2016 Mississippi Cotton Official Small Plot Variety Trials

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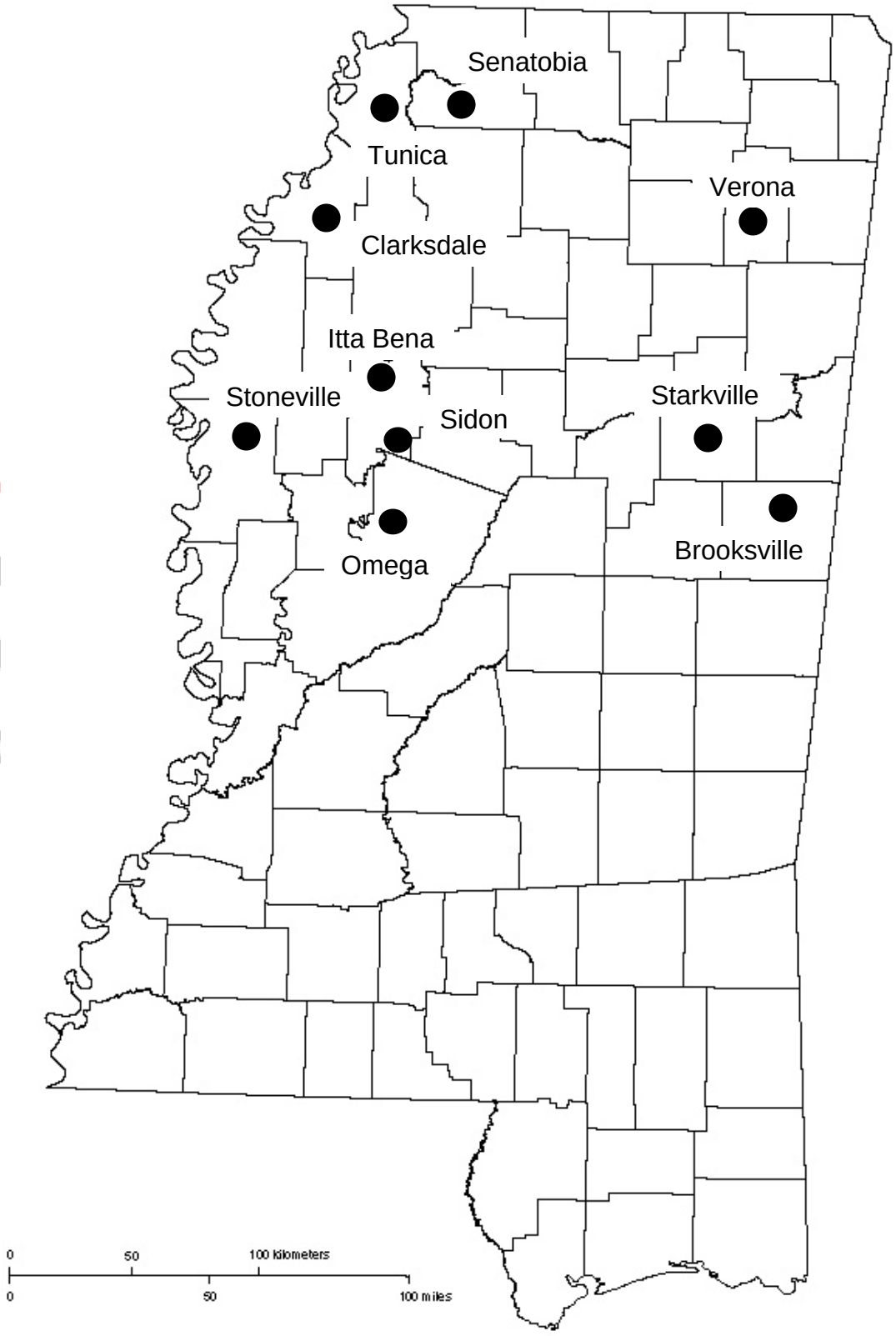
PREFACE

The main objective of the Mississippi Cotton Official Variety Trials (OVT) is to provide unbiased information to clientele regarding evaluation of yield and fiber performance of commercial cotton varieties and advanced lines that may become varieties in the future. 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 data presented may change after additional experimentation over years. All 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

2016 OVT Testing Locations



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Acknowledgements

The authors would like to express their appreciation first and foremost to the five producers who participated in the 2016 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 (Clarksdale), Phil Nichols and George Cunningham (Omega), Kenny Hurt (Senatobia), John Doty Porter and Doty Porter (Sidon) and George Perry (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 Chase Samples and Chase King of 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 Clark Blaine, Michael Davis, Drew Denton, Savana Davis, Lucas Franca, Steven Hall, Kord Lyon, Benjamin Palmer, Michael Plumblee, and B.J. Simmerman 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.

Input management for trials is determined by cooperators at each location based on soil texture, soil test value, and scouting for pest pressures. However, seeding rate and physical seeding is controlled by the cotton variety testing coordinator. A list of agronomically important input management dates is presented in Appendix 1. Agronomic date information allows the user to take into account management practices at each location when evaluating yield.

All fiber parameters (lint percent, individual boll weight) 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 Fiber and Biopolymer Research Institute at Texas Tech University in Lubbock, TX.

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.

The commercial varieties utilized as standard checks for comparison in 2016 were as follows; Delta Pine and Land 1321 B2RF, Phytogen 499 WRF, and Stoneville 4946GLB2. These varieties were included to give the end user an idea of how newer cultivars compare to proven high yielding varieties adapted to the Mid-South growing region.

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 minimal footprint associated with small plot research generally allows for less variability among replications due to field variability (i.e. soil textural changes, pest variations). Reduced variability lends us a greater understanding of a varieties 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; if not the most important management decision a producer must make for the duration of growing season. Improper variety selection generally cannot be overcome with management. Starting with the greatest genetic potential will generally the highest yield with all other things being considered equal. Careful consideration should go into selecting varieties that are well adapted to 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, or XF. Varieties with these designations can tolerate over the top applications of glyphosate. The newer GlyTol and Flex varieties have completely replaced the older roundup ready varieties (R or RR). Glytol and Flex varieties allow for over the top applications to be made later into the season. XtendFlex (XF) varieties are tolerant also tolerant to Liberty and dicamba.

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 Liberty and dicamba.

It is important to note that producers utilizing both glyphosate and glufosinate tolerant varieties 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

WideStike – Phytogen varieties with the designation W or W3 on the bag or in the variety name. Like Bollgard 2, Widestrike varieties contain two genes that produce proteins toxic to caterpillar pests. Additionally, W3 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, 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

Considerations for Selection

Yield variability among calendar years within a variety is certain. 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 as well. Do not underestimate the discounts associated with high micronaire which can be significant.

A consideration to look at 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 2016, 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. The program is updated annually.

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.

Table 1. Varieties submitted for testing by participating industry partners in 2016.

Industry Contact	Official Variety Trial Entries	
Americot Inc. – NexGen Varieties *Tom Brooks*	AMX 1601 B2XF AMX 1604 B2XF NG 3405 B2XF	NG 3406 B2XF NG 3522 B2XF NG 5007 B2XF
Bayer Crop Science *Andy White*	ST 4747GLB2 ST 4848GLT ST 4946GLB2†**(Standard)** ST 4949GLT ST 5115GLT ST 6182GLT	BX 1737GLT BX 1738GLT BX 1739GLT BX 1773GLTP BX 1775GLTP
Crop Production Services/Dyna-Gro Seed *Scott Cummings*	DG 3385 B2XF DG 3526 B2XF DG 3757 B2XF DG CPS16654 B2XF	
International Seed Technology *Carmen Carvajal*	BRS-286 BRS-293 BRS-336	
Monsanto *Dave Albers*	DP 1321 B2RF†**(Standard)** DP 1518 B2XF DP 1522 B2XF DP 1538 B2XF DP 1553 B2XF DP 1555 B2RF	DP 1614 B2XF DP 1639 B2XF DP 1646 B2XF MON 15R535 B2XF MON 16R229 B2XF
PhytoGen Seed Co. *Brooks Blanche*	PHY 312 WRF PHY 333 WRF PHY 339 WRF PHY 444 WRF	PHY 495 W3RF PHY 496 W3RF PHY 499 WRF†**(Standard)** PHY 552 WRF
Seed Source Genetics *Ed Jungmann*	SSG CT 210 SSG UA 222	
Winnfield Solutions, LLC *Robert Cossar*	CG 3475 B2XF CG 3885 B2XF	

† (Std) Designates a standard entry to be used for check purposes

Table 2. One-year mean yield performance and fiber characteristics for OVT varieties submitted for testing in 2016 averaged across all (10) testing locations

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 444 WRF	3733	**1611**	0.43	1.28	4.2	31.6	86.3	6.8	55.00
PHY 312 WRF	3785	**1590**	0.42	1.20	4.6	31.1	85.5	7.3	54.43
PHY 496 W3RF	3538	**1584**	0.44	1.13	4.8	32.2	84.6	8.3	53.47
DP 1646 B2XF	3620	**1572**	0.44	1.27	4.6	30.1	85.0	7.5	54.50
PHY 495 W3RF	3593	**1569**	0.44	1.13	4.7	32.5	84.8	8.3	53.88
ST 4949GLT	3661	**1557**	0.43	1.18	4.8	31.2	84.9	8.0	53.80
PHY 552 WRF	3581	**1544**	0.43	1.19	4.5	31.9	85.5	6.9	54.61
DP 1555 B2RF	3492	**1528**	0.44	1.20	4.6	32.4	84.9	7.0	54.25
PHY 333 WRF	3555	**1521**	0.43	1.19	4.6	30.1	84.7	6.8	54.42
PHY 499 WRF	3476	**1509**	0.43	1.15	4.8	32.2	85.3	8.3	53.53
NG 3522 B2XF	3538	**1509**	0.43	1.12	4.7	27.8	83.5	7.3	52.58
SSG-UA 222	3644	**1495**	0.41	1.22	4.7	31.8	85.0	8.4	54.21
BX 1737GLT	3600	**1483**	0.41	1.20	4.7	30.5	84.6	7.5	54.36
PHY 339 WRF	3546	**1477**	0.42	1.18	4.6	31.5	84.8	7.7	54.40
DP 1639 B2XF	3337	1465	0.44	1.17	5.0	32.5	85.3	7.8	53.39
DP 1321 B2RF	3467	1465	0.42	1.17	5.0	31.8	85.1	8.6	53.52
NG 5007 B2XF	3449	1452	0.42	1.18	4.6	29.2	84.2	7.8	54.14
DP 1518 B2XF	3521	1445	0.41	1.19	4.5	29.6	84.7	6.9	54.33
DP 1553 B2XF	3392	1444	0.42	1.20	4.6	30.4	85.3	8.0	54.58
DG 3757 B2XF	3315	1433	0.43	1.16	4.7	30.0	84.6	7.8	54.03
MON 15R535 B2XF	3223	1431	0.44	1.17	4.6	29.9	83.8	6.9	54.03
BX 1738GLT	3495	1428	0.41	1.23	4.7	32.9	85.7	7.7	54.39
BX 1775GLTP	3450	1424	0.41	1.20	4.5	30.0	84.3	8.2	54.45
NG 3406 B2XF	3397	1419	0.42	1.16	4.7	30.2	85.1	8.4	54.07
CG 3885 B2XF	3329	1416	0.43	1.16	4.8	30.2	84.8	8.1	53.84
ST 4848GLT	3249	1410	0.43	1.17	4.9	31.0	84.9	7.1	53.44
ST 4747GLB2	3440	1408	0.41	1.20	4.7	29.5	83.7	5.8	54.17
ST 5115GLT	3425	1407	0.41	1.16	4.6	31.8	83.7	7.5	54.12
AMX 1604 B2XF	3411	1404	0.41	1.15	4.9	31.4	84.0	5.9	53.11
DP 1522 B2XF	3337	1402	0.42	1.17	4.9	31.6	85.0	8.7	53.56
DG CPS 16654 B2XF	3284	1398	0.43	1.27	4.5	30.5	84.9	7.5	54.65
NG 3405 B2XF	3347	1398	0.42	1.12	4.6	28.1	83.6	7.4	53.31
ST 4946GLB2	3395	1390	0.41	1.17	4.9	32.0	85.1	7.9	53.54
ST 6182GLT	3056	1386	0.45	1.17	4.8	29.8	84.4	6.9	53.97
BX 1773GLTP	3351	1385	0.41	1.18	4.5	29.6	84.2	8.0	54.07
DP 1614 B2XF	3191	1385	0.43	1.20	4.9	31.0	85.3	8.3	53.34
DP 1538 B2XF	3162	1379	0.44	1.13	4.8	29.5	84.1	8.1	53.20
CG 3475 B2XF	3352	1368	0.41	1.15	4.8	31.7	84.8	8.5	53.71

BRS 286	3348	1343	0.40	1.14	4.8	31.4	84.0	7.1	53.37
DG 3385 B2XF	3154	1332	0.42	1.17	4.9	30.4	85.5	8.3	53.72
MON 16R229 B2XF	3049	1295	0.43	1.12	4.9	29.9	83.9	7.6	52.39
BRS 293	3219	1289	0.40	1.16	5.1	33.2	84.9	7.5	52.93
BRS 336	3190	1270	0.40	1.19	4.5	30.8	84.9	7.4	54.68
SSG-HQ 210 CT	3161	1240	0.39	1.14	4.9	31.2	83.6	7.4	52.55
AMX 1601 B2XF	2851	1231	0.43	1.20	4.8	33.3	85.3	7.1	53.77
DG 3526 B2XF	2789	1227	0.44	1.15	4.7	30.1	85.3	8.7	53.89
BX 1739GLT	2691	1163	0.43	1.24	4.8	33.1	85.0	5.7	54.56
Overall Mean	3361	1425	0.42	1.18	4.7	30.9	84.7	7.6	53.88
LSD(0.05)	318	136	0.01	0.02	0.2	0.8	0.5	0.6	0.74
C.V. (%)	21.2	21.4	4.7	4.0	8.4	5.5	1.4	19.0	3.1

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

Table 3. Two-year mean yield performance of varieties cultivated at 3 locations in the Delta region during 2015 and 2016.

	Location and Year						Average across location and year
	Clarksdale		Stoneville		Tunica		
	2015	2016	2015	2016	2015	2016	
	---------- Lint yield (lb lint/acre) ----------						
PHY 312 WRF	1869	1617	1968	1594	1481	1654	1697
PHY 552 WRF	2097	1888	2094	1183	1268	1367	1649
PHY 496 W3RF	1671	1492	1997	1210	1536	1727	1605
DP 1321 B2RF	1773	1498	2063	1557	1124	1472	1581
PHY 444 WRF	1929	1618	1786	1320	1408	1379	1573
DP 1646 B2XF	1752	1467	1944	1350	1252	1661	1571
ST 4949GLT	1662	1559	2153	1415	1109	1581	1560
DP 1522 B2XF	1588	1312	2024	1280	1403	1674	1547
DP 1518 B2XF	1553	1354	1846	1290	1594	1576	1535
NG 3405 B2XF	1815	1394	1708	1295	1441	1536	1532
ST 4848GLT	1684	1300	1958	1476	1247	1458	1521
PHY 499 WRF	1768	1628	1750	1291	1227	1383	1508
DP 1639 B2XF	1664	1616	1998	1049	1373	1338	1506
SSG-UA 222	1855	1575	1739	1509	1104	1248	1505
DP 1555 B2RF	1737	1624	2022	1107	1172	1352	1502
DG 3385 B2XF	1601	1262	1787	1272	1652	1350	1487
PHY 333 WRF	1723	1297	1976	1580	1030	1301	1484
NG 3406 B2XF	1606	1390	1790	1190	1402	1401	1463
ST 6182GLT	1807	1425	1826	1152	1325	1220	1459
NG 5007 B2XF	1667	1405	1725	1238	1401	1306	1457
PHY 495 W3RF	1636	1460	1910	1262	1191	1264	1454
PHY 339 WRF	1586	1381	1657	1385	1350	1341	1450
DP 1614 B2XF	1613	1204	1840	1496	1275	1232	1443
CG 3885 B2XF	1697	1415	1618	1203	1372	1312	1436
ST 4747GLB2	1626	1276	1777	1322	1208	1368	1429
DP 1538 B2XF	1708	1470	1711	1282	1244	1108	1420
ST 5115GLT	1609	1395	1765	1144	1179	1358	1408
ST 4946GLB2	1646	1414	1419	1459	1253	1243	1406
DP 1553 B2XF	1688	1699	1582	992	1032	1217	1368
SSG-HQ 210 CT	1495	1333	1432	726	1372	962	1220
BRS 293	1614	1255	1470	970	1019	758	1181
BRS 286	1471	1274	1280	1171	801	901	1150

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

Table 4. Two-year mean yield performance of varieties cultivated at 4 locations in the Hill region during 2015 and 2016.

Variety	Location and Year								Average across location and year
	Brooksville		Senatobia		Starkville		Verona		
	2015	2016	2015	2016	2015	2016	2015	2016	
	----------------------Lint yield (lb lint/acre)-------------------								
PHY 444 WRF	1565	1712	1818	1413	1332	2017	1908	1989	1719
DP 1555 B2RF	1461	1547	1888	1418	1353	1747	1869	1886	1646
DP 1646 B2XF	1272	1354	1784	1850	1331	1774	1644	1742	1594
PHY 499 WRF	1340	1566	1908	1226	1232	1714	1742	1997	1591
ST 4949GLT	1151	1126	1803	1607	1700	1472	1799	1987	1581
PHY 333 WRF	1489	1541	1791	1523	1281	1573	1677	1729	1576
DP 1553 B2XF	1451	1400	1621	1203	1431	1937	1753	1769	1571
PHY 496 W3RF	1143	1604	1730	1522	1445	1635	1555	1814	1556
PHY 495 W3RF	1418	1602	1661	1460	1154	1640	1564	1850	1544
DP 1538 B2XF	1237	1223	1597	1307	1580	1820	1773	1761	1537
PHY 339 WRF	1262	1453	1696	1439	1435	1780	1568	1560	1524
ST 6182GLT	1275	1334	1795	1060	1345	1813	1830	1730	1523
PHY 552 WRF	1346	1519	1654	1371	1190	1561	1690	1800	1516
PHY 312 WRF	1202	1415	1696	1519	1174	1609	1740	1724	1510
CG 3885 B2XF	1365	1336	1373	1343	1332	1651	1706	1882	1498
DP 1639 B2XF	1319	1393	1479	1375	1274	1596	1724	1772	1491
NG 3406 B2XF	981	1369	1821	1123	1499	1714	1642	1720	1483
DP 1518 B2XF	1299	1106	1728	1651	978	1654	1713	1719	1481
DP 1522 B2XF	1008	1192	1829	1437	1247	1593	1599	1764	1459
DP 1321 B2RF	1053	1375	1685	1232	1199	1751	1661	1707	1458
ST 4747GLB2	1150	1323	1621	1247	1196	1727	1735	1633	1454
SSG-UA 222	1090	1299	1326		1236	1818	1680	1700	1450
ST 4946GLB2	1212	1357	1825	1153	1204	1532	1611	1701	1449
NG 5007 B2XF	1182	1318	1377	1344	1354	1680	1658	1671	1448
ST 5115GLT	1302	1466	1678	1226	994	1588	1605	1695	1444
NG 3405 B2XF	1156	1152	1594	1352	1359	1600	1642	1642	1437
ST 4848GLT	971	1677	1591	1305	1047	1554	1778	1536	1432
BRS 293	1139	1444	1091		981	1697	1652	1459	1352
DP 1614 B2XF	1086	1347	1511	1440	996	1354	1551	1519	1350
DG 3385 B2XF	835	1124	1667	1002	1176	1586	1584	1644	1327
SSG-HQ 210 CT	1138	1183	1113		1065	1482	1507	1590	1297
BRS 286	1085	1263	874		1113	1721	1283	1692	1290

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

Table 5. One-year mean yield performance of varieties cultivated at 6 locations in the Delta Region during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 312 WRF	3800	**1588**	0.42	1.20	4.6	31.0	85.2	7.2	54.31
ST 4949GLT	3705	**1563**	0.42	1.17	4.9	31.2	84.7	8.1	53.38
PHY 496 W3RF	3438	**1541**	0.44	1.14	4.7	32.5	84.5	8.1	53.67
DP 1321 B2RF	3557	**1484**	0.42	1.17	5.0	32.3	85.0	8.5	53.64
NG 3522 B2XF	3502	**1475**	0.42	1.12	4.7	28.3	83.6	7.2	52.81
PHY 333 WRF	3471	**1475**	0.43	1.20	4.5	30.5	84.4	6.7	54.53
PHY 552 WRF	3515	**1469**	0.43	1.19	4.4	32.3	85.2	6.9	54.38
DP 1646 B2XF	3495	**1463**	0.43	1.28	4.6	30.6	85.1	7.3	54.37
BX 1737GLT	3593	**1457**	0.41	1.20	4.7	31.0	84.5	7.4	54.43
PHY 499 WRF	3353	**1451**	0.43	1.15	4.8	32.8	85.0	8.4	53.60
SSG-UA 222	3612	**1440**	0.40	1.23	4.7	32.4	85.2	8.1	54.13
PHY 444 WRF	3546	1428	0.42	1.29	4.1	31.7	86.1	6.7	55.06
MON 15R535 B2XF	3278	1425	0.44	1.17	4.5	30.0	83.6	6.6	53.88
PHY 495 W3RF	3464	1423	0.43	1.13	4.6	32.8	84.5	8.1	53.93
DP 1518 B2XF	3519	1422	0.41	1.19	4.4	30.1	84.8	7.0	54.25
DP 1555 B2RF	3319	1413	0.44	1.21	4.5	33.0	84.6	6.8	54.24
BX 1775GLTP	3439	1404	0.41	1.20	4.5	30.2	84.2	8.2	54.37
AMX 1604 B2XF	3409	1388	0.41	1.16	4.9	31.6	83.9	5.5	53.71
NG 3406 B2XF	3369	1378	0.41	1.16	4.7	30.3	85.0	8.3	53.99
PHY 339 WRF	3520	1373	0.41	1.18	4.5	31.7	84.6	7.6	54.47
DP 1522 B2XF	3282	1366	0.42	1.17	4.9	32.0	84.8	8.8	53.57
BX 1738GLT	3482	1365	0.40	1.23	4.7	33.2	85.5	7.6	54.11
BX 1773GLTP	3334	1363	0.41	1.18	4.5	29.9	84.0	7.9	54.05
ST 4946GLB2	3374	1360	0.40	1.17	4.9	32.4	85.1	7.6	53.63
DP 1639 B2XF	3211	1356	0.43	1.18	5.0	32.8	85.1	7.8	53.83
NG 5007 B2XF	3401	1344	0.42	1.18	4.6	29.1	84.1	7.9	53.83
CG 3885 B2XF	3217	1341	0.42	1.17	4.8	30.4	84.7	8.1	53.80
NG 3405 B2XF	3338	1340	0.41	1.12	4.5	28.5	83.5	7.4	53.32
DP 1614 B2XF	3153	1337	0.43	1.21	4.9	31.2	85.0	8.4	53.45
ST 4848GLT	3167	1333	0.43	1.17	4.8	31.6	84.9	7.2	53.53
CG 3475 B2XF	3408	1329	0.40	1.16	4.8	32.2	84.9	8.2	53.67
MON 16R229 B2XF	3153	1327	0.42	1.13	4.8	30.3	83.8	7.5	53.08
ST 4747GLB2	3371	1317	0.40	1.21	4.7	29.8	83.5	5.6	54.19
DP 1538 B2XF	3035	1312	0.43	1.12	4.8	29.7	83.8	8.0	53.32
DG CPS 16654 B2XF	3184	1300	0.42	1.30	4.4	31.0	85.0	7.4	54.69
ST 5115GLT	3259	1297	0.41	1.16	4.7	32.2	83.5	7.3	54.05
DG 3385 B2XF	3201	1288	0.40	1.18	4.8	30.6	85.4	8.2	53.65
DG 3757 B2XF	3102	1256	0.43	1.16	4.8	30.2	84.7	7.8	53.83

ST 6182GLT	2921	1246	0.45	1.18	4.7	30.1	84.3	6.9	54.28
AMX 1601 B2XF	2899	1221	0.43	1.21	4.8	33.7	85.4	7.1	53.96
DP 1553 B2XF	3232	1199	0.42	1.21	4.6	30.6	85.2	7.8	54.56
DG 3526 B2XF	2707	1185	0.44	1.16	4.7	30.5	85.2	8.6	54.08
BRS 286 - CONV.	3122	1183	0.39	1.15	4.8	32.1	83.8	6.4	53.55
SSG-HQ 210 CT	3032	1151	0.38	1.14	5.0	32.0	83.6	7.0	52.83
BRS 293	2991	1043	0.39	1.17	5.1	33.9	84.9	7.1	53.00
BX 1739GLT	2514	1041	0.43	1.26	4.8	33.7	84.8	5.4	54.68
BRS 336	2998	1026	0.39	1.20	4.6	31.7	84.8	6.9	54.76
Overall Mean	3300	1351	0.42	1.18	4.7	31.3	84.6	7.5	53.92
LSD(0.05)	444	156	0.01	0.02	0.2	0.8	0.7	0.8	0.99
C.V. (%)	23.4	19.6	4.8	3.6	9.2	4.8	1.4	18.9	3.2

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

Table 6. One year mean yield performance of varieties cultivated at 4 locations in the Hill region during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 444 WRF	4013	**1783**	0.44	1.26	4.4	31.4	86.6	7.0	54.91
DP 1646 B2XF	3918	**1732**	0.44	1.25	4.6	29.7	84.9	7.7	54.72
PHY 495 W3RF	3777	**1666**	0.44	1.13	4.8	32.0	85.2	8.5	53.88
DP 1555 B2RF	3740	**1649**	0.44	1.19	4.8	31.5	85.1	7.3	54.30
PHY 496 W3RF	3681	**1643**	0.45	1.13	4.8	31.8	84.7	8.4	53.15
ST 4949GLT	3792	**1633**	0.43	1.20	4.6	31.1	85.4	7.7	54.51
SSG-UA 222	3708	**1605**	0.43	1.18	4.7	30.5	84.6	9.1	54.36
PHY 312 WRF	3763	1592	0.42	1.20	4.7	31.2	85.8	7.5	54.60
PHY 333 WRF	3681	1592	0.43	1.18	4.6	29.6	85.3	7.0	54.26
PHY 552 WRF	3675	1590	0.43	1.20	4.5	31.6	85.9	7.0	54.99
PHY 499 WRF	3644	1589	0.43	1.16	4.8	31.7	85.6	8.4	53.61
BRS 293	3790	1575	0.42	1.15	5.0	31.5	84.8	8.1	53.11
BX 1737GLT	3714	1566	0.42	1.19	4.7	30.1	85.0	7.5	54.33
NG 3522 B2XF	3592	1560	0.43	1.11	4.7	27.0	83.2	7.4	52.23
DG 3757 B2XF	3536	1558	0.44	1.16	4.7	29.6	84.5	7.7	54.29
PHY 339 WRF	3687	1553	0.42	1.18	4.6	31.4	85.1	7.8	54.41
DP 1639 B2XF	3438	1530	0.44	1.16	5.1	31.8	85.4	7.8	52.72
CG 3885 B2XF	3497	1527	0.44	1.15	4.8	29.9	85.0	8.1	53.91
DP 1518 B2XF	3628	1524	0.42	1.18	4.6	28.9	84.5	6.9	54.46
DP 1553 B2XF	3512	1524	0.43	1.20	4.7	30.2	85.5	8.2	54.66
ST 5115GLT	3664	1520	0.41	1.16	4.6	31.3	83.9	7.7	54.27
BX 1738GLT	3619	1518	0.42	1.23	4.7	32.3	86.0	7.6	54.77
BRS 286	3618	1508	0.42	1.12	4.8	30.0	84.0	8.3	52.84
NG 5007 B2XF	3519	1503	0.43	1.17	4.6	29.6	84.5	7.7	54.66
DG CPS 16654 B2XF	3429	1496	0.44	1.24	4.6	29.9	84.8	7.7	54.63
ST 6182GLT	3250	1484	0.46	1.15	4.9	29.6	84.6	6.9	53.56
ST 4747GLB2	3544	1482	0.42	1.20	4.7	29.0	84.1	6.1	54.13
NG 3406 B2XF	3438	1481	0.43	1.16	4.8	30.2	85.2	8.7	54.20
DP 1321 B2RF	3434	1479	0.43	1.17	4.9	31.0	85.3	8.8	53.47
ST 4848GLT	3368	1476	0.44	1.16	4.9	30.2	84.8	7.0	53.42
BRS 336	3556	1466	0.41	1.17	4.5	28.9	84.9	8.3	54.55
BX 1775GLTP	3466	1464	0.42	1.20	4.5	29.8	84.5	8.2	54.56
DP 1538 B2XF	3294	1454	0.44	1.13	4.9	29.2	84.4	8.3	52.99
DP 1522 B2XF	3417	1452	0.42	1.17	4.8	31.3	85.2	8.5	53.48
NG 3405 B2XF	3361	1436	0.43	1.12	4.7	27.6	83.7	7.4	53.28
ST 4946GLB2	3426	1436	0.42	1.15	4.9	31.5	85.0	8.3	53.40
AMX 1604 B2XF	3415	1428	0.42	1.14	4.9	31.1	84.1	6.5	52.33
BX 1739GLT	3209	1420	0.44	1.21	4.8	31.6	85.2	6.3	54.53

BX 1773GLTP	3377	1420	0.42	1.18	4.6	29.2	84.6	8.2	54.10
SSG-HQ 210 CT	3419	1418	0.41	1.13	4.9	29.5	83.7	8.3	51.98
DP 1614 B2XF	3246	1415	0.44	1.19	4.9	30.8	85.7	8.3	53.27
CG 3475 B2XF	3274	1372	0.42	1.14	4.8	31.2	84.7	9.0	53.95
MON 15R535 B2XF	3029	1356	0.45	1.16	4.8	29.9	84.2	7.3	54.25
DG 3385 B2XF	3086	1339	0.43	1.17	4.9	30.2	85.7	8.4	53.91
MON 16R229 B2XF	3067	1323	0.43	1.11	5.0	29.5	84.1	7.6	51.30
DG 3526 B2XF	2901	1284	0.44	1.14	4.8	29.7	85.3	8.7	53.73
AMX 1601 B2XF	2783	1224	0.44	1.18	4.9	32.8	85.3	7.2	53.57
Overall Mean	3486	1502	0.43	1.17	4.7	30.4	84.9	7.8	53.85
LSD(0.05)	391	186	0.02	0.04	0.2	1.3	0.9	1.1	1.09
C.V. (%)	15.6	17.2	5.4	4.3	7.3	6.1	1.4	18.9	2.8

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

Table 7. 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 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 444 WRF	3753	**1712**	0.46	1.23	4.6	30.3	86.0	7.3	54.34
ST 4848GLT	3679	**1677**	0.46	1.14	5.3	29.3	84.3	7.1	51.70
PHY 496 W3RF	3477	**1604**	0.46	1.10	5.0	30.6	84.7	9.7	51.76
PHY 495 W3RF	3479	**1602**	0.46	1.09	5.1	31.2	85.0	8.7	51.69
PHY 499 WRF	3488	**1566**	0.45	1.14	5.1	31.9	85.4	8.7	52.55
DP 1555 B2RF	3400	**1547**	0.46	1.17	5.1	30.5	84.4	7.6	52.98
PHY 333 WRF	3439	**1541**	0.45	1.15	4.8	28.7	85.2	7.7	53.89
NG 3522 B2XF	3461	**1540**	0.44	1.07	5.2	25.2	82.3	7.6	48.13
PHY 552 WRF	3348	**1519**	0.45	1.15	4.8	29.8	85.6	7.5	54.65
ST 5115GLT	3445	1466	0.43	1.11	4.7	30.0	82.7	8.7	53.50
PHY 339 WRF	3317	1453	0.44	1.14	4.8	29.5	84.6	8.5	53.43
BRS 293	3461	1444	0.42	1.11	5.3	31.2	83.6	8.0	50.95
PHY 312 WRF	3305	1415	0.43	1.18	4.8	29.9	86.0	7.5	54.55
DP 1553 B2XF	3193	1400	0.44	1.19	4.9	29.4	85.5	8.6	54.71
DP 1639 B2XF	3138	1393	0.44	1.14	5.3	30.8	85.1	7.7	51.43
DP 1321 B2RF	3131	1375	0.44	1.12	5.0	30.8	84.5	10.7	52.83
NG 3406 B2XF	3026	1369	0.45	1.11	4.9	27.9	84.2	8.5	52.79
ST 4946GLB2	3170	1357	0.43	1.09	4.8	30.6	83.9	8.9	52.86
DP 1646 B2XF	3041	1354	0.45	1.24	4.7	29.4	84.5	8.7	54.74
DP 1614 B2XF	3036	1347	0.44	1.16	5.2	30.8	85.7	9.2	52.54
CG 3885 B2XF	3006	1336	0.44	1.11	5.1	28.6	84.7	8.5	52.24
ST 6182GLT	2839	1334	0.47	1.13	5.2	27.7	84.8	7.3	51.89
BX 1737GLT	3170	1324	0.42	1.15	4.8	28.7	84.0	8.5	53.98
ST 4747GLB2	3095	1323	0.43	1.17	4.9	27.0	83.1	6.0	53.19
DG 3757 B2XF	2983	1320	0.44	1.15	4.9	29.3	84.5	7.5	53.96
NG 5007 B2XF	3021	1318	0.44	1.14	4.9	27.8	84.7	8.1	54.44
BRS 336	3172	1307	0.41	1.13	4.7	27.7	83.9	7.6	54.10
DG CPS 16654 B2XF	2933	1307	0.45	1.24	4.8	29.3	84.4	8.0	54.00
AMX 1601 B2XF	2942	1303	0.44	1.17	5.3	32.5	85.6	8.0	52.56
SSG-UA 222	3103	1299	0.42	1.17	4.7	31.0	84.6	9.0	54.76
BRS 286 - CONV.	3030	1263	0.42	1.09	4.9	28.9	83.4	8.3	51.55
BX 1739GLT	2843	1253	0.44	1.19	4.8	29.8	85.0	6.0	54.20
BX 1738GLT	2957	1249	0.42	1.22	4.6	33.6	86.0	8.4	55.05
AMX 1604 B2XF	2897	1246	0.43	1.07	5.2	29.6	83.5	6.9	49.70
MON 16R229 B2XF	2827	1243	0.44	1.07	5.4	27.9	82.7	8.3	48.67
DP 1538 B2XF	2729	1223	0.45	1.09	5.1	27.8	83.6	9.4	51.78
DP 1522 B2XF	2789	1192	0.43	1.16	5.2	31.0	85.5	9.2	52.74

SSG-HQ 210 CT	2871	1183	0.41	1.08	5.4	29.0	82.6	7.7	49.29
CG 3475 B2XF	2740	1176	0.43	1.11	5.0	30.3	84.2	9.7	52.43
BX 1775GLTP	2753	1160	0.42	1.16	4.5	27.4	83.4	9.2	54.36
NG 3405 B2XF	2617	1152	0.44	1.09	4.8	25.8	83.3	7.8	52.45
BX 1773GLTP	2699	1139	0.42	1.11	4.8	27.6	82.9	8.7	53.16
MON 15R535 B2XF	2447	1134	0.46	1.16	5.1	28.6	84.9	7.3	53.40
ST 4949GLT	2587	1126	0.43	1.15	5.1	30.6	84.5	9.4	52.93
DG 3385 B2XF	2503	1124	0.45	1.14	5.0	29.2	85.5	9.3	53.43
DP 1518 B2XF	2604	1106	0.42	1.13	4.7	26.4	83.2	7.2	53.64
DG 3526 B2XF	2107	963	0.46	1.10	4.9	28.4	84.1	9.4	52.55
Overall Mean	3040	1334	0.44	1.14	4.9	29.4	84.4	8.2	52.88
LSD(0.05)	473	211	0.01	0.04	0.3	1.6	1.3	1.0	2.1
C.V. (%)	10.9	11.0	1.8	2.7	4.0	3.9	1.1	8.9	2.8

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

Table 8. Mean yield performance and fiber characteristics for cotton varieties cultivated on non-irrigated Dubbs very fine sandy loam on Cliff Heaton Farms near Clarksdale, MS during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 552 WRF	4248	**1888**	0.45	1.16	5.0	32.0	85.0	7.3	53.35
DP 1553 B2XF	3927	**1699**	0.43	1.16	5.1	29.5	84.4	9.2	53.00
PHY 499 WRF	3595	**1628**	0.45	1.10	5.3	31.0	84.6	9.4	50.46
DP 1555 B2RF	3557	1624	0.46	1.18	5.2	33.0	83.4	6.9	52.18
DG 3526 B2XF	3620	1621	0.45	1.14	5.1	29.5	84.7	10.3	52.35
PHY 444 WRF	3676	1618	0.44	1.25	4.7	31.1	85.4	7.5	54.90
PHY 312 WRF	3629	1617	0.45	1.14	5.4	29.2	85.0	8.0	51.70
DP 1639 B2XF	3662	1616	0.44	1.16	5.5	32.8	85.4	8.3	51.63
SSG-UA 222	3865	1575	0.41	1.22	5.2	32.9	84.8	8.7	52.36
DG 3757 B2XF	3523	1564	0.45	1.12	5.2	28.8	84.6	8.5	51.48
DG CPS 16654 B2XF	3612	1564	0.44	1.26	5.0	30.3	84.2	8.0	53.24
ST 4949GLT	3654	1559	0.43	1.14	5.5	31.0	84.4	8.9	50.69
BX 1737GLT	3673	1557	0.42	1.14	5.3	29.0	84.1	8.1	51.95
MON 15R535 B2XF	3261	1511	0.46	1.12	5.2	28.3	82.5	7.5	50.76
DP 1321 B2RF	3463	1498	0.43	1.13	5.6	32.1	85.2	9.2	50.90
PHY 496 W3RF	3261	1492	0.46	1.08	5.2	31.3	83.8	10.0	50.73
BX 1775GLTP	3514	1474	0.42	1.15	5.2	28.7	83.7	9.0	51.98
DP 1538 B2XF	3368	1470	0.44	1.09	5.2	28.9	83.1	9.3	51.26
DP 1646 B2XF	3272	1467	0.45	1.18	5.3	30.6	83.4	8.7	51.65
PHY 495 W3RF	3278	1460	0.44	1.09	5.0	31.6	83.8	8.9	52.36
ST 6182GLT	3096	1425	0.46	1.16	5.1	29.2	84.5	7.6	52.49
CG 3885 B2XF	3224	1415	0.44	1.10	5.3	28.4	84.1	8.7	50.38
ST 4946GLB2	3376	1414	0.42	1.13	5.4	30.5	84.9	8.4	51.61
NG 5007 B2XF	3261	1405	0.43	1.13	5.2	27.3	82.9	8.4	50.40
BRS 336	3493	1397	0.40	1.18	4.9	31.1	84.3	7.3	54.19
ST 5115GLT	3252	1395	0.43	1.14	5.3	30.6	82.4	8.0	51.19
NG 3405 B2XF	3099	1394	0.45	1.06	5.4	27.4	82.6	8.2	48.23
NG 3406 B2XF	3238	1390	0.43	1.12	5.3	28.7	84.8	8.8	51.23
BX 1773GLTP	3261	1386	0.42	1.12	5.3	28.3	83.6	8.4	51.59
PHY 339 WRF	3208	1381	0.43	1.12	5.1	30.0	83.8	7.8	52.50
NG 3522 B2XF	3096	1380	0.45	1.08	5.3	25.8	83.2	7.7	48.18
MON 16R229 B2XF	3085	1361	0.44	1.05	5.7	28.3	82.2	8.1	47.78
DP 1518 B2XF	3222	1354	0.42	1.13	5.3	28.5	84.2	7.2	51.11
SSG-HQ 210 CT	3294	1333	0.41	1.09	5.7	29.9	82.7	8.2	49.53
AMX 1601 B2XF	3007	1324	0.44	1.18	5.6	33.2	85.2	7.3	51.61
AMX 1604 B2XF	3067	1315	0.43	1.08	5.5	28.3	82.7	6.6	49.21
DP 1522 B2XF	2997	1312	0.44	1.12	5.5	31.0	84.7	9.9	50.60

BX 1739GLT	2993	1311	0.44	1.23	5.1	32.9	83.9	6.5	53.43
ST 4848GLT	2863	1300	0.45	1.12	5.7	29.1	84.4	7.2	50.15
PHY 333 WRF	2923	1297	0.44	1.16	5.0	27.4	83.7	7.7	52.65
ST 4747GLB2	3108	1276	0.41	1.18	5.2	27.6	83.0	5.9	52.28
BRS 286	3178	1274	0.40	1.09	5.3	29.4	81.8	7.3	49.40
DG 3385 B2XF	2819	1262	0.45	1.12	5.5	29.0	83.9	9.0	50.36
BRS 293	3173	1255	0.39	1.15	5.4	34.6	84.5	7.6	51.63
BX 1738GLT	2874	1207	0.42	1.14	5.4	30.7	85.0	8.1	51.45
DP 1614 B2XF	2693	1204	0.45	1.14	5.6	29.7	83.4	9.5	50.50
CG 3475 B2XF	2727	1164	0.43	1.07	5.5	30.4	83.2	8.9	48.56
Overall Mean	3301	1434	0.43	1.14	5.3	29.9	83.9	8.2	51.30
LSD(0.05)	606	262	0.01	0.05	0.3	1.9	1.4	1.0	2.55
C.V. (%)	12.8	12.7	2.3	3.0	4.0	4.5	1.1	8.4	3.5

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

Table 9. Mean yield performance and fiber characteristics for cotton varieties cultivated on an irrigated Tensas silty clay loam on Mark Kimmel Farms near Itta Bena, MS during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 495 W3RF	5147	**2140**	0.42	1.13	4.3	34.1	84.6	9.5	54.50
PHY 339 WRF	5203	**2113**	0.41	1.21	4.3	32.6	85.5	8.6	55.15
DP 1553 B2XF	5160	**2105**	0.41	1.23	4.6	30.9	85.4	8.3	55.00
PHY 499 WRF	4926	**2082**	0.42	1.15	4.3	33.2	85.2	10.2	55.00
NG 5007 B2XF	5059	**2077**	0.41	1.20	4.5	29.0	84.9	9.0	54.62
PHY 444 WRF	5019	**2073**	0.41	1.30	3.8	32.0	86.3	7.8	54.79
BX 1775GLTP	5013	**1992**	0.40	1.20	4.3	30.8	84.1	9.4	54.90
ST 6182GLT	4494	**1986**	0.44	1.17	4.8	30.3	84.6	7.8	54.70
DG 3757 B2XF	4682	**1982**	0.42	1.16	4.9	30.2	84.9	8.5	54.14
DP 1518 B2XF	5096	**1982**	0.39	1.20	4.3	30.1	84.0	7.4	54.77
DP 1555 B2RF	4805	**1976**	0.41	1.22	4.0	34.8	85.5	7.7	54.73
DP 1646 B2XF	4670	**1975**	0.42	1.28	4.4	31.8	85.1	8.4	54.98
PHY 496 W3RF	4339	**1974**	0.43	1.13	4.5	33.2	83.9	8.8	54.61
PHY 333 WRF	4745	**1972**	0.42	1.23	4.4	32.0	85.2	7.0	55.10
AMX 1604 B2XF	4932	**1960**	0.40	1.18	4.9	32.0	85.2	6.4	54.22
ST 4949GLT	4611	**1940**	0.42	1.18	5.0	32.7	85.9	9.5	53.90
PHY 312 WRF	4872	**1937**	0.40	1.23	4.1	32.6	85.6	8.1	55.13
CG 3475 B2XF	4912	**1927**	0.39	1.16	4.7	33.5	84.7	8.9	54.23
PHY 552 WRF	4644	**1926**	0.42	1.22	4.0	34.6	85.8	7.1	55.28
BX 1737GLT	4896	**1916**	0.39	1.23	4.5	32.2	85.3	8.2	55.06
ST 4747GLB2	4788	**1906**	0.40	1.22	4.6	29.4	83.7	7.3	54.65
BX 1738GLT	4812	**1896**	0.39	1.24	4.3	34.0	85.8	8.6	55.23
DP 1321 B2RF	4700	**1894**	0.40	1.17	4.8	34.3	85.2	9.7	54.99
DP 1639 B2XF	4455	**1884**	0.42	1.19	4.8	33.3	85.0	8.2	55.01
SSG-UA 222	4767	**1881**	0.39	1.25	4.5	32.8	85.5	9.0	55.08
DG 3385 B2XF	4537	**1858**	0.41	1.17	4.8	30.7	85.0	8.4	54.12
BRS 336	4857	**1845**	0.38	1.19	4.5	31.7	84.8	7.4	54.99
BRS 286	4676	1777	0.38	1.17	4.7	33.4	85.6	6.9	55.02
BRS 293	4600	1762	0.38	1.18	4.9	34.0	85.6	7.4	53.95
MON 15R535 B2XF	4140	1753	0.42	1.17	4.0	30.1	83.4	7.7	54.70
NG 3522 B2XF	4287	1749	0.41	1.11	4.4	28.1	83.7	8.6	53.64
ST 5115GLT	4373	1738	0.40	1.17	4.4	32.8	84.2	8.2	54.92
ST 4946GLB2	4404	1734	0.39	1.18	4.9	32.7	84.8	8.7	54.35
DP 1614 B2XF	4075	1733	0.43	1.24	4.9	32.3	85.5	9.5	54.51
DG CPS 16654 B2XF	4252	1727	0.41	1.32	4.1	31.8	84.8	7.8	55.08
BX 1773GLTP	4391	1720	0.39	1.17	4.2	30.1	84.1	8.7	54.71
NG 3406 B2XF	4385	1708	0.39	1.17	4.4	32.0	85.9	8.7	55.08

DP 1538 B2XF	4065	1690	0.42	1.13	4.5	29.6	84.0	9.1	54.50
CG 3885 B2XF	4155	1667	0.40	1.18	4.6	31.0	84.5	8.8	54.24
ST 4848GLT	4036	1664	0.41	1.19	4.2	33.2	85.3	8.7	55.13
DG 3526 B2XF	3875	1660	0.43	1.18	4.3	32.5	85.9	9.2	55.15
SSG-HQ 210 CT	4337	1608	0.37	1.15	4.3	33.4	83.6	8.1	54.83
DP 1522 B2XF	3734	1507	0.41	1.17	4.8	32.5	84.8	9.7	54.95
AMX 1601 B2XF	3601	1497	0.42	1.22	4.1	35.4	86.4	7.7	55.32
MON 16R229 B2XF	3589	1492	0.42	1.13	4.5	31.3	84.1	8.2	54.50
BX 1739GLT	3172	1343	0.42	1.27	4.7	34.3	85.1	5.9	55.07
NG 3405 B2XF	3437	1303	0.38	1.13	4.0	27.8	83.8	8.4	54.30
Overall Mean	4518	1834	0.41	1.19	4.5	32.1	84.9	8.3	54.73
LSD(0.05)	776	322	0.02	0.04	0.4	1.5	1.4	1.2	1.03
C.V. (%)	11.4	11.7	2.7	2.4	6.2	3.1	1.1	9.8	1.2

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

Table 10. Mean yield performance and fiber characteristics for cotton varieties cultivated on a pivot irrigated Dundee silt loam at George Cunningham and Phil Nichols Farms near Omega, MS in 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
NG 5007 B2XF	3488	**1461**	0.42	1.18	4.2	28.4	84.0	8.8	54.48
AMX 1604 B2XF	3514	**1450**	0.41	1.19	4.8	31.6	84.2	5.6	54.85
DP 1522 B2XF	3529	**1448**	0.41	1.17	4.6	31.8	84.8	9.6	54.90
ST 4949GLT	3353	**1434**	0.43	1.20	4.6	31.9	85.2	9.0	54.96
NG 3522 B2XF	3469	**1425**	0.41	1.14	4.3	28.9	83.7	8.1	54.50
PHY 496 W3RF	3188	**1375**	0.43	1.19	4.7	32.5	85.3	8.3	54.97
PHY 312 WRF	3288	**1348**	0.41	1.22	4.2	31.0	84.9	7.8	55.00
MON 16R229 B2XF	3213	**1338**	0.42	1.14	4.5	29.8	83.7	8.3	54.30
DP 1518 B2XF	3318	**1337**	0.40	1.21	4.3	30.9	84.8	8.3	54.90
DP 1639 B2XF	3028	**1327**	0.44	1.18	4.7	32.5	85.0	9.0	54.94
MON 15R535 B2XF	3062	**1318**	0.43	1.19	4.0	30.8	83.7	7.0	54.91
CG 3885 B2XF	3099	**1303**	0.42	1.20	4.7	30.8	85.2	8.6	54.89
PHY 552 WRF	3090	**1295**	0.42	1.19	4.3	32.0	84.8	8.2	54.99
AMX 1601 B2XF	3057	**1291**	0.42	1.21	4.5	32.6	85.1	8.1	55.03
DP 1646 B2XF	2998	**1289**	0.43	1.28	4.3	30.5	85.0	7.4	54.90
DP 1538 B2XF	2892	**1285**	0.44	1.14	4.7	29.3	84.6	8.2	54.54
DP 1321 B2RF	2944	**1279**	0.43	1.18	4.7	31.5	85.1	9.0	54.98
DG 3757 B2XF	2944	1269	0.43	1.18	4.4	30.2	84.3	8.2	54.70
DP 1614 B2XF	2956	1262	0.43	1.19	4.5	30.7	85.2	8.3	54.78
PHY 333 WRF	2983	1258	0.42	1.23	4.2	31.2	85.2	7.1	55.06
ST 4848GLT	3004	1252	0.42	1.21	4.4	31.5	85.2	8.0	54.90
NG 3405 B2XF	3127	1252	0.40	1.11	4.2	27.7	83.7	8.3	54.13
BRS 286	2936	1250	0.43	1.19	4.7	32.0	84.6	7.4	54.93
DP 1553 B2XF	2931	1239	0.42	1.22	4.4	31.0	85.2	8.3	55.03
NG 3406 B2XF	2950	1226	0.42	1.16	4.5	29.6	84.2	9.1	54.53
CG 3475 B2XF	2981	1210	0.41	1.21	4.5	31.6	84.9	8.4	54.93
DG CPS 16654 B2XF	2796	1209	0.43	1.30	4.3	29.9	85.2	8.0	54.84
DP 1555 B2RF	2712	1205	0.45	1.19	4.2	31.1	84.8	7.8	55.00
ST 4946GLB2	2961	1205	0.41	1.20	4.4	32.6	85.3	8.2	55.10
ST 5115GLT	2920	1205	0.41	1.18	4.5	30.6	84.0	7.7	54.75
PHY 499 WRF	2770	1194	0.43	1.16	4.7	32.3	84.6	8.3	54.84
PHY 444 WRF	2798	1193	0.43	1.29	4.0	31.5	85.5	6.9	55.18
ST 6182GLT	2617	1189	0.46	1.21	4.5	29.4	84.1	7.8	54.61
PHY 495 W3RF	2675	1188	0.44	1.17	4.4	31.9	84.8	8.6	54.91
PHY 339 WRF	2892	1185	0.41	1.20	4.2	31.7	84.3	8.3	54.91
DG 3526 B2XF	2649	1170	0.44	1.17	4.4	30.4	85.4	9.1	54.88
BX 1737GLT	2858	1169	0.41	1.20	4.3	31.0	84.4	8.2	54.96

ST 4747GLB2	2847	1154	0.40	1.22	4.5	30.0	83.7	6.1	54.69
BX 1775GLTP	2830	1139	0.40	1.21	4.2	30.2	83.7	8.5	54.83
DG 3385 B2XF	2747	1136	0.41	1.18	4.5	30.9	85.5	8.2	54.93
BX 1738GLT	2783	1130	0.41	1.22	4.3	33.4	84.9	8.1	55.01
SSG-UA 222	2759	1109	0.40	1.23	4.2	31.8	84.9	8.8	55.04
BX 1739GLT	2538	1107	0.44	1.25	4.6	33.3	85.2	5.8	55.05
BX 1773GLTP	2727	1100	0.40	1.20	4.0	29.7	84.5	8.7	54.80
BRS 293	2645	1091	0.41	1.18	4.7	33.3	85.0	9.2	54.98
SSG-HQ 210 CT	2905	1071	0.37	1.15	4.4	31.2	83.1	7.3	54.69
BRS 336	2348	984	0.42	1.19	4.5	31.6	84.9	8.0	54.97
Overall Mean	2968	1245	0.42	1.19	4.4	31.0	84.6	8.1	54.8
LSD(0.05)	443	189	0.02	0.04	0.3	1.9	1.4	1.2	0.34
C.V. (%)	10.2	10.4	3.8	2.5	5.0	4.2	1.1	10.4	0.4

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

Table 11. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated soil at Kenny Hurt Farms near Senatobia, MS during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
DP 1646 B2XF	4412	**1850**	0.42	1.30	4.8	30.1	85.6	6.0	54.88
DP 1518 B2XF	4125	1651	0.40	1.23	4.8	31.5	85.8	4.7	55.00
DG CPS 16654 B2XF	3945	1632	0.41	1.30	4.6	31.8	85.2	5.8	55.05
ST 4949GLT	4036	1607	0.40	1.21	4.6	32.2	84.7	5.5	54.96
PHY 333 WRF	3692	1523	0.41	1.22	4.9	31.2	85.2	4.8	54.95
PHY 496 W3RF	3553	1522	0.43	1.15	5.1	33.1	84.6	6.4	53.13
PHY 312 WRF	3760	1519	0.40	1.22	4.8	31.8	85.6	5.5	55.05
NG 3522 B2XF	3617	1479	0.41	1.16	4.7	30.4	83.4	4.5	54.60
PHY 495 W3RF	3542	1460	0.41	1.15	4.8	34.5	85.1	6.4	54.93
DP 1614 B2XF	3463	1440	0.42	1.26	5.1	32.7	86.6	6.4	53.63
PHY 339 WRF	3683	1439	0.39	1.25	4.4	32.5	85.4	5.5	55.08
DP 1522 B2XF	3595	1437	0.40	1.22	5.1	32.5	85.6	6.5	52.75
DP 1555 B2RF	3442	1418	0.41	1.23	4.8	33.8	85.7	5.5	54.50
PHY 444 WRF	3497	1413	0.40	1.32	4.3	33.5	87.0	4.9	55.21
DP 1639 B2XF	3222	1375	0.43	1.17	5.3	33.6	85.4	6.2	51.99
PHY 552 WRF	3307	1371	0.41	1.22	4.7	32.6	85.6	5.2	55.10
BX 1738GLT	3511	1369	0.39	1.28	5.1	33.1	87.1	5.5	54.04
NG 3405 B2XF	3414	1352	0.40	1.16	4.8	30.4	83.7	5.7	54.03
MON 15R535 B2XF	3113	1350	0.43	1.18	4.7	32.2	83.5	4.8	54.78
DG 3757 B2XF	3289	1346	0.41	1.18	4.8	31.0	85.3	6.1	54.30
NG 5007 B2XF	3365	1344	0.40	1.20	4.5	31.0	84.0	6.3	54.89
CG 3885 B2XF	3298	1343	0.41	1.19	4.9	31.8	84.6	7.0	54.31
AMX 1604 B2XF	3401	1327	0.39	1.20	5.0	34.6	84.9	4.1	54.46
DP 1538 B2XF	3149	1307	0.41	1.14	5.0	30.6	84.2	6.2	52.93
ST 4848GLT	3102	1305	0.42	1.17	5.1	31.2	84.6	5.2	53.10
MON 16R229 B2XF	3224	1286	0.40	1.15	4.9	31.7	85.0	6.0	53.71
BX 1773GLTP	3175	1257	0.40	1.25	4.9	31.3	86.2	5.9	53.90
ST 4747GLB2	3218	1247	0.39	1.23	4.7	31.7	85.0	4.1	54.93
BX 1737GLT	3175	1242	0.39	1.26	4.9	32.3	85.9	5.5	54.51
BX 1775GLTP	3177	1237	0.39	1.27	4.9	32.0	85.3	6.2	54.46
DP 1321 B2RF	3066	1232	0.40	1.18	5.1	32.2	85.4	7.0	52.71
PHY 499 WRF	3008	1226	0.41	1.19	5.0	34.5	85.8	6.7	53.91
ST 5115GLT	3193	1226	0.38	1.19	4.7	33.8	84.5	5.3	54.96
DP 1553 B2XF	2996	1203	0.40	1.21	4.9	30.8	84.9	6.9	54.30
CG 3475 B2XF	3060	1154	0.38	1.21	4.8	32.8	86.3	6.5	55.09
ST 4946GLB2	2950	1153	0.39	1.21	5.2	33.1	85.5	5.6	52.44
NG 3406 B2XF	2862	1123	0.39	1.20	4.8	30.8	85.4	7.1	54.88
DG 3526 B2XF	2610	1096	0.42	1.18	5.0	31.2	85.6	7.2	53.81

ST 6182GLT	2507	1060	0.42	1.19	4.9	31.5	85.1	4.9	53.84
DG 3385 B2XF	2539	1002	0.40	1.20	4.9	30.8	85.6	6.4	54.33
AMX 1601 B2XF	2354	969	0.41	1.20	4.8	34.7	84.8	5.0	54.48
Overall Mean	3259	1318	0.40	1.21	4.9	32.2	85.3	5.7	54.4
LSD(0.05)	460	194	0.01	0.03	0.3	1.7	1.2	0.9	1.30
C.V. (%)	9.9	10.3	2.0	1.6	3.9	3.6	1.0	10.5	1.7

† Lint yields in bold type within a column are not significantly different from the numerically greatest yielding variety.
**** Conventional varieties are not reported due to damage from glyphosate drift.**

Table 12. Mean yield performance and fiber characteristics for cotton varieties cultivated on an irrigated Dundee loam on Porter Farms near Sidon, MS during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
ST 4949GLT	3753	**1609**	0.43	1.15	5.3	31.5	83.9	6.8	51.92
PHY 495 W3RF	3368	**1505**	0.45	1.08	4.9	32.6	83.2	6.1	52.26
PHY 499 WRF	3262	**1446**	0.44	1.12	5.1	31.6	83.8	7.3	52.13
PHY 333 WRF	3342	**1440**	0.43	1.18	4.6	30.5	83.8	4.9	54.65
PHY 496 W3RF	3189	**1438**	0.45	1.09	5.0	32.1	83.4	6.6	52.39
PHY 444 WRF	3243	**1402**	0.43	1.26	4.5	30.8	85.5	5.1	55.00
NG 3522 B2XF	3239	**1402**	0.43	1.10	5.0	27.7	82.2	5.3	51.20
PHY 312 WRF	3284	1400	0.43	1.15	4.8	30.4	83.9	5.5	53.99
PHY 552 WRF	3084	1375	0.45	1.16	4.9	31.3	84.8	4.7	53.70
BX 1738GLT	3370	1362	0.41	1.20	5.0	32.9	84.6	6.2	53.28
DP 1646 B2XF	3107	1360	0.44	1.25	4.9	29.1	84.1	5.4	54.60
NG 3406 B2XF	3230	1355	0.42	1.14	4.9	29.4	84.5	6.5	53.93
DP 1555 B2RF	2905	1334	0.46	1.18	5.2	32.1	83.7	5.2	53.31
DP 1321 B2RF	3142	1331	0.42	1.15	5.3	31.9	83.6	7.0	51.66
SSG-UA 222	3264	1316	0.40	1.20	5.0	31.6	85.1	6.2	53.81
PHY 339 WRF	3088	1313	0.43	1.15	4.9	31.8	83.1	5.9	54.08
BX 1737GLT	3181	1309	0.41	1.18	4.9	31.1	83.5	5.7	54.74
ST 4848GLT	2811	1272	0.45	1.10	5.3	30.4	83.7	5.8	50.96
BX 1773GLTP	2914	1249	0.43	1.16	5.0	29.6	83.1	6.3	53.39
NG 3405 B2XF	2970	1248	0.42	1.11	4.8	27.6	82.9	5.3	53.96
BRS 336	3095	1238	0.40	1.16	4.9	30.6	83.5	5.3	54.06
DP 1614 B2XF	2802	1238	0.44	1.20	5.2	31.4	85.4	6.8	52.51
ST 5115GLT	3019	1233	0.41	1.12	4.9	31.8	81.7	6.0	53.48
MON 15R535 B2XF	2725	1232	0.45	1.15	4.9	29.2	82.3	4.8	53.18
BX 1775GLTP	2946	1228	0.42	1.18	4.7	29.8	83.7	6.3	54.59
NG 5007 B2XF	2742	1181	0.43	1.16	4.9	28.7	83.4	6.0	53.81
DG CPS 16654 B2XF	2781	1175	0.42	1.25	4.6	30.2	84.0	5.5	54.71
DP 1522 B2XF	2770	1174	0.42	1.13	5.1	31.2	83.9	6.7	52.58
DP 1518 B2XF	2826	1165	0.41	1.16	4.6	29.5	83.9	5.2	54.51
DP 1639 B2XF	2583	1136	0.44	1.16	5.2	31.9	84.3	5.8	52.51
DG 3385 B2XF	2729	1136	0.42	1.18	5.0	30.7	85.2	6.5	53.13
DP 1538 B2XF	2578	1134	0.44	1.11	5.3	28.8	82.8	6.0	51.06
ST 4747GLB2	2776	1123	0.40	1.19	4.9	29.5	82.5	3.9	53.84
BRS 286	2789	1107	0.40	1.10	5.1	31.0	82.8	4.5	51.76
ST 4946GLB2	2720	1107	0.41	1.15	5.0	32.0	83.8	5.8	53.25
ST 6182GLT	2417	1102	0.46	1.13	4.9	29.2	83.0	5.1	54.06
CG 3475 B2XF	2715	1100	0.41	1.13	4.8	31.1	83.7	6.3	54.62
CG 3885 B2XF	2535	1096	0.43	1.15	5.0	29.8	84.1	6.0	53.03

MON 16R229 B2XF	2535	1093	0.43	1.11	5.0	28.9	82.8	5.2	53.23
DP 1553 B2XF	2443	1044	0.43	1.21	4.8	30.6	84.0	5.6	54.21
SSG-HQ 210 CT	2707	1029	0.38	1.12	5.2	31.2	82.3	5.3	52.15
BRS 293	2488	1001	0.40	1.14	5.6	33.6	83.9	5.7	51.04
AMX 1604 B2XF	2411	980	0.41	1.15	4.9	32.3	83.0	4.0	53.85
DG 3757 B2XF	2173	951	0.44	1.14	5.1	29.9	83.5	6.1	52.97
DG 3526 B2XF	1925	857	0.45	1.12	5.1	28.6	84.5	6.5	52.10
AMX 1601 B2XF	1985	855	0.43	1.17	5.2	33.0	83.4	5.3	52.64
BX 1739GLT	1832	813	0.44	1.23	5.0	33.5	84.0	3.7	54.17
Overall Mean	2853	1215	0.43	1.15	5.0	30.7	83.6	5.7	53.23
LSD(0.05)	182	207	0.01	0.04	0.3	1.7	1.3	0.7	1.86
C.V. (%)	11.9	12.0	1.6	2.1	4.2	3.9	1.1	8.3	2.5

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

Table 13. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Marietta fine sandy loam at the Mississippi State University Plant Science Research Center near Starkville, MS during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 444 WRF	4592	**2017**	0.44	1.26	4.4	30.9	86.6	7.8	55.00
DP 1553 B2XF	4447	**1937**	0.43	1.18	4.5	30.2	85.3	8.7	54.66
DG 3757 B2XF	4292	**1850**	0.43	1.18	4.4	29.6	83.9	8.9	54.61
DP 1538 B2XF	4116	**1820**	0.44	1.19	4.7	30.9	86.9	7.9	53.75
SSG-UA 222	4144	**1818**	0.44	1.21	4.4	30.2	84.1	8.6	54.14
ST 6182GLT	4045	**1813**	0.45	1.17	4.7	31.4	84.6	7.5	54.79
PHY 339 WRF	4201	**1780**	0.42	1.19	4.6	32.4	85.4	8.3	54.15
DP 1646 B2XF	4007	**1774**	0.44	1.21	4.4	29.1	84.1	8.2	54.55
BX 1739GLT	4201	1766	0.42	1.25	4.5	33.5	86.2	7.2	55.19
DP 1321 B2RF	4043	1751	0.43	1.25	4.5	31.0	86.3	7.8	55.03
DP 1555 B2RF	4072	1747	0.43	1.19	4.5	30.4	85.7	8.8	54.88
ST 4747GLB2	4101	1727	0.42	1.23	4.5	30.5	85.2	7.5	54.80
BRS 286	4261	1721	0.40	1.20	4.4	32.3	85.9	8.4	55.06
NG 3522 B2XF	3995	1717	0.43	1.14	4.2	27.9	83.4	8.5	54.39
NG 3406 B2XF	4036	1714	0.42	1.19	4.5	32.3	85.6	9.1	55.04
PHY 499 WRF	4099	1714	0.42	1.18	4.4	30.2	86.3	8.6	54.91
BX 1737GLT	3931	1703	0.43	1.20	4.3	29.9	85.7	8.0	54.76
DG CPS 16654 B2XF	3997	1697	0.42	1.17	4.3	30.2	84.9	8.3	54.78
BRS 293	4181	1697	0.41	1.19	4.7	31.4	84.9	7.8	54.89
NG 5007 B2XF	4004	1680	0.42	1.18	4.5	31.3	85.4	8.0	54.91
BX 1775GLTP	3883	1678	0.43	1.21	4.3	31.1	85.7	8.0	55.03
CG 3475 B2XF	3868	1659	0.43	1.14	4.4	31.1	84.2	10.0	54.51
DP 1518 B2XF	3857	1654	0.43	1.25	4.5	30.3	84.8	8.6	54.93
CG 3885 B2XF	3868	1651	0.43	1.19	4.6	30.3	85.4	7.7	54.83
PHY 495 W3RF	3790	1640	0.43	1.19	4.5	31.7	86.2	8.4	55.00
PHY 496 W3RF	3906	1635	0.42	1.17	4.3	32.5	85.2	8.3	55.09
PHY 312 WRF	3940	1609	0.41	1.22	4.2	33.0	86.3	9.2	54.58
BRS 336	3881	1607	0.41	1.23	4.4	30.1	86.1	8.4	54.94
NG 3405 B2XF	3766	1600	0.43	1.15	4.4	28.2	84.3	8.5	54.09
DP 1639 B2XF	3674	1596	0.43	1.19	4.6	31.5	85.8	8.2	54.88
DP 1522 B2XF	3759	1593	0.42	1.19	4.2	31.0	84.8	8.0	54.97
ST 5115GLT	3770	1588	0.42	1.22	4.6	31.8	86.6	7.8	54.33
DG 3385 B2XF	3704	1586	0.43	1.21	4.4	31.3	86.2	8.5	54.96
AMX 1604 B2XF	3841	1578	0.41	1.20	4.4	31.1	84.6	8.2	54.84
BX 1773GLTP	3786	1578	0.42	1.23	4.1	31.1	85.4	9.0	54.91
BX 1738GLT	3725	1574	0.42	1.24	4.3	31.2	85.5	8.1	55.03
PHY 333 WRF	3851	1573	0.41	1.22	4.0	29.5	85.6	7.9	54.85

PHY 552 WRF	3884	1561	0.40	1.27	4.0	32.9	87.1	8.4	55.33
ST 4848GLT	3659	1554	0.42	1.21	4.3	30.9	85.7	7.7	54.79
ST 4946GLB2	3616	1532	0.42	1.17	4.6	30.9	85.0	9.4	54.55
SSG-HQ 210 CT	3617	1482	0.41	1.19	4.1	30.3	84.8	8.8	54.93
ST 4949GLT	3497	1472	0.42	1.19	4.6	31.1	85.7	9.4	54.84
DG 3526 B2XF	3244	1356	0.42	1.18	4.4	30.7	86.2	8.5	54.93
MON 16R229 B2XF	3119	1355	0.44	1.16	4.5	30.2	85.5	8.4	54.79
DP 1614 B2XF	3212	1354	0.42	1.20	4.2	29.3	85.2	8.3	54.19
MON 15R535 B2XF	2940	1227	0.42	1.16	4.5	30.7	84.4	9.9	54.43
AMX 1601 B2XF	2747	1189	0.43	1.21	4.5	31.9	85.5	7.6	54.91
Overall Mean	3859	1638	0.42	1.20	4.4	30.8	85.4	8.4	54.76
LSD(0.05)	530	249	0.03	0.08	0.5	2.8	1.8	1.5	0.92
C.V. (%)	9.5	10.5	5.1	4.4	8.2	6.3	1.5	12.8	1.2

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

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 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 312 WRF	3824	**1594**	0.42	1.23	4.8	32.4	86.2	8.5	55.10
PHY 333 WRF	3748	**1580**	0.42	1.21	4.6	30.8	84.7	8.1	54.91
CG 3475 B2XF	3944	**1573**	0.40	1.22	4.7	33.8	87.0	9.8	55.20
DP 1321 B2RF	3824	**1557**	0.41	1.21	4.8	32.9	86.1	9.4	55.07
SSG-UA 222	3764	**1509**	0.40	1.25	5.1	32.6	86.0	9.4	53.39
MON 15R535 B2XF	3357	**1498**	0.45	1.20	4.8	30.8	85.7	8.0	54.90
DP 1614 B2XF	3422	**1496**	0.44	1.26	5.0	31.5	86.3	9.2	53.36
ST 4848GLT	3481	**1476**	0.42	1.22	4.8	34.0	86.7	8.2	55.20
DG 3526 B2XF	3382	**1471**	0.44	1.18	4.9	30.8	86.0	9.6	53.88
ST 4946GLB2	3604	**1459**	0.41	1.23	5.3	33.5	87.1	8.8	52.53
ST 4949GLT	3274	**1415**	0.43	1.19	4.8	30.6	85.3	8.7	54.25
AMX 1604 B2XF	3518	**1413**	0.40	1.21	4.9	33.1	84.8	6.7	55.04
PHY 339 WRF	3433	**1385**	0.40	1.22	4.6	31.9	85.7	8.8	55.11
NG 3522 B2XF	3301	**1379**	0.42	1.17	4.6	29.9	84.9	8.0	54.73
BX 1737GLT	3445	**1372**	0.40	1.27	4.7	31.2	85.8	8.6	55.04
BX 1738GLT	3423	**1355**	0.40	1.33	4.9	33.7	88.0	8.8	55.20
DP 1646 B2XF	3212	**1350**	0.42	1.36	4.5	31.2	87.2	8.4	55.06
ST 4747GLB2	3295	1322	0.40	1.26	4.7	31.1	85.1	6.4	54.96
PHY 444 WRF	3207	1320	0.41	1.34	4.1	33.0	87.6	7.8	55.33
NG 3405 B2XF	3183	1295	0.41	1.16	4.8	29.6	84.5	8.5	54.59
PHY 499 WRF	3084	1291	0.42	1.20	4.9	33.9	86.6	9.3	54.03
DP 1518 B2XF	3214	1290	0.40	1.25	4.3	31.1	86.2	8.1	55.11
DP 1538 B2XF	2946	1282	0.44	1.16	5.0	30.7	85.5	9.2	54.19
DP 1522 B2XF	3113	1280	0.41	1.22	5.0	33.0	86.4	10.1	54.03
DG 3385 B2XF	3155	1272	0.40	1.23	4.9	31.2	86.9	9.8	54.45
BX 1773GLTP	3165	1272	0.40	1.23	4.5	31.3	84.8	9.6	54.94
PHY 495 W3RF	2955	1262	0.43	1.18	4.7	34.4	86.3	9.7	55.10
NG 5007 B2XF	2987	1238	0.41	1.23	4.6	29.8	85.5	9.5	54.78
MON 16R229 B2XF	2972	1236	0.42	1.16	5.0	31.2	84.9	9.1	53.70
BX 1775GLTP	3055	1223	0.40	1.24	4.5	30.2	85.5	9.4	54.88
PHY 496 W3RF	2806	1210	0.43	1.19	4.7	33.0	87.1	9.5	55.13
CG 3885 B2XF	2855	1203	0.42	1.20	4.8	31.2	86.5	9.6	55.05
NG 3406 B2XF	2929	1190	0.41	1.21	4.8	31.3	86.6	9.7	54.50
PHY 552 WRF	2819	1183	0.42	1.25	4.3	32.7	87.1	8.5	55.20
BRS 286	3070	1171	0.38	1.20	4.8	33.2	84.7	7.5	54.99
ST 6182GLT	2589	1152	0.45	1.22	4.7	31.3	86.1	7.8	54.99
ST 5115GLT	2891	1144	0.40	1.21	4.6	33.1	85.3	8.4	55.09

DP 1555 B2RF	2610	1107	0.42	1.25	4.5	33.3	86.0	7.8	55.10
AMX 1601 B2XF	2557	1095	0.43	1.25	5.0	33.9	86.6	8.4	54.03
DP 1639 B2XF	2440	1049	0.43	1.20	5.0	33.5	86.2	9.4	53.99
DG CPS 16654 B2XF	2427	994	0.41	1.36	4.5	32.0	86.5	8.8	55.13
DP 1553 B2XF	2397	992	0.41	1.25	4.6	30.7	86.9	9.4	54.96
BRS 293	2512	970	0.39	1.21	5.2	34.1	86.2	8.0	52.88
DG 3757 B2XF	2052	860	0.42	1.22	4.7	31.1	86.7	8.9	55.05
BX 1739GLT	1840	779	0.42	1.31	4.8	34.3	86.7	6.5	55.20
BRS 336	1976	745	0.38	1.24	4.6	32.1	86.3	8.5	55.16
SSG-HQ 210 CT	1951	726	0.37	1.18	5.3	33.5	85.5	7.4	51.78
Overall Mean	3030	1249	0.41	1.23	4.7	32.0	86.1	8.6	54.61
LSD(0.05)	601	255	0.01	0.03	0.3	1.4	1.2	1.0	0.96
C.V. (%)	13.7	14.0	1.6	1.7	3.7	2.9	0.9	7.5	1.2

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

Table 15. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated soil at Pace Perry Farms near Tunica, MS during 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 496 W3RF	3930	**1727**	0.44	1.14	4.4	33.1	84.4	6.4	54.69
DP 1522 B2XF	4034	**1674**	0.41	1.20	4.6	32.0	84.2	7.0	54.92
DP 1646 B2XF	4008	**1661**	0.41	1.33	4.2	30.9	85.7	5.9	55.04
PHY 312 WRF	3940	**1654**	0.42	1.19	4.3	31.0	85.1	5.6	54.99
ST 4949GLT	3971	**1581**	0.40	1.20	4.0	30.0	83.8	5.9	54.80
DP 1518 B2XF	3911	**1576**	0.40	1.21	4.0	30.1	84.8	5.5	54.95
NG 3405 B2XF	3782	**1536**	0.41	1.15	4.2	30.3	83.6	6.1	54.65
NG 3522 B2XF	3620	**1514**	0.42	1.16	4.4	29.7	84.1	5.5	54.65
BX 1775GLTP	3708	**1509**	0.41	1.23	4.1	30.9	84.4	6.6	54.98
DP 1321 B2RF	3598	1472	0.41	1.17	4.7	31.3	84.7	6.5	54.81
ST 4848GLT	3386	1458	0.43	1.17	4.6	31.4	84.4	5.4	54.83
BX 1773GLTP	3544	1451	0.41	1.20	4.0	30.4	83.8	5.9	54.88
MON 16R229 B2XF	3523	1442	0.41	1.18	4.4	32.3	85.0	6.0	55.00
BX 1737GLT	3505	1420	0.40	1.20	4.5	31.2	83.7	5.8	54.81
DG CPS 16654 B2XF	3502	1413	0.40	1.32	3.9	31.5	85.0	5.8	55.11
NG 3406 B2XF	3484	1401	0.40	1.16	4.5	30.6	84.4	6.8	54.69
BX 1738GLT	3560	1392	0.39	1.25	4.3	34.0	84.9	5.8	55.13
PHY 499 WRF	3268	1383	0.42	1.17	4.4	33.4	85.4	6.5	55.14
PHY 444 WRF	3336	1379	0.41	1.30	3.8	31.9	86.4	5.1	55.20
ST 4747GLB2	3411	1368	0.40	1.21	4.6	31.3	83.2	4.0	54.71
PHY 552 WRF	3164	1367	0.43	1.19	4.2	32.2	84.5	5.2	55.06
MON 15R535 B2XF	3123	1363	0.44	1.21	4.1	30.9	84.0	4.7	54.85
ST 5115GLT	3377	1358	0.40	1.17	4.3	33.7	83.4	5.8	54.91
AMX 1604 B2XF	3390	1353	0.40	1.16	4.3	32.2	83.6	3.8	54.88
DP 1555 B2RF	3173	1352	0.43	1.24	4.1	33.5	85.1	5.6	55.18
DG 3385 B2XF	3300	1350	0.41	1.19	4.4	31.8	85.7	6.6	55.08
PHY 339 WRF	3297	1341	0.41	1.20	4.3	32.0	85.2	6.2	55.09
DP 1639 B2XF	3096	1338	0.43	1.17	4.6	33.0	84.9	6.2	54.93
CG 3475 B2XF	3378	1317	0.39	1.18	4.5	31.6	85.3	6.5	55.00
CG 3885 B2XF	3294	1312	0.40	1.19	4.2	31.2	84.3	6.5	54.96
NG 5007 B2XF	3285	1306	0.40	1.20	4.2	30.3	84.1	6.2	54.83
PHY 333 WRF	3084	1301	0.42	1.19	4.3	30.9	83.6	5.2	54.83
PHY 495 W3RF	2887	1264	0.44	1.12	4.6	31.9	84.4	6.6	54.28
SSG-UA 222	3252	1248	0.38	1.26	4.3	32.5	85.0	6.8	55.10
ST 4946GLB2	3179	1243	0.39	1.17	4.5	33.0	84.7	5.7	54.93
DP 1614 B2XF	2920	1232	0.42	1.22	4.3	31.5	84.4	7.1	54.96
ST 6182GLT	2706	1220	0.45	1.17	4.3	30.6	83.8	5.3	54.74
DP 1553 B2XF	3015	1217	0.40	1.23	4.0	30.9	85.2	6.4	55.09

AMX 1601 B2XF	2740	1162	0.42	1.22	4.5	33.9	85.5	5.7	55.13
DP 1538 B2XF	2615	1108	0.42	1.12	4.3	30.7	82.8	6.6	54.34
BX 1739GLT	2470	1060	0.43	1.25	4.4	34.1	84.1	4.0	54.95
DG 3757 B2XF	2523	1057	0.42	1.17	4.3	30.7	84.2	6.9	54.79
DG 3526 B2XF	2326	1010	0.44	1.18	4.2	31.1	85.3	7.2	54.98
SSG-HQ 210 CT	2549	962	0.38	1.18	5.0	33.0	84.2	5.1	53.74
BRS 286	2441	901	0.37	1.18	4.5	33.0	84.0	4.7	54.91
BRS 293	1996	758	0.38	1.18	4.9	35.3	84.6	5.9	53.44
BRS 336	2059	754	0.37	1.24	4.2	33.3	85.1	5.3	55.18
Overall Mean	3231	1325	0.41	1.20	4.3	31.8	84.5	5.8	54.86
LSD(0.05)	574	235	0.01	0.04	0.3	1.5	1.2	0.5	0.59
C.V. (%)	12.4	12.4	2.2	2.1	4.5	3.2	1.0	6.5	0.7

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

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 2016.

Variety	Seedcotton Yield	Measurement							
		Lint Yield†	Lint	Length	Mic.	Strength	Uniform.	Elong.	Loan Value
	(lb/acre)	(lb/acre)	(%)	(in.)	- - - -	(g/tex)	(%)	(%)	¢/LB
PHY 499 WRF	4288	**1997**	0.47	1.12	4.9	30.9	85.5	8.9	53.70
PHY 444 WRF	4211	**1989**	0.47	1.25	4.4	31.0	86.8	8.1	55.08
ST 4949GLT	4259	**1987**	0.47	1.24	4.5	30.7	86.6	7.1	54.99
DP 1555 B2RF	4046	**1886**	0.47	1.18	4.8	31.5	84.8	7.3	54.86
CG 3885 B2XF	4012	**1882**	0.47	1.12	4.9	28.7	84.7	9.5	54.12
PHY 495 W3RF	3950	**1850**	0.47	1.09	4.9	31.8	85.0	10.1	54.01
DG 3757 B2XF	3976	**1842**	0.46	1.14	4.6	28.8	84.4	8.9	54.44
BX 1737GLT	4168	**1823**	0.44	1.14	4.8	28.7	83.9	8.5	53.80
PHY 496 W3RF	3788	1814	0.48	1.09	5.0	30.9	84.3	9.4	52.64
PHY 552 WRF	3966	1800	0.45	1.17	4.6	31.0	85.3	7.3	54.88
BX 1775GLTP	4053	1779	0.44	1.16	4.5	28.6	83.7	9.3	54.40
DP 1639 B2XF	3777	1772	0.47	1.13	5.1	31.3	85.3	9.1	53.11
DP 1553 B2XF	3849	1769	0.46	1.20	4.7	30.2	86.4	8.8	54.91
DP 1522 B2XF	3927	1764	0.45	1.14	4.9	30.6	84.8	9.8	53.51
DP 1538 B2XF	3836	1761	0.46	1.12	4.7	28.5	84.6	9.5	54.14
DP 1646 B2XF	3730	1742	0.47	1.24	4.7	29.2	85.4	8.5	54.69
ST 6182GLT	3611	1730	0.48	1.14	4.9	28.1	83.9	8.1	53.74
PHY 333 WRF	3743	1729	0.46	1.15	4.8	29.0	84.9	7.6	53.35
PHY 312 WRF	3844	1724	0.45	1.17	4.8	29.5	84.9	8.0	53.92
NG 3406 B2XF	3828	1720	0.45	1.13	4.9	29.9	85.6	10.1	54.09
DP 1518 B2XF	3984	1719	0.43	1.15	4.6	28.0	84.3	7.5	54.38
DP 1321 B2RF	3810	1707	0.45	1.15	5.0	30.2	85.5	9.7	53.25
BX 1773GLTP	3847	1706	0.44	1.14	4.5	26.8	84.1	9.2	54.41
ST 4946GLB2	3969	1701	0.43	1.15	4.9	31.6	85.7	9.4	53.76
SSG-UA 222	3876	1700	0.44	1.17	5.0	30.5	85.1	9.7	54.19
BX 1738GLT	3860	1696	0.44	1.19	4.6	32.3	85.4	8.9	55.08
ST 5115GLT	3965	1695	0.43	1.12	4.6	29.5	82.3	9.0	54.10
BRS 286	3939	1692	0.43	1.08	4.9	29.8	83.0	8.7	52.48
NG 3522 B2XF	3668	1675	0.46	1.09	4.6	26.0	83.5	8.5	52.31
MON 15R535 B2XF	3548	1672	0.47	1.15	4.8	28.0	83.4	7.9	54.33
NG 5007 B2XF	3684	1671	0.45	1.15	4.5	28.3	83.8	8.6	54.40
DG CPS 16654 B2XF	3548	1647	0.46	1.22	4.7	29.1	84.5	9.2	54.65
DG 3385 B2XF	3596	1644	0.46	1.13	5.1	29.5	85.6	9.3	52.91
NG 3405 B2XF	3648	1642	0.45	1.09	4.6	25.9	83.7	7.8	52.55
ST 4747GLB2	3761	1633	0.43	1.17	4.8	26.8	83.0	6.9	53.63
SSG-HQ 210 CT	3768	1590	0.42	1.12	5.2	29.2	83.7	8.3	51.74
DG 3526 B2XF	3316	1571	0.47	1.12	4.8	29.0	85.3	9.8	54.29

AMX 1604 B2XF	3523	1562	0.44	1.09	5.3	29.2	83.6	6.9	50.33
PHY 339 WRF	3560	1560	0.44	1.15	4.7	30.5	84.8	8.9	54.73
ST 4848GLT	3385	1536	0.45	1.13	4.9	29.4	84.4	8.2	53.94
DP 1614 B2XF	3273	1519	0.46	1.16	5.1	30.5	85.4	9.1	52.74
CG 3475 B2XF	3429	1498	0.44	1.11	4.9	30.5	84.3	9.8	53.78
BRS 336	3616	1482	0.41	1.16	4.4	29.0	84.8	9.0	54.60
BRS 293	3393	1459	0.43	1.12	5.3	31.6	85.6	8.2	52.30
BX 1739GLT	3190	1451	0.46	1.19	4.8	30.9	84.4	6.8	54.81
AMX 1601 B2XF	3088	1436	0.46	1.16	5.3	32.3	85.2	8.1	52.33
MON 16R229 B2XF	3039	1388	0.46	1.05	5.3	27.7	82.7	8.1	47.39
Overall Mean	3748	1694	0.45	1.14	4.8	29.6	84.6	8.6	53.64
LSD(0.05)	383	180	0.01	0.03	0.2	1.4	1.3	1.1	1.61
C.V. (%)	7.1	7.4	1.3	1.7	3.5	3.4	1.1	9.2	2.1

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

Appendix 1. Dates of agronomically important events for all cotton variety trials and locations in Mississippi during 2016.

Event	Location and soil texture†									
	Brooksville Brooksville SC	Clarksdale Dubbs VFSL	Itta Bena Tensas SCL	Omega Dundee SL	Senatobia Falaya SL	Sidon Dundee L	Starkville Marietta FSL	Stoneville Bosket VFSL	Tunica Keyespoint SC	Verona Leeper SL
	-Month/day-									
Planting Date	5/12	5/6	5/11	5/16	5/9	5/13		5/17	5/9	5/18
Irrigation	N/A	N/A			N/A		N/A	6/27; 7/20	N/A	N/A
Nitrogen application					5/1			6/22	3/23; 5/7; 5/26	6/15
Pre Herbicide		5/8	5/11		5/9			5/17	5/9	5/18
Early Post Herbicide					N/A			6/17; 6/21	6/7	6/13
Layby Herbicide					N/A			7/14	6/22	7/7
Early Insecticide					6/20			5/26; 6/9	5/23	7/5; 7/11
Mid Insecticide			7/2; 7/7; 7/13	7/2; 7/7; 7/13	7/14; 7/25;	7/2; 7/7; 7/13		6/22; 7/8; 7/13	6/14; 7/13	7/25
Late Insecticide			7/21; 8/5	7/21; 8/5	8/4	7/21; 8/5		7/20; 8/1; 8/9	7/15; 8/10	N/A
PGR	N/A				6/20; 7/14; 8/4	7/2		8/1; 8/9	N/A	8/22
Harvest Aid								9/30; 10/5	9/13; 9/19	9/12; 9/19
Harvest	10/24	10/13	10/6	10/11	10/20	10/28		10/17	9/29	9/27

† FSL = Fine sandy loam, VFSL = Very-fine sandy loam, SCL = Silty clay loam, SL = Silt loam, SCL=Silty clay loam, L = Loam