6	32.8	83.6	54.53
NG 4689 B2XF	3905	1562	40.0	1.20	4.9	34.6	84.5	54.70
SSG UA 222	4008	1560	39.0	1.27	4.7	32.7	84.9	55.63
PHY 480 W3FE	3849	1558	40.5	1.21	4.7	31.0	85.5	55.73
NG 4777 B2XF	3906	1553	39.7	1.18	4.9	33.3	82.8	54.14
CPS 18R817	3739	1552	42.0	1.20	4.6	32.5	84.4	55.74
PX 5B73 W3FE	3789	1549	40.8	1.17	4.6	31.6	83.7	54.29
DP 1823 NR B2XF	3698	1520	41.2	1.25	4.2	33.8	85.5	55.45
BX 1975GLTP	3552	1519	42.7	1.22	4.6	33.5	84.3	55.45
NG 3729 B2XF	3738	1510	40.5	1.24	4.9	31.8	85.2	54.01
PHY 320 W3FE	3636	1492	41.3	1.18	4.9	31.7	85.4	54.29
DP 1851 B3XF	3538	1488	42.1	1.23	4.3	34.7	85.2	55.90

DP 1845 B3XF	3506	1464	41.9	1.33	4.1	33.1	85.5	55.83
DG 3433 B2XF	3557	1423	40.0	1.16	4.4	30.2	82.9	54.11
AMX 1816 B3XF	3755	1416	37.7	1.23	4.3	31.8	84.2	55.01
NG 5007 B2XF	3435	1408	41.0	1.22	4.5	31.7	84.6	55.33
SSG UA 114	3612	1405	38.9	1.22	4.9	32.2	85.7	54.75
AMX 1818 B3XF	3471	1403	40.5	1.24	4.7	33.5	84.8	54.91
AMX 1819 B3XF	3578	1378	38.5	1.21	4.9	32.1	85.3	55.24
CPS 18501-C	3395	1378	40.6	1.27	3.9	31.3	85.7	55.36
NG 2982 B3XF	3236	1294	40.0	1.15	4.4	33.7	83.2	51.15
PHY 440 W3FE	3028	1238	41.0	1.24	4.2	34.5	83.4	55.41
Overall Mean	3920	1629	41.6	1.21	4.6	32.6	84.3	55.02
LSD(0.05)	737	307	1.5	0.04	0.3	1.8	1.2	1.61
C.V. (%)	13.1	13.1	2.6	2.3	4.4	4.1	1.1	2.1

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 10. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated McLaurin fine sandy loam soil at Stringellow/Courtney Farms near Lucedale, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	---	(g/tex)	(%)	¢/LB
DP 1845 B3XF	2342	1017	43.2	1.30	4.9	33.1	85.8	53.30
PX 5D28B W3FE	2054	920	43.6	1.18	4.8	35.7	85.7	54.19
NG 5711 B3XF	2096	872	41.4	1.22	4.9	32.8	84.8	53.48
CPS 18R827	2035	872	42.9	1.21	5.0	32.7	83.8	52.23
DP 1518 B2XF	1990	803	40.3	1.21	5.0	31.9	85.4	52.84
DP 1851 B3XF	1820	795	43.6	1.21	5.1	34.5	84.8	51.19
PHY 444 WRF	1897	794	41.8	1.28	5.0	33.2	86.7	52.85
CPS 18R817	1827	776	42.5	1.17	5.3	32.3	85.4	51.18
DG 3433 B2XF	1838	763	41.6	1.10	4.9	29.0	81.8	51.21
PX 3B07 W3FE	1711	762	44.4	1.18	5.1	33.7	83.4	50.75
CPS 18503-D	1740	761	43.6	1.19	5.3	33.7	84.5	52.59
PX 5B73 W3FE	1793	760	42.5	1.17	5.1	31.8	84.8	51.95
ST 5818GLTP	1856	760	40.8	1.21	5.2	33.2	84.6	51.95
BX 1973GLTP	1677	742	44.2	1.16	5.0	33.2	84.1	52.03
DP 1646 B2XF	1661	726	43.8	1.25	5.0	31.0	83.9	53.79
PHY 340 W3FE	1666	724	43.3	1.17	5.2	32.4	84.3	51.20
PHY 580 W3FE	1582	718	45.4	1.16	5.1	32.7	84.6	51.21
DG 3526 B2XF	1650	711	43.2	1.16	5.2	30.0	85.1	51.40
ST 5517GLTP	1745	699	40.0	1.20	5.1	32.7	84.2	52.59
DG 3214 B2XF	1692	693	40.9	1.19	5.4	32.2	85.3	49.15
PHY 430 W3FE	1611	690	42.9	1.13	5.2	32.7	84.6	50.33
ST 5122GLT	1615	680	42.0	1.15	5.1	31.4	82.8	52.09
ST 5471GLTP	1618	666	41.3	1.19	5.3	33.1	84.4	50.66
PX 3B09 W3FE	1513	659	43.5	1.18	5.1	33.3	84.0	50.76
DP 17R818 B3XF	1511	644	42.8	1.21	5.1	32.2	85.6	52.18
PHY 330 W3FE	1480	640	43.4	1.14	5.2	31.0	84.2	49.58
CPS 18507-D	1507	637	42.3	1.17	5.4	32.9	85.3	50.99
DG 3385 B2XF	1536	633	41.3	1.16	5.4	30.5	85.1	48.98
CG 9608 B3XF	1393	628	45.3	1.18	4.8	30.4	83.8	53.64
PX 4A64 W3FE	1479	628	42.5	1.17	5.2	33.8	85.2	52.18
PHY 480 W3FE	1500	627	41.9	1.17	5.2	31.7	85.5	51.86
NG 3729 B2XF	1529	627	41.0	1.21	5.4	32.2	85.8	48.34
DP 1916 B3XF	1414	618	43.7	1.16	5.3	33.7	85.1	51.28
ST 4949GLT	1413	618	43.6	1.14	5.2	30.4	83.3	51.31
PHY 320 W3FE	1482	613	41.4	1.13	5.2	31.3	85.2	49.69
CPS 18501-C	1518	611	40.3	1.28	4.6	33.6	85.8	54.09
DG 1702 GLT	1489	607	40.7	1.14	5.0	32.8	83.7	53.20
NG 3780 B2XF	1502	602	40.0	1.21	5.5	34.4	84.5	51.21
NG 4689 B2XF	1473	601	40.7	1.16	5.4	32.9	84.1	51.21
CG 9178 B3XF	1368	596	43.7	1.19	5.3	31.0	84.9	49.76
PX 4A69 W3FE	1339	594	44.3	1.20	5.1	34.3	84.6	53.25
NG 3699 B2XF	1480	593	40.1	1.23	5.4	34.1	84.1	51.16
BX 1976GLTP	1382	591	42.7	1.19	5.4	34.2	85.3	50.94
DP 1820 B3XF	1325	586	44.1	1.24	5.3	35.4	84.8	50.87
NG 2982 B3XF	1484	570	39.2	1.17	4.6	34.1	84.9	52.08
AMX 1819 B3XF	1375	567	41.1	1.18	5.3	31.5	84.7	50.79
PX 3C06 W3FE	1332	564	42.3	1.16	5.3	30.4	83.5	48.73
PHY 300 W3FE	1280	557	43.5	1.15	5.2	30.7	84.4	51.89
PHY 350 W3FE	1309	557	42.4	1.17	5.2	31.6	84.7	50.94
NG 5007 B2XF	1289	553	43.0	1.19	4.8	30.3	84.6	54.69
PHY 440 W3FE	1280	553	43.1	1.19	5.0	34.5	83.7	53.39
DP 1725 B2XF	1210	543	45.0	1.17	5.0	31.9	82.8	52.73
DP 1823 NR B2XF	1230	530	43.2	1.21	5.0	33.0	85.0	51.30
AMX 1818 B3XF	1323	528	40.1	1.22	5.2	33.9	85.2	52.04
DP 1835 B3XF	1198	526	43.8	1.21	5.1	32.5	83.7	52.39
PHY 312 WRF	1287	524	40.8	1.20	4.9	31.7	84.9	53.95
BX 1974GLTP	1143	510	44.6	1.18	5.2	31.0	85.0	51.43

ST 5020GLT	1246	501	40.2	1.24	5.0	33.8	84.7	52.29
CPS 18502-C	1184	493	41.8	1.19	5.0	31.4	84.2	54.06
NG 4936 B3XF	1259	490	39.2	1.22	4.9	31.7	84.4	53.16
NG 4777 B2XF	1187	487	41.1	1.19	5.4	33.9	84.5	49.50
BX 1975GLTP	1105	476	43.1	1.17	5.2	32.0	84.2	51.01
AMX 1817 B3XF	1121	461	41.2	1.19	5.2	32.3	84.7	50.44
AMX 1816 B3XF	1055	398	37.8	1.22	4.7	32.3	84.2	54.58
DP 1555 B2RF	896	392	42.8	1.21	5.1	33.8	84.4	51.81
SSG UA 114	869	326	37.7	1.19	5.2	32.9	85.1	50.65
SSG UA 222	831	323	38.6	1.21	5.0	32.7	84.3	52.59
Overall Mean	1487	628	42.1	1.19	5.1	32.5	84.6	51.75
LSD(0.05)	468	197	1.6	0.04	0.3	1.6	1.2	2.44
C.V. (%)	22.5	22.4	2.7	2.2	4.2	3.5	1.0	3.4

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 11. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Falaya silt loam soil at Pace Farms near Senatobia, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	----	(g/tex)	(%)	¢/LB
PX 3C06 W3FE	4381	2041	46.6	1.17	4.9	30.5	82.9	54.60
DG 1702 GLT	4534	2034	44.9	1.11	4.7	30.9	82.5	53.78
DP 1725 B2XF	4168	2026	48.7	1.15	5.1	29.7	82.9	52.03
CG 9178 B3XF	4185	1996	47.7	1.18	5.3	30.3	83.8	51.34
CPS 18R817	4152	1967	47.6	1.12	5.2	30.0	83.9	51.53
DP 1646 B2XF	4103	1955	49.5	1.24	5.0	31.3	83.7	53.20
PHY 312 WRF	4203	1919	45.8	1.17	4.9	30.6	83.3	54.14
ST 5122GLT	4190	1898	45.3	1.13	4.6	29.1	81.6	53.93
CPS 18501-C	4360	1890	43.3	1.25	4.3	31.6	85.3	55.05
ST 5471GLTP	4165	1878	45.0	1.14	4.9	31.0	82.1	53.95
BX 1973GLTP	3934	1873	47.6	1.15	5.0	32.8	85.2	53.83
PX 3B07 W3FE	3823	1867	47.7	1.18	4.8	32.0	83.6	54.18
DG 3526 B2XF	3899	1850	47.5	1.15	5.0	29.1	84.6	53.51
DG 3214 B2XF	4015	1838	45.8	1.17	5.0	30.4	84.2	53.06
PHY 350 W3FE	4089	1834	44.8	1.21	4.9	31.9	85.2	54.14
DP 1518 B2XF	4045	1827	45.1	1.16	4.7	29.7	83.1	54.33
DP 1555 B2RF	3790	1813	47.8	1.18	4.9	32.3	82.7	53.68
DG 3385 B2XF	3931	1804	45.9	1.17	5.1	29.0	85.6	53.18
NG 3729 B2XF	4035	1802	44.7	1.19	5.0	30.5	83.6	53.00
ST 4949GLT	3746	1797	48.0	1.12	5.1	30.4	83.3	52.45
PHY 444 WRF	3945	1794	45.5	1.25	4.4	32.7	85.2	55.48
CPS 18R827	3812	1789	47.0	1.17	5.0	29.5	82.6	52.46
DP 17R818 B3XF	3873	1783	46.0	1.20	5.2	32.2	83.8	52.01
DP 1916 B3XF	3742	1780	47.5	1.14	5.0	31.4	82.7	52.93
NG 4689 B2XF	3942	1761	44.7	1.13	5.1	32.0	83.4	52.80
PX 3B09 W3FE	3807	1756	46.1	1.17	4.7	31.6	83.0	54.65
SSG UA 114	4228	1747	41.3	1.18	5.2	32.2	84.7	51.48
AMX 1817 B3XF	3648	1735	47.5	1.16	5.1	30.0	82.7	52.05
PX 4A64 W3FE	3700	1732	46.8	1.13	4.9	31.9	83.8	53.73
DP 1845 B3XF	3655	1714	46.9	1.21	4.8	33.2	82.5	54.11
NG 4777 B2XF	3877	1709	44.1	1.15	5.0	32.1	83.4	53.55
PX 5D28B W3FE	3651	1702	46.6	1.15	4.7	33.3	83.9	55.05
ST 5020GLT	4012	1700	42.3	1.22	4.9	34.0	84.9	54.99
PHY 340 W3FE	3694	1700	46.1	1.17	4.9	30.7	83.4	53.78
PHY 320 W3FE	3747	1700	45.3	1.15	4.8	32.2	84.5	54.81
PHY 430 W3FE	3546	1699	47.9	1.10	5.2	30.8	84.0	50.90
NG 4936 B3XF	3755	1686	44.9	1.19	5.0	30.4	84.5	53.85
DP 1820 B3XF	3594	1682	46.8	1.23	5.1	33.8	83.9	52.60
DP 1823 NR B2XF	3573	1679	47.0	1.18	4.6	31.3	84.5	54.75
CPS 18503-D	3749	1671	44.6	1.18	4.9	33.5	83.2	54.36
CG 9608 B3XF	3423	1667	48.7	1.14	4.8	29.8	81.6	53.79
BX 1974GLTP	3488	1659	47.6	1.18	5.0	31.4	84.4	53.58
ST 5818GLTP	3789	1641	43.3	1.18	4.6	31.6	83.1	54.41
ST 5517GLTP	3805	1639	43.0	1.17	4.8	31.8	82.7	53.80
DP 1851 B3XF	3434	1636	47.7	1.14	5.0	32.2	84.0	54.03
NG 5711 B3XF	3526	1606	45.6	1.20	4.9	31.2	82.9	53.69
PHY 580 W3FE	3324	1604	48.2	1.16	4.9	32.7	84.4	54.91
AMX 1816 B3XF	3803	1591	41.9	1.19	4.4	31.8	83.4	54.93
CPS 18502-C	3517	1591	45.4	1.17	4.6	30.7	83.3	54.20
PX 5B73 W3FE	3468	1589	45.8	1.16	5.2	30.9	83.9	52.05
BX 1975GLTP	3434	1588	46.4	1.17	5.0	31.5	83.9	53.31
NG 5007 B2XF	3446	1586	46.2	1.14	4.7	28.7	82.7	54.23
PHY 330 W3FE	3401	1574	46.3	1.18	4.8	31.7	84.8	55.15
CPS 18507-D	3407	1572	46.1	1.14	5.1	30.7	83.8	53.09
DG 3433 B2XF	3581	1557	43.5	1.11	4.6	27.7	81.5	53.58
SSG UA 222	3686	1555	42.2	1.22	5.0	33.2	84.3	53.91
PHY 300 W3FE	3345	1546	46.3	1.15	5.0	31.2	83.6	53.55

DP 1835 B3XF	3260	1532	47.1	1.19	5.0	32.0	84.0	54.38
NG 3780 B2XF	3572	1527	42.8	1.16	5.1	32.0	83.5	53.05
PHY 480 W3FE	3331	1516	45.5	1.16	4.8	30.9	84.4	54.20
BX 1976GLTP	3307	1515	45.8	1.18	5.5	33.9	84.3	51.56
PX 4A69 W3FE	3159	1510	47.6	1.18	4.6	31.3	83.4	55.01
NG 3699 B2XF	3481	1488	42.7	1.16	4.8	31.3	82.3	54.64
AMX 1819 B3XF	3295	1411	42.8	1.17	5.0	30.1	84.5	54.16
AMX 1818 B3XF	3166	1384	43.8	1.18	5.0	33.7	84.6	53.55
PHY 440 W3FE	3028	1380	45.7	1.21	4.5	34.8	84.0	55.24
NG 2982 B3XF	2782	1160	41.9	1.12	4.2	33.6	84.2	54.28
Overall Mean	3725	1702	45.7	1.17	4.9	31.4	83.7	53.66
LSD(0.05)	428	195	1.5	0.04	0.3	1.6	1.6	1.65
C.V. (%)	8.1	8.1	2.3	2.5	3.8	3.7	1.3	2.2

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 12. Mean yield performance and fiber characteristics for cotton varieties cultivated on a furrow irrigated Dubbs Loam/Tensas Silty Clay Loam at Porter Farms near Sidon, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	---	(g/tex)	(%)	¢/LB
DP 1646 B2XF	2735	1255	45.4	1.15	5.0	29.3	82.5	53.53
PX 3B09 W3FE	2671	1228	46.0	1.11	4.8	30.1	81.9	53.77
PHY 580 W3FE	2542	1174	46.1	1.07	4.9	29.9	82.4	51.75
PHY 320 W3FE	2676	1172	43.9	1.11	4.8	31.5	83.1	53.39
ST 5517GLTP	2564	1089	42.4	1.12	4.7	30.5	81.5	54.10
PHY 312 WRF	2516	1086	43.0	1.12	4.9	30.9	83.2	53.00
PX 5D28B W3FE	2336	1067	45.7	1.10	4.7	31.7	82.8	53.44
ST 5122GLT	2419	1056	43.6	1.09	4.8	28.9	81.3	53.17
DG 3385 B2XF	2430	1029	42.6	1.10	5.0	28.8	83.3	52.71
DG 3214 B2XF	2305	1024	44.3	1.10	5.2	30.0	83.1	51.31
CG 9178 B3XF	2249	1024	45.6	1.10	5.3	28.8	82.0	49.78
PHY 340 W3FE	2189	1017	46.5	1.08	5.0	28.6	81.5	51.06
PX 3B07 W3FE	2215	1015	45.7	1.11	4.9	30.2	82.0	52.34
PHY 350 W3FE	2280	1011	44.3	1.12	5.0	29.1	82.9	52.09
NG 3729 B2XF	2308	1011	43.7	1.14	5.0	30.0	82.9	52.69
PX 3C06 W3FE	2247	1006	44.8	1.08	5.2	27.9	80.3	49.50
PHY 430 W3FE	2093	972	46.5	1.06	5.0	30.3	81.9	50.13
DP 1725 B2XF	2078	967	46.5	1.10	4.9	29.6	82.1	52.86
DP 1845 B3XF	2144	966	45.1	1.21	4.7	32.8	83.2	54.94
ST 5818GLTP	2260	960	42.4	1.13	4.7	30.7	82.0	54.50
NG 4777 B2XF	2209	959	43.2	1.11	5.0	31.0	81.6	52.10
PHY 480 W3FE	2172	959	44.1	1.13	4.7	31.1	83.8	54.71
DG 3526 B2XF	2071	957	46.2	1.07	5.0	28.1	82.5	50.73
CPS 18R817	2185	955	43.7	1.11	5.0	30.5	82.8	52.54
DG 1702 GLT	2187	955	43.6	1.09	4.6	29.8	80.6	52.55
NG 4689 B2XF	2174	955	43.7	1.07	5.3	30.0	81.5	49.53
ST 5471GLTP	2137	916	43.0	1.11	4.7	30.2	81.8	53.35
DP 1820 B3XF	2004	916	45.5	1.15	5.0	32.4	82.5	53.08
CPS 18503-D	2071	913	44.2	1.11	4.9	29.4	82.4	53.11
PX 5B73 W3FE	1985	907	45.7	1.08	4.8	28.9	82.2	51.56
PHY 330 W3FE	1942	892	45.9	1.07	4.7	29.0	81.5	51.33
PHY 300 W3FE	1946	889	45.6	1.09	4.7	29.6	82.2	52.33
CPS 18R827	1981	866	43.9	1.09	5.0	29.4	81.4	52.25
ST 5020GLT	2041	860	42.2	1.18	4.8	33.0	84.0	54.94
AMX 1819 B3XF	1996	858	43.0	1.10	5.0	28.7	83.1	51.50
ST 4949GLT	1819	845	46.4	1.06	4.8	28.1	81.5	49.93
PX 4A69 W3FE	1819	843	46.4	1.12	4.4	29.9	82.3	54.36
CG 9608 B3XF	1772	841	47.4	1.07	4.6	26.5	80.7	50.98
BX 1974GLTP	1819	839	46.2	1.12	4.9	29.3	82.4	53.05
AMX 1818 B3XF	1964	838	42.7	1.09	5.0	32.1	83.2	51.84
BX 1973GLTP	1802	835	46.3	1.11	4.9	31.5	82.6	52.65
DP 1555 B2RF	1815	828	45.6	1.14	5.0	33.5	82.7	53.26
CPS 18502-C	1872	827	44.2	1.11	4.6	29.2	82.5	53.66
CPS 18501-C	1968	826	42.0	1.17	4.2	30.2	82.6	54.81
NG 5007 B2XF	1845	823	44.5	1.10	4.9	26.9	81.8	51.98
DP 1851 B3XF	1770	820	46.3	1.13	5.0	31.5	83.1	53.01
BX 1975GLTP	1781	817	45.8	1.12	5.1	30.4	83.1	52.63
PHY 444 WRF	1824	817	44.8	1.18	4.6	31.6	83.6	54.70
DP 1518 B2XF	1875	817	43.5	1.09	4.6	27.5	81.9	53.01
DP 1823 NR B2XF	1781	814	46.0	1.12	4.8	30.5	83.2	53.49
SSG UA 222	1845	811	43.8	1.11	4.7	30.1	81.6	53.71
NG 2982 B3XF	1959	800	40.9	1.06	4.4	30.7	82.2	51.61
NG 3699 B2XF	1877	799	42.4	1.12	4.8	29.4	81.0	52.56
CPS 18507-D	1787	798	44.5	1.09	5.4	30.2	83.1	49.35
NG 3780 B2XF	1785	775	43.4	1.12	5.0	30.3	81.7	52.31
NG 5711 B3XF	1727	761	44.0	1.16	4.8	31.0	81.8	54.71
BX 1976GLTP	1615	740	45.9	1.12	5.2	31.6	82.1	51.89

DG 3433 B2XF	1733	734	42.3	1.02	4.9	24.4	79.6	46.39
SSG UA 114	1828	732	40.0	1.14	4.9	31.9	83.8	53.58
PHY 440 W3FE	1641	730	44.4	1.14	4.5	32.5	81.4	54.03
DP 1916 B3XF	1617	730	45.2	1.12	4.8	30.6	81.8	53.80
PX 4A64 W3FE	1619	723	44.7	1.10	4.9	32.1	82.6	53.33
DP 17R818 B3XF	1585	705	44.5	1.09	5.2	30.9	82.1	50.91
DP 1835 B3XF	1503	698	46.5	1.11	4.7	30.1	81.4	53.53
AMX 1817 B3XF	1499	694	46.0	1.07	5.0	28.1	80.9	50.28
AMX 1816 B3XF	1669	682	40.9	1.11	4.5	28.6	81.7	53.56
NG 4936 B3XF	1553	675	43.5	1.14	5.0	29.6	82.9	52.63
Overall Mean	2011	894	44.5	1.11	4.9	30.0	82.2	52.49
LSD(0.05)	526	240	1.6	0.04	0.3	1.8	1.2	2.16
C.V. (%)	18.6	19.1	2.6	2.2	4.0	4.3	1.1	2.9

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 13. Mean yield performance and fiber characteristics for cotton varieties cultivated on a Marietta Fine Sandy Loam at the Plant Science Research Center near Starkville, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	---	(g/tex)	(%)	¢/LB
NG 5007 B2XF	2755	1253	45.5	1.09	4.6	26.7	81.1	51.09
DG 3385 B2XF	2548	1186	46.5	1.08	4.8	27.1	83.3	51.85
DG 3526 B2XF	2509	1171	46.6	1.08	4.8	27.6	82.2	51.78
PX 3C06 W3FE	2453	1122	45.7	1.11	4.5	26.5	81.0	49.44
NG 4689 B2XF	2531	1119	44.1	1.09	4.5	28.1	81.5	51.33
ST 5517GLTP	2526	1073	42.4	1.11	4.1	28.9	80.9	52.83
PHY 580 W3FE	2201	1052	47.8	1.08	4.4	29.3	82.3	52.74
ST 5122GLT	2321	1038	44.6	1.08	4.6	28.0	81.8	51.04
DP 1845 B3XF	2299	1037	45.1	1.17	4.3	31.3	82.7	54.30
DP 1851 B3XF	2182	1032	47.2	1.07	4.7	28.9	82.7	50.50
ST 5020GLT	2426	1028	42.4	1.17	4.3	31.3	83.1	52.78
DP 1646 B2XF	2210	1018	46.1	1.17	4.4	28.2	81.9	53.85
DG 1702 GLT	2256	1004	44.6	1.08	4.4	28.6	81.3	51.58
BX 1973GLTP	2121	1000	47.5	1.08	4.6	28.7	81.3	52.46
PHY 350 W3FE	2175	999	46.0	1.10	4.8	28.1	82.9	52.04
BX 1974GLTP	2086	975	46.9	1.11	4.4	28.9	82.4	51.59
ST 5818GLTP	2291	975	42.6	1.11	4.0	28.2	81.4	52.46
ST 5471GLTP	2221	973	43.8	1.11	4.2	28.9	82.1	53.23
PHY 340 W3FE	2016	967	47.9	1.10	4.4	27.8	82.0	52.95
NG 4777 B2XF	2218	965	43.6	1.08	4.4	26.5	81.0	51.00
NG 3699 B2XF	2223	965	43.5	1.10	4.4	27.2	81.4	52.04
CPS 18501-C	2225	962	43.4	1.13	4.1	29.0	82.8	53.13
PHY 312 WRF	2125	961	45.2	1.11	4.5	28.5	82.8	52.49
NG 3729 B2XF	2172	958	44.0	1.11	4.7	28.6	82.1	51.64
CPS 18R827	2102	947	45.1	1.08	4.8	27.7	80.5	50.43
PX 3B09 W3FE	2048	926	45.1	1.10	4.1	29.3	81.3	53.01
SSG UA 114	2309	914	39.7	1.15	4.3	28.9	83.3	50.75
CPS 18R817	2018	912	45.2	1.08	4.7	28.0	82.1	50.48
PHY 430 W3FE	1986	908	45.5	1.05	4.6	27.4	81.9	48.83
BX 1975GLTP	1954	907	46.4	1.10	4.7	28.1	82.8	52.46
BX 1976GLTP	1925	904	47.1	1.10	4.9	29.1	83.1	52.68
SSG UA 222	2104	902	42.9	1.11	4.4	28.9	81.5	52.55
PHY 444 WRF	1974	899	45.4	1.14	4.3	29.8	82.8	54.13
DG 3214 B2XF	2020	898	44.5	1.13	4.7	28.7	82.7	50.88
CG 9178 B3XF	1951	889	45.5	1.12	4.6	27.2	82.1	50.89
PX 4A64 W3FE	1887	874	46.4	1.06	4.6	29.3	82.1	51.49
PHY 320 W3FE	1910	874	45.7	1.07	4.5	28.4	82.7	51.05
PHY 300 W3FE	1831	871	47.5	1.08	4.6	27.6	81.7	52.36
DP 1555 B2RF	1917	871	45.5	1.10	4.6	29.8	81.5	52.88
DP 1725 B2XF	1860	859	46.1	1.11	4.5	27.8	82.1	51.58
PHY 330 W3FE	1750	858	49.0	1.07	4.4	27.2	81.0	51.40
DP 1835 B3XF	1820	857	46.8	1.07	4.9	27.9	81.5	51.58
PHY 480 W3FE	1917	853	44.4	1.11	4.6	29.4	83.4	52.80
ST 4949GLT	1809	833	46.1	1.08	4.4	28.2	82.1	51.85
PX 3B07 W3FE	1842	828	45.0	1.11	4.1	29.5	81.1	52.58
PX 5B73 W3FE	1828	828	45.3	1.09	4.4	27.6	82.1	52.76
PX 4A69 W3FE	1763	799	45.4	1.09	4.3	27.9	81.0	52.94
CG 9608 B3XF	1675	796	48.1	1.09	4.6	26.8	81.8	52.19
NG 3780 B2XF	1896	787	41.4	1.12	4.4	29.1	80.8	50.98
PX 5D28B W3FE	1703	786	46.2	1.09	4.2	29.8	82.2	52.20
NG 4936 B3XF	1770	781	44.4	1.16	4.4	28.5	83.7	53.21
CPS 18507-D	1754	776	44.2	1.10	4.5	28.3	82.8	51.68
PHY 440 W3FE	1631	763	46.9	1.10	4.4	29.5	81.5	52.83
NG 5711 B3XF	1711	760	44.3	1.13	4.5	28.6	82.3	52.15
CPS 18502-C	1743	749	43.1	1.09	3.6	28.1	81.8	51.41
CPS 18503-D	1697	747	44.1	1.07	4.4	27.3	81.8	51.89
AMX 1816 B3XF	1830	740	40.3	1.13	3.8	26.3	80.9	50.70

DP 1518 B2XF	1673	706	42.2	1.09	4.0	26.8	82.9	51.28
AMX 1817 B3XF	1528	704	46.1	1.10	4.6	25.6	81.6	51.40
DP 1916 B3XF	1505	676	44.8	1.12	4.1	28.8	81.8	52.58
AMX 1818 B3XF	1596	672	42.0	1.14	4.4	29.4	82.9	50.78
DP 1820 B3XF	1419	643	45.3	1.14	4.4	30.4	82.1	54.05
DP 1823 NR B2XF	1309	602	45.9	1.12	3.9	27.6	82.7	52.06
NG 2982 B3XF	1515	596	39.4	1.08	3.4	30.4	82.2	48.05
DP 17R818 B3XF	1358	592	43.4	1.14	4.3	30.0	81.7	51.33
AMX 1819 B3XF	1376	574	41.4	1.08	4.2	25.8	81.8	50.48
DG 3433 B2XF	1250	554	43.4	1.02	4.5	23.4	79.6	44.71
Overall Mean	1963	881	44.9	1.10	4.4	28.3	82.0	51.77
LSD(0.05)	392	178	1.9	0.04	0.3	1.3	1.3	2.26
C.V. (%)	14.1	14.2	3.0	2.3	5.6	3.3	1.1	3.1

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 14. Mean yield performance and fiber characteristics for cotton varieties cultivated on an irrigated Bosket very fine sandy loam soil at the Mississippi State University Delta Research and Extension Center near Stoneville, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	----	(g/tex)	(%)	¢/LB
DP 1555 B2RF	4529	2042	45.1	1.22	4.8	34.8	84.3	54.83
DP 1725 B2XF	4571	2027	44.3	1.24	4.5	32.1	84.2	55.51
PX 3B09 W3FE	4714	2018	42.8	1.23	4.4	34.7	83.8	55.43
CPS 18503-D	4593	2012	43.8	1.24	4.9	34.0	85.2	55.39
DP 1823 NR B2XF	4461	1963	44.0	1.23	4.3	32.9	85.3	55.73
PHY 580 W3FE	4421	1947	44.0	1.23	4.8	34.5	85.3	56.08
CG 9178 B3XF	4448	1945	43.7	1.25	4.8	32.6	85.3	54.83
DG 3526 B2XF	4424	1944	44.0	1.18	4.6	31.5	84.3	55.58
DP 1646 B2XF	4421	1935	43.8	1.30	4.5	30.6	85.5	55.68
DG 3214 B2XF	4519	1925	42.6	1.22	4.9	33.3	85.5	54.93
CPS 18R817	4426	1922	43.4	1.20	4.5	32.9	84.8	55.80
PHY 430 W3FE	4419	1910	43.2	1.18	4.5	33.1	84.8	55.69
DP 1518 B2XF	4638	1909	41.2	1.23	4.3	32.2	85.0	55.65
BX 1973GLTP	4255	1904	44.8	1.21	4.5	34.9	84.8	55.83
CPS 18501-C	4629	1884	40.7	1.30	4.0	33.7	85.8	55.85
PHY 330 W3FE	4417	1880	42.0	1.21	4.3	33.2	84.2	55.98
ST 5471GLTP	4450	1852	41.5	1.21	4.6	33.2	83.7	55.15
PX 3B07 W3FE	4251	1850	43.5	1.23	4.6	35.3	83.9	55.58
CPS 18507-D	4208	1842	43.8	1.20	4.9	34.2	84.5	54.09
PX 5D28B W3FE	4281	1838	42.9	1.21	4.2	34.5	85.0	55.58
CPS 18R827	4242	1837	43.3	1.21	4.6	32.5	82.8	55.54
ST 5122GLT	4417	1830	41.5	1.20	4.4	32.2	82.8	55.58
DP 1820 B3XF	4110	1829	44.5	1.25	4.7	35.2	84.3	55.48
DP 1835 B3XF	4075	1827	44.8	1.24	4.6	33.0	84.7	55.75
PHY 312 WRF	4384	1824	41.6	1.22	4.5	34.0	85.5	55.75
ST 5020GLT	4472	1823	40.8	1.28	4.6	34.7	86.1	55.81
CPS 18502-C	4334	1821	42.1	1.24	4.4	33.1	85.5	55.61
PHY 350 W3FE	4373	1817	41.6	1.23	4.5	33.5	85.5	55.70
DP 1845 B3XF	4191	1811	43.2	1.32	4.4	33.4	85.8	55.10
NG 3729 B2XF	4393	1811	41.2	1.24	4.6	31.6	84.6	55.20
NG 5007 B2XF	4230	1811	42.8	1.22	4.5	32.5	84.6	55.78
PHY 444 WRF	4256	1795	42.2	1.30	3.9	33.0	86.0	54.69
PX 4A64 W3FE	4157	1791	43.1	1.20	4.6	34.5	85.7	56.15
PHY 340 W3FE	4213	1786	42.4	1.21	4.5	32.8	84.2	55.19
BX 1974GLTP	3993	1781	44.4	1.22	4.5	32.7	84.6	55.75
ST 5818GLTP	4334	1780	41.0	1.22	4.5	34.1	84.1	56.00
DP 1916 B3XF	3981	1779	44.7	1.24	4.7	34.5	85.5	55.75
PHY 300 W3FE	4102	1777	43.3	1.19	4.5	33.3	83.9	55.78
CG 9608 B3XF	3900	1769	45.3	1.23	4.4	31.9	84.4	55.41
PHY 480 W3FE	4185	1745	41.7	1.21	4.6	32.9	85.3	54.53
PX 4A69 W3FE	4045	1743	43.1	1.25	4.4	33.5	85.2	55.70
PX 5B73 W3FE	4148	1736	41.8	1.22	4.5	33.2	84.7	55.11
PHY 320 W3FE	4137	1721	41.6	1.20	4.4	33.8	85.9	54.81
NG 5711 B3XF	4073	1720	42.2	1.27	4.4	32.2	84.7	55.41
AMX 1817 B3XF	3938	1718	43.6	1.20	4.8	32.3	83.5	55.30
DP 1851 B3XF	3871	1711	44.2	1.25	4.6	35.0	85.2	55.74
DG 1702 GLT	4020	1697	42.2	1.19	4.3	34.3	83.6	55.63
ST 4949GLT	3832	1697	44.3	1.16	4.4	31.8	83.7	55.33
BX 1975GLTP	3834	1696	44.2	1.22	4.7	33.8	84.8	55.08
PHY 440 W3FE	3908	1692	43.2	1.25	4.4	35.3	84.7	56.08
DG 3433 B2XF	4159	1688	40.6	1.14	4.3	28.7	81.4	54.40
DP 17R818 B3XF	3889	1681	43.2	1.22	4.7	33.4	84.3	55.46
AMX 1819 B3XF	4066	1656	40.7	1.20	4.8	32.4	84.5	54.49
AMX 1818 B3XF	4057	1655	40.8	1.25	4.6	34.2	85.1	55.66
NG 4689 B2XF	3928	1627	41.4	1.20	4.9	36.8	84.5	54.65
ST 5517GLTP	4076	1610	39.5	1.23	4.4	34.7	84.0	56.00

BX 1976GLTP	3631	1607	44.3	1.22	5.0	35.7	85.0	54.55
SSG UA 114	3903	1559	40.0	1.23	4.7	33.9	85.8	55.95
AMX 1816 B3XF	4019	1549	38.6	1.24	4.3	32.5	84.5	55.79
DG 3385 B2XF	3649	1524	42.0	1.20	4.7	33.0	85.4	54.80
PX 3C06 W3FE	3617	1522	42.0	1.18	4.6	31.1	82.6	55.14
NG 3780 B2XF	3882	1509	38.9	1.24	4.9	35.2	84.1	55.03
NG 4777 B2XF	3686	1490	40.4	1.20	4.7	35.0	83.7	55.18
SSG UA 222	3552	1453	40.9	1.24	4.5	33.0	84.8	56.03
NG 4936 B3XF	3626	1450	40.2	1.25	4.6	32.6	85.8	55.69
NG 3699 B2XF	3665	1430	39.0	1.25	4.5	34.2	84.0	55.55
NG 2982 B3XF	3527	1354	38.7	1.17	4.0	34.2	84.1	56.03
Overall Mean	4151	1762	42.4	1.22	4.5	33.4	84.6	55.44
LSD(0.05)	434	195	1.0	0.03	0.3	1.7	1.1	1.13
C.V. (%)	7.4	7.8	1.6	1.6	4.0	3.7	0.9	1.5

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 15. Mean yield performance and fiber characteristics for cotton varieties cultivated on a furrow irrigated Keyespoint silty clay soil at Pace Perry Farms near Tunica, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	---	(g/tex)	(%)	¢/LB
DP 1725 B2XF	4926	2282	46.3	1.22	4.6	30.4	83.9	54.54
DP 1851 B3XF	5136	2281	44.0	1.22	4.5	34.6	84.2	55.09
PX 3B07 W3FE	4983	2239	44.9	1.20	4.5	32.0	83.0	54.74
BX 1973GLTP	4806	2179	45.3	1.20	4.5	33.3	85.1	55.35
SSG UA 222	5321	2130	39.9	1.29	4.6	31.8	85.5	55.06
DP 1646 B2XF	4818	2120	44.0	1.30	4.6	29.9	84.9	54.46
PX 5D28B W3FE	4820	2118	43.7	1.21	4.2	33.7	84.0	54.84
DG 3526 B2XF	4617	2084	45.1	1.18	4.7	29.4	85.0	54.58
PHY 430 W3FE	4699	2078	44.2	1.14	4.4	30.7	83.8	54.68
CG 9178 B3XF	4651	2071	44.5	1.22	5.0	30.5	84.1	53.86
PX 3B09 W3FE	4696	2053	43.7	1.21	4.3	31.9	83.3	54.79
PX 4A64 W3FE	4812	2050	42.6	1.20	4.4	34.3	85.0	55.19
ST 4949GLT	4492	2046	45.6	1.18	4.5	31.0	83.9	54.74
CPS 18501-C	5015	2031	40.2	1.27	3.8	32.1	85.3	54.95
PHY 320 W3FE	4808	2024	41.8	1.21	4.3	31.6	85.8	54.69
PHY 340 W3FE	4602	2017	43.9	1.21	4.5	31.0	84.1	54.56
DG 3214 B2XF	4821	2001	41.3	1.23	4.8	32.0	85.0	54.73
DP 1518 B2XF	4754	1993	41.9	1.21	4.2	29.8	83.9	54.46
PHY 312 WRF	4788	1993	41.6	1.24	4.4	31.6	85.0	54.75
NG 5007 B2XF	4690	1990	42.3	1.21	4.4	29.8	83.6	54.71
PX 3C06 W3FE	4587	1982	43.2	1.20	4.6	29.7	82.4	53.29
PHY 480 W3FE	4624	1981	42.9	1.21	4.5	31.0	85.2	54.94
CG 9608 B3XF	4361	1961	45.0	1.23	4.3	31.2	83.9	55.28
DP 1555 B2RF	4353	1957	45.0	1.20	4.4	32.4	83.7	55.54
PHY 350 W3FE	4618	1957	41.9	1.21	4.6	31.5	84.8	54.83
PHY 330 W3FE	4530	1944	43.0	1.19	4.5	32.6	83.9	54.88
PHY 444 WRF	4505	1939	43.1	1.30	4.0	32.3	85.8	55.44
NG 3729 B2XF	4674	1934	41.4	1.23	4.6	31.8	85.5	54.63
ST 5471GLTP	4584	1931	42.1	1.18	4.3	32.1	82.8	55.25
DP 1916 B3XF	4378	1929	44.0	1.22	4.7	34.0	85.8	55.08
DG 3385 B2XF	4505	1918	41.9	1.19	4.7	29.4	85.0	54.59
DP 1845 B3XF	4391	1915	43.7	1.29	4.4	32.3	84.8	55.08
ST 5517GLTP	4634	1906	41.1	1.21	4.5	33.0	83.7	54.85
AMX 1817 B3XF	4289	1906	44.5	1.20	4.7	30.0	82.8	54.54
DG 1702 GLT	4543	1895	41.8	1.19	4.2	32.1	82.8	54.76
CPS 18R827	4324	1890	43.8	1.20	4.9	31.2	83.1	53.90
DP 1823 NR B2XF	4316	1882	43.6	1.22	4.3	32.4	85.4	54.68
CPS 18507-D	4268	1881	44.0	1.17	5.0	31.5	84.7	53.88
PHY 580 W3FE	4096	1862	45.5	1.18	4.6	32.4	83.3	54.94
NG 5711 B3XF	4340	1833	42.2	1.28	4.6	32.1	84.6	55.04
ST 5818GLTP	4507	1833	40.7	1.25	4.2	32.6	84.0	55.26
PX 4A69 W3FE	4214	1828	43.4	1.23	4.0	33.3	84.6	55.55
PX 5B73 W3FE	4347	1815	41.8	1.19	4.6	30.8	83.5	54.86
ST 5020GLT	4541	1812	39.9	1.29	4.5	33.5	85.9	54.73
PHY 300 W3FE	4124	1806	43.8	1.20	4.6	31.7	83.8	54.53
SSG UA 114	4583	1805	39.4	1.25	4.8	33.1	86.1	55.01
DP 1835 B3XF	4037	1797	44.6	1.24	4.2	32.3	84.8	55.36
DP 1820 B3XF	3979	1787	44.9	1.28	4.8	34.6	84.6	54.81
NG 4936 B3XF	4369	1786	40.9	1.26	4.7	31.5	85.8	54.96
ST 5122GLT	4287	1782	41.6	1.19	4.0	33.0	82.1	55.15
BX 1975GLTP	4050	1767	43.9	1.22	4.5	33.1	84.8	54.95
CPS 18R817	3965	1740	43.9	1.19	4.8	31.5	84.6	55.11
NG 4689 B2XF	4255	1727	40.6	1.22	4.6	33.2	84.8	55.05
CPS 18503-D	4064	1710	42.1	1.22	4.4	33.2	83.5	55.54
NG 3780 B2XF	4337	1690	39.0	1.25	4.9	33.3	84.8	54.38
AMX 1816 B3XF	4412	1675	37.6	1.26	4.0	32.5	85.1	55.20
DG 3433 B2XF	4113	1674	40.6	1.15	4.4	28.3	82.0	54.24

NG 4777 B2XF	4079	1640	40.2	1.24	4.7	33.7	85.2	54.98
DP 17R818 B3XF	3759	1628	43.3	1.23	4.8	31.8	84.9	54.01
BX 1976GLTP	3619	1588	43.9	1.22	4.9	34.1	85.3	55.10
BX 1974GLTP	3626	1582	43.7	1.24	4.6	31.7	85.1	55.09
PHY 440 W3FE	3723	1580	42.5	1.24	4.2	35.5	83.4	55.13
AMX 1819 B3XF	3986	1580	39.6	1.20	4.6	32.2	84.5	55.20
NG 2982 B3XF	3893	1501	38.5	1.20	4.1	35.0	85.5	54.99
CPS 18502-C	3633	1483	40.8	1.23	4.2	31.0	84.7	54.66
AMX 1818 B3XF	3680	1471	40.0	1.27	4.3	33.1	85.7	55.25
NG 3699 B2XF	3353	1292	38.5	1.25	4.6	32.9	83.4	54.80
Overall Mean	4399	1874	42.5	1.22	4.5	32.1	84.4	54.84
LSD(0.05)	591	256	1.1	0.03	0.2	1.6	1.6	0.77
C.V. (%)	9.1	9.3	1.8	1.8	3.7	3.6	1.1	1.0

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.



Table 16. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Leeper silt loam soil at the North Mississippi Research and Extension Center near Verona, MS during 2018.

Variety	Measurement							
	Seedcotton Yield	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	----	(g/tex)	(%)	¢/LB
PHY 430 W3FE	4654	2196	47.2	1.09	5.0	31.7	83.4	50.86
BX 1974GLTP	4502	2194	47.9	1.16	4.8	31.2	83.9	52.14
DP 1851 B3XF	4650	2189	47.1	1.18	4.9	32.6	84.6	53.21
PHY 340 W3FE	4508	2131	47.3	1.15	5.0	31.3	84.0	51.61
CPS 18507-D	4576	2129	46.2	1.16	5.3	32.1	84.6	49.91
PHY 312 WRF	4851	2124	44.3	1.19	4.9	31.3	84.5	52.53
DP 1555 B2RF	4490	2116	47.1	1.18	5.0	32.6	84.3	51.73
PHY 580 W3FE	4421	2103	47.5	1.17	5.0	31.3	84.5	51.11
PHY 444 WRF	4529	2091	46.1	1.22	4.6	32.1	85.3	53.00
PX 5B73 W3FE	4606	2080	45.2	1.15	4.9	30.6	84.7	52.73
DP 1646 B2XF	4340	2078	47.8	1.22	4.8	30.4	84.5	52.98
CG 9608 B3XF	4258	2044	48.0	1.15	4.7	29.3	83.2	52.31
BX 1973GLTP	4262	2026	47.5	1.18	4.8	33.3	84.6	52.21
CPS 18503-D	4559	2007	43.6	1.18	4.8	32.3	82.6	52.16
CPS 18R817	4297	1980	46.1	1.15	4.9	30.8	84.4	52.74
CPS 18501-C	4606	1978	43.0	1.22	4.3	31.9	84.7	52.16
NG 5007 B2XF	4318	1977	45.8	1.14	4.8	29.0	83.7	53.18
PHY 330 W3FE	4238	1973	46.9	1.15	4.8	31.9	83.7	52.18
PX 3B09 W3FE	4227	1959	45.7	1.17	4.4	32.3	82.9	51.94
DP 1845 B3XF	4176	1954	46.8	1.26	4.5	31.7	84.5	52.89
PHY 350 W3FE	4353	1946	44.7	1.17	4.9	31.4	84.9	51.69
CG 9178 B3XF	4026	1935	48.0	1.18	5.2	30.8	84.7	50.11
PX 4A64 W3FE	4344	1929	44.4	1.14	4.8	33.1	84.7	53.73
DG 3526 B2XF	4117	1905	47.0	1.12	5.1	28.8	84.5	49.51
CPS 18R827	4047	1901	47.1	1.14	4.9	29.9	82.2	51.23
DP 1820 B3XF	3944	1890	48.0	1.23	4.9	33.1	84.3	52.38
PHY 300 W3FE	4103	1883	45.9	1.16	5.0	31.1	84.6	51.96
DP 1725 B2XF	3935	1882	47.9	1.16	5.0	30.7	83.1	51.48
PX 5D28B W3FE	4086	1878	45.9	1.14	4.5	32.9	83.7	52.03
PX 3B07 W3FE	4206	1863	44.3	1.22	4.6	33.3	84.6	53.80
PX 4A69 W3FE	4000	1857	46.4	1.16	4.6	31.5	83.6	51.95
PHY 480 W3FE	4086	1851	45.3	1.14	4.8	30.9	84.7	51.34
BX 1975GLTP	3892	1850	47.5	1.17	5.0	31.4	84.2	50.99
NG 5711 B3XF	4030	1844	45.7	1.20	4.7	31.6	84.2	52.04
SSG UA 222	4357	1819	41.8	1.23	4.9	33.4	84.4	52.95
DP 1823 NR B2XF	3910	1811	46.3	1.21	4.5	31.4	85.0	52.11
NG 4936 B3XF	4009	1798	44.9	1.19	4.9	30.5	85.4	52.46
DG 3214 B2XF	4146	1793	43.3	1.19	5.1	31.3	85.5	51.23
BX 1976GLTP	3841	1776	46.3	1.17	5.0	32.5	84.4	51.94
PHY 440 W3FE	3863	1771	45.9	1.20	4.6	33.7	84.3	54.63
DG 1702 GLT	4146	1764	42.6	1.15	4.6	31.0	83.6	53.46
AMX 1817 B3XF	3776	1760	46.6	1.16	5.1	30.4	82.8	49.68
DG 3385 B2XF	3974	1741	43.8	1.14	4.9	29.3	84.7	51.33
ST 5020GLT	4236	1737	41.0	1.24	4.6	32.6	85.3	54.63
DP 1835 B3XF	3639	1724	47.4	1.18	4.9	31.6	83.2	53.24
ST 5471GLTP	4013	1714	42.7	1.16	4.6	32.4	83.2	52.80
DP 1518 B2XF	3974	1708	43.0	1.18	4.5	30.0	83.8	51.78
DP 1916 B3XF	3591	1701	47.4	1.17	4.8	31.9	83.9	51.22
PHY 320 W3FE	3772	1671	44.3	1.15	4.7	31.7	84.9	52.85
AMX 1816 B3XF	4082	1646	40.4	1.20	4.1	31.1	83.8	53.65
DG 3433 B2XF	3716	1643	44.2	1.11	4.6	27.2	81.0	51.41
NG 3729 B2XF	3768	1627	43.2	1.18	4.8	30.9	84.6	53.59
ST 5818GLTP	3828	1612	42.1	1.20	4.9	31.7	84.3	52.73
PX 3C06 W3FE	3660	1611	44.0	1.17	4.8	30.3	82.8	53.35
ST 5517GLTP	3849	1611	41.9	1.16	4.6	31.9	82.8	54.38
ST 5122GLT	3781	1607	42.5	1.17	4.5	31.0	83.2	52.66
SSG UA 114	3931	1573	40.0	1.20	4.8	33.4	85.2	51.90

CPS 18502-C	3630	1565	43.1	1.18	4.6	31.1	84.4	53.64
NG 4689 B2XF	3617	1564	43.3	1.13	5.0	31.5	83.0	50.98
NG 4777 B2XF	3454	1550	44.9	1.11	5.0	32.1	82.1	50.46
ST 4949GLT	3406	1541	45.8	1.15	4.9	30.2	83.8	52.29
AMX 1818 B3XF	3393	1517	44.7	1.18	4.7	32.5	84.2	52.05
DP 17R818 B3XF	3402	1515	44.5	1.22	4.9	33.3	84.8	51.65
NG 3780 B2XF	3351	1392	41.5	1.19	4.9	33.0	83.5	52.32
AMX 1819 B3XF	3286	1349	41.0	1.17	4.7	31.2	83.9	51.94
NG 3699 B2XF	3200	1335	41.7	1.17	4.6	32.3	82.9	53.45
NG 2982 B3XF	3191	1281	40.2	1.14	4.1	33.4	84.5	53.01
Overall Mean	4030	1814	44.9	1.17	4.8	31.5	84.0	52.23
LSD(0.05)	377	188	1.8	0.03	0.3	1.5	1.2	N.S.
C.V. (%)	6.6	7.3	2.9	2.1	3.9	3.3	1.0	N.S.

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
N.S. = No significant differences between treatments.

