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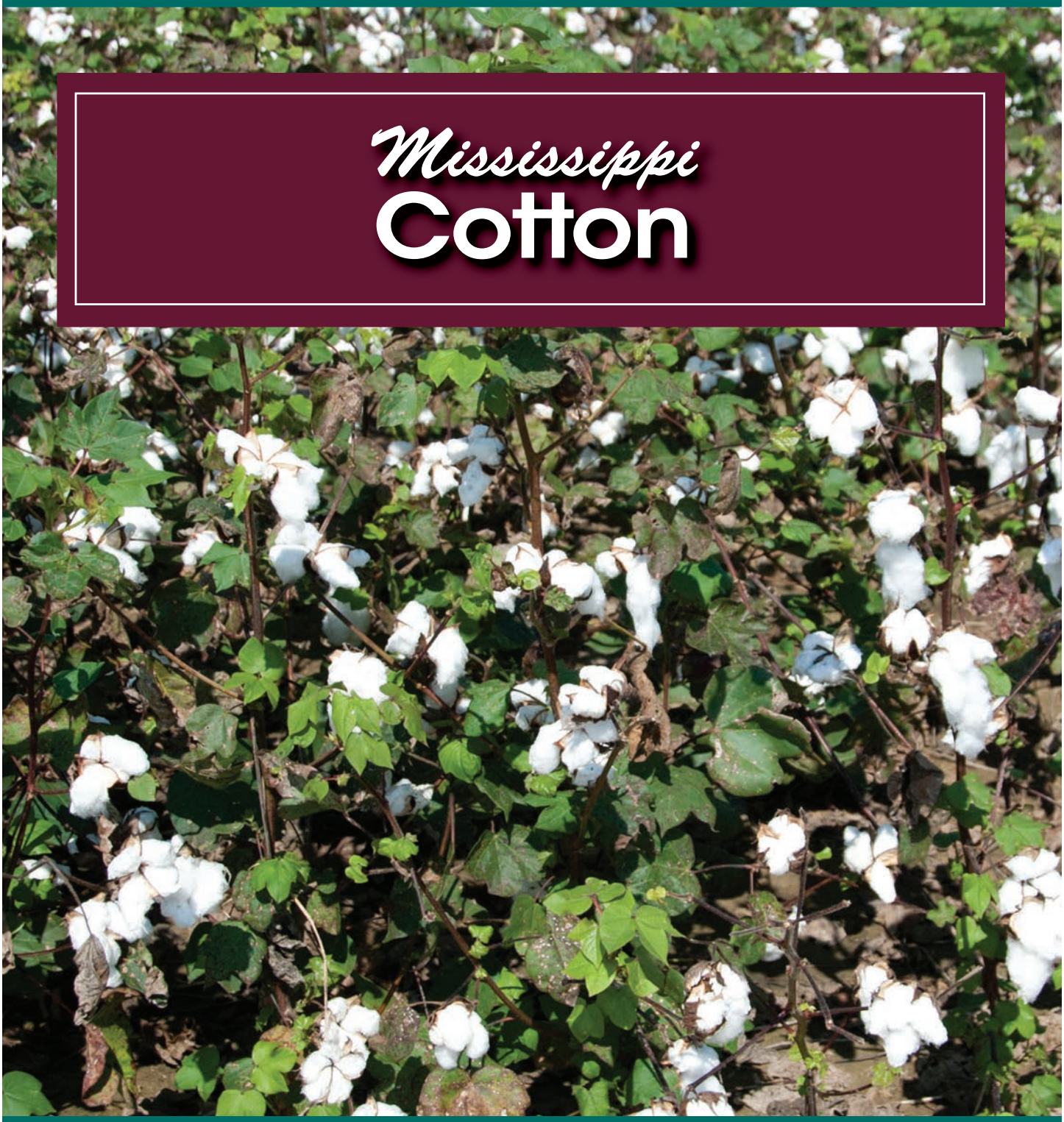
Mississippi Cotton



VARIETY TRIALS, 2015

Mississippi's Official Variety Trials

MAFES

Mississippi Agricultural & Forestry Experiment Station • George M. Hopper, Director

Mississippi State University • Mark E. Keenum, President • Gregory A Bohach, Vice President

NOTICE TO USER

This Mississippi Agricultural and Forestry Experiment Station information bulletin is a summary of research conducted under project number 171790 at the Delta Research and Extension Center in Stoneville, Mississippi, and several other locations in the state. It is intended for the use of colleagues, cooperators, and sponsors.

The interpretation of data presented herein may change after additional experimentation. Information included herein is not to be construed either as a recommendation for use or as an endorsement of a specific product by Mississippi State University or the Mississippi Agricultural and Forestry Experiment Station.

Trade names of commercial products used in this report are included only for clarity and understanding. All available names (trade names, chemical names, experimental product code names or numbers, etc.) of products used in this research project are listed in the tables contained in this report.

Mississippi Cotton Variety Trials, 2015

MAFES Official Variety Trial Contributors

Darrin M. Dodds
Associate Extension/Research Professor
State Cotton Specialist
Cotton Variety Trial Coordinator
Department of Plant and Soil Sciences
Mississippi State University

Normie W. Buehring
Research Professor/Superintendent
Northeast Mississippi Branch Experiment Station
Verona, Mississippi

Larry Falconer
Extension Professor
Delta Research and Extension Center
Stoneville, Mississippi

Bobby R. Golden
Assistant Research Professor
Delta Research and Extension Center
Stoneville, Mississippi

Mark W. Shankle
Research Professor
North Mississippi Research and Extension Center
Pontotoc, Mississippi

Ted P. Wallace
Associate Professor
Department of Plant and Soil Sciences
Mississippi State University

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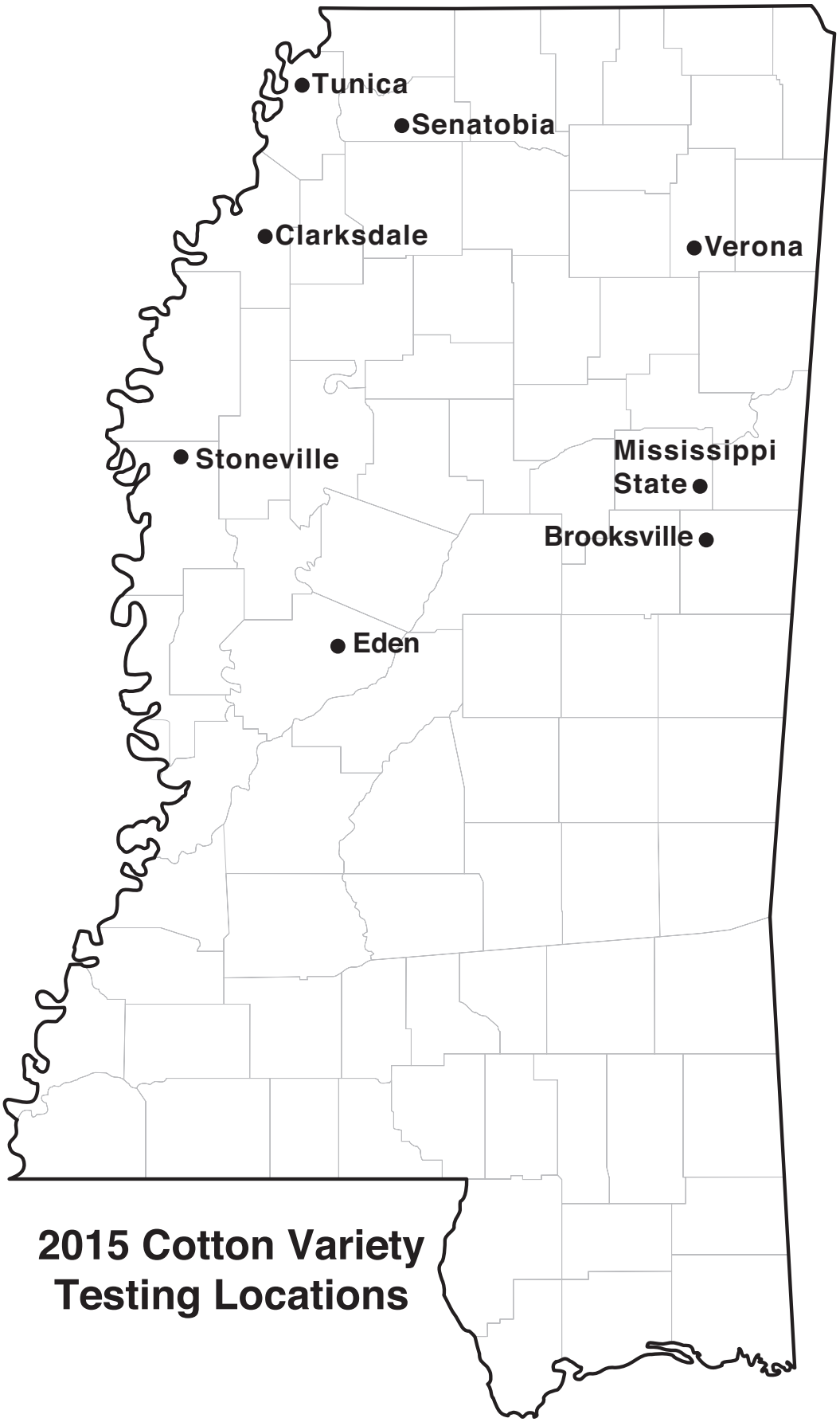
Find variety trial information online at ***mafes.msstate.edu/variety-trials***.

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 information bulletin is a summary of research conducted at numerous on- and off-station locations throughout Mississippi. 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 Experiment Station. Trade names of commercial products used in this report are included only to provide greater clarity to the information presented.



2015 Cotton Variety Testing Locations

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Mississippi Cotton Variety Trials, 2015

INTRODUCTION

Annually, Mississippi State researchers evaluate cotton varieties at numerous locations within the cotton-growing regions of the state. The purpose of the Mississippi State Official Variety Trials (OVT) 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 bases of operation.

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

TESTING PROCEDURES

All varieties submitted for testing were grown utilizing conventional chemical control for insect and weed pests. Each test plot consisted of two rows of cotton 35 to 40 feet in length with a row spacing of 38 or 40 inches. Each trial location was analyzed statistically as a randomized complete block with four blocks or replications.

Input management for trials was determined by cooperators at each location based on soil texture, soil test value, and scouting for pest pressures. However, seeding rate and physical seeding was 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, were based upon a handpicked 25-boll sample from each replicated plot at each location. The samples from all locations were ginned on the same 10-saw Continental laboratory gin to determine gin turnout. Using the same gin for all samples is important because it prevents bias in fiber quality analysis across locations. The Fiber and Biopolymer Research Institute at Texas Tech University in Lubbock, Texas, conducted high-volume instrumentation analyses for fiber property determinations.

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

The commercial varieties utilized as standard checks for comparison in 2015 were Delta and Pine 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 Midsouth growing region.

INTERPRETING THE DATA

Field variability is inherent in 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 variety's genetic potential cultivated under uniform conditions. However, strip-trial research may provide more 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 Fisher's Protected Least Significant Difference (LSD) at a 5% level of significance. The LSD associated with the 5% level gives us 95% 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.

Varieties listed in bold may have slightly different numerical yields, but they will perform very similarly at a given location. Statistical analysis is not conducted for across-location averages. Each producer should review data tables for the geographically closest location that is representative of his or her operation. Producers 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, if not the most important, management decision a producer must make during the growing season. Improper variety selection generally cannot be overcome with management. Starting with the greatest genetic potential will generally result in the highest yield if all other factors are equal. Careful consideration should go into selecting varieties that are well adapted to Midsouth 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 variety gives the producer multiple options to choose from with respect to herbicide and insecticide traits. Following is a synopsis of the transgenic traits that were represented in this year's trials.

Glyphosate tolerance — This trait is generally indicated on the seed bag with the designations "G," "RF," or "XF." These varieties 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 also tolerant to Liberty and dicamba.

Glufosinate tolerance — This trait is generally indicated on the seed bag with an "LL." These varieties can withstand over-the-top applications of Liberty. XtendFlex (XF) varieties are also tolerant to Liberty and dicamba. It is important to note that producers who use 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 2016*, available online at ***http://msucares.com/pubs/publications/p1532.pdf***.

Bollgard 2 — Varieties with the designation "B2" on the seed bag or in the brand name contain genes that produce proteins 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 ***http://msucares.com/pubs/publications/p2471.pdf***.

WideStrike — Phytogen varieties with the designations "W" or "W3" on the bag or in the variety name 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.

TwinLink — Bayer varieties with the designation "T" on the bag or in the variety name 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.

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 should be the primary factor when attempting to select a variety, but do not discount fiber quality as a close second. 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 current 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 2015, 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 Midsouth is short on its own. The recent trend in cotton varieties submitted for testing to university OVTs across the Midsouth has declined over the last 10 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 Midsouth university OVTs.

ACKNOWLEDGEMENTS

The authors would like to express their appreciation first and foremost to the four producers who participated in on-farm variety trials. These locations expand the trials into various areas of the state to better represent environmental, soil textural, and management differences present throughout Mississippi. Thank you to Cliff Heaton (Clarksdale), Phil Nichols and George Cunningham (Eden), and George Perry (Senatobia and Tunica); your hard work and willingness to participate in the variety trials are deeply valued. We at the Mississippi Agricultural and Forestry Experiment Station look forward to working with you and other willing producers in the future.

We also thank Chase Samples and Chase King of the agronomy program in the Mississippi State University Department of Plant and Soil Sciences for their assistance with all aspects of the trials. Without their diligent work and assistance, the trials would not be a success. We also recognize Tandon Baker, Michael Davis, Drew Denton, Savana Davis, Lucas Franca, Steven Hall, Bradley Norris, and Michael Plumblee for their assistance with hand-harvesting, ginning, and preparing fiber-quality samples. Their work allows us to provide data in a timely fashion.

Table 1. Varieties submitted for testing by participating industry partners in 2015.

Industry contact	Variety trial entries	
Americot Inc. – NexGen Varieties		
Tom Brooks	NG 3405 B2XF	NG 5007 B2XF
	NG 3406 B2XF	
Bayer Crop Science		
Andy White	ST 4747GLB2	ST 6182GLT
	ST 4848GLT	ST 6448GLB2
	ST 4946GLB2 (Std)[1]	BX 1531GLT
	ST 4949GLT	BX 1532GLT
	ST 5032GLT	BX 1634GLT
	ST 5115GLT	BX 1638GLT
Crop Production Services/Dyna-Gro Seed		
Scott Cummings	DG 2285 B2RF	DG CT15426 B2RF
	DG 3385 B2XF	DG CT15557 B2RF
	DG CT14515 B2RF	
International Seed Technology		
Carmen Carvajal	BRS-286	BRS-335
	BRS-293	
Monsanto		
Dave Albers	DP 1321 B2RF (Std)[1]	DP 1558NR B2RF
	DP 1518 B2XF	DP 1612 B2XF
	DP 1522 B2XF	DP 1614 B2XF
	DP 1538 B2XF	DP 1639 B2XF
	DP 1553 B2XF	DP 1646 B2XF
	DP 1555 B2RF	MON 15R513 B2XF
PhytoGen Seed Co.		
Brooks Blanche	PHY 222 WRF	PHY 487 WRF
	PHY 312 WRF	PHY 495 W3RF
	PHY 333 WRF	PHY 496 W3RF
	PHY 339 WRF	PHY 499 WRF (Std)[1]
	PHY 427 WRF	PHY 552 WRF
	PHY 444 WRF	
Seed Source Genetics		
Ed Jungmann	SSG CT 210	SSG UA 222
Winnfield Solutions LLC		
Robert Cossar	CG 3885 B2XF	

[1]"Std" designates a standard entry used for check purposes.

Table 2. One-year mean yield performance and fiber characteristics for OVT varieties submitted for testing in 2015 averaged across all testing locations.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	Loan value
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*¢/lb*
PHY 444 WRF	4355	**1612**	0.43	1.26	4.4	31.6	84.9	6.83	5.10	54.52
DP 1555 B2RF	4124	**1592**	0.44	1.20	4.8	32.6	83.9	7.31	4.93	53.96
PHY 333 WRF	4233	**1565**	0.43	1.18	4.8	30.6	84.0	7.09	5.12	53.50
PHY 312 WRF	4292	**1560**	0.42	1.19	4.7	31.7	84.7	7.49	4.83	53.88
ST 4949GLT	3949	**1552**	0.45	1.14	5.0	30.4	83.6	7.46	5.27	52.52
PHY 552 WRF	4182	**1540**	0.42	1.17	4.6	32.0	84.1	7.33	4.46	54.20
ST 6182GLT	3924	**1531**	0.45	1.16	4.9	30.1	83.8	7.24	5.04	53.21
PHY 496 W3RF	4143	**1531**	0.43	1.14	5.0	31.6	83.6	8.03	4.92	52.36
DP 1522 B2XF	4157	**1510**	0.42	1.15	5.0	31.4	83.6	8.83	4.78	52.46
DP 1646 B2XF	4074	**1510**	0.43	1.26	4.7	30.4	84.2	7.72	4.57	54.21
DP 1538 B2XF	3731	**1504**	0.43	1.11	4.8	29.6	82.9	8.13	4.88	52.71
PHY 499 WRF	3994	**1503**	0.43	1.15	5.0	32.8	84.1	8.29	4.98	52.59
NG 3406 B2XF	4097	**1489**	0.42	1.15	4.8	30.7	83.9	8.36	5.04	53.16
DP 1321 B2RF	4107	**1489**	0.42	1.16	5.0	32.0	83.9	8.73	4.92	52.44
PHY 487 WRF	4201	**1489**	0.41	1.12	4.9	30.4	82.8	8.03	4.85	52.40
NG 3405 B2XF	4091	**1487**	0.42	1.11	4.8	28.1	82.7	7.36	5.12	52.66
DG CT 15557 B2RF	3914	**1484**	0.44	1.16	4.9	30.6	83.7	7.93	4.91	53.07
DP 1518 B2XF	4245	**1484**	0.40	1.17	4.5	29.6	83.4	6.98	4.67	53.85
BX 1531GLT	3683	**1478**	0.45	1.15	5.0	30.5	83.7	7.28	5.05	52.52
DP 1558NR B2RF	3900	**1472**	0.42	1.20	4.9	33.1	84.3	7.47	5.47	53.09
DG 2285 B2RF	4016	**1464**	0.41	1.17	4.7	30.7	84.2	8.09	5.05	53.83
PHY 495 W3RF	3891	**1460**	0.43	1.12	4.7	33.4	84.0	8.30	4.83	53.75
MON 1639 B2XF	3846	**1458**	0.44	1.16	5.1	32.9	84.1	8.07	4.48	52.27
PHY 339 WRF	4096	**1453**	0.41	1.17	4.7	31.6	83.7	7.67	4.87	54.02
BX 1638GLT	3991	**1451**	0.42	1.22	4.7	32.5	83.6	7.12	5.00	53.75
DP 1553 B2XF	3923	**1448**	0.42	1.19	4.6	30.8	83.8	8.06	4.91	54.25
DG CT 15426 B2RF	3776	**1445**	0.44	1.14	4.8	30.4	84.0	8.79	5.20	53.16
CG 3885 B2XF	3808	1442	0.43	1.15	4.8	30.5	83.5	8.15	4.94	53.52
BX 1634GLT	4011	1437	0.41	1.18	5.1	31.5	84.4	6.21	5.18	52.26
ST 4848GLT	3830	1434	0.43	1.16	5.1	31.2	83.7	7.22	4.98	52.57
ST 4747GLB2	4087	1431	0.40	1.20	4.8	29.5	82.7	5.86	4.95	53.50
DP 1612 B2XF	4057	1431	0.40	1.19	4.7	32.4	83.9	8.30	4.88	54.01
ST 4946GLB2	4061	1428	0.41	1.15	5.1	32.3	83.9	7.74	5.62	52.71
NG 5007 B2XF	3939	1426	0.42	1.16	4.6	29.2	82.9	7.87	4.70	53.91
DG 3385 B2XF	3910	1421	0.42	1.16	4.9	30.4	84.5	8.30	4.79	52.83
ST 5115GLT	3986	1408	0.41	1.15	4.7	31.9	83.0	7.47	5.55	53.02
SSG UA 222	4090	1404	0.40	1.23	4.9	31.9	84.4	8.23	5.13	53.38
BX 1532GLT	3560	1393	0.45	1.16	4.8	30.1	83.8	7.08	4.75	53.33
PHY 427 WRF	3980	1380	0.40	1.15	4.7	31.6	83.6	8.26	4.59	53.69
DP 1614 B2XF	3680	1376	0.43	1.20	5.0	31.2	84.1	8.23	4.34	52.72
PHY 222 WRF	3848	1361	0.41	1.15	5.1	31.3	84.3	8.35	5.01	51.96
ST 6448GLB2	3943	1354	0.40	1.22	4.8	29.4	83.1	6.15	4.77	53.55
ST 5032GLT	3909	1348	0.40	1.20	4.7	32.2	83.9	7.64	5.23	53.93
MON 15R513 B2XF	3641	1329	0.41	1.19	4.9	31.0	84.3	7.83	4.87	52.74
DG CT 14515 B2RF	3604	1265	0.41	1.20	4.9	32.7	83.9	7.65	5.41	53.19
SSG CT 210	3705	1227	0.38	1.14	5.1	32.3	83.2	7.27	5.18	51.84
BRS 293	3579	1195	0.38	1.16	5.1	33.7	83.7	7.79	5.43	52.40
BRS 335	3483	1119	0.37	1.20	5.0	32.9	83.4	6.00	5.12	53.16
BRS 286	3115	1053	0.39	1.14	4.9	32.5	83.4	7.00	4.94	52.72
Overall Mean	**3934**	**1433**	**0.42**	**1.17**	**4.9**	**31.3**	**83.8**	**7.65**	**4.97**	**53.17**
LSD (0.05)	**487**	**168**	**0.01**	**0.02**	**0.2**	**0.7**	**0.5**	**0.24**	**0.25**	**0.85**
C.V. (%)	**25**	**24**	**4.10**	**3.85**	**8.0**	**4.2**	**1.3**	**6.35**	**10.24**	**3.23**

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

Table 3. Two-year mean lint yield performance of varieties cultivated at three locations in the Delta region during 2014 and 2015.[1]

Variety	Clarksdale		Stoneville		Tunica		Average across location and yr.
	2014	2015	2014	2015	2014	2015	
	lb/A	*lb/A*	*lb/A*	*lb/A*	*lb/A*	*lb/A*	*lb/A*
PHY 552 WRF	2342	2097	2749	2094	1025	1268	1929
PHY 312 WRF	1948	1869	2745	1968	1350	1481	1894
PHY 496 W3RF	2213	1671	2564	1997	1008	1536	1832
PHY 444 WRF	2098	1929	2835	1786	853	1408	1818
BX 1531GLT	2336	1861	2680	1680	751	1563	1812
DP 1321 B2RF	2039	1773	2818	2063	1049	1124	1811
PHY 333 WRF	2120	1723	2724	1976	1212	1030	1798
PHY 427 WRF	1936	1779	2768	1783	1150	1335	1792
PHY 487 WRF	1951	1687	2654	1797	1057	1577	1787
DG 2285 B2RF	1876	1669	2881	1759	990	1468	1774
PHY 499 WRF	2416	1768	2547	1750	830	1227	1756
PHY 495 W3RF	2204	1636	2687	1910	701	1191	1722
ST 4946GLB2	1755	1646	2807	1419	1376	1253	1709
SSG UA 222	1819	1855	2685	1739	1037	1104	1707
BX 1532GLT	1961	1774	2582	1736	923	1165	1690
ST 5115GLT	1782	1609	2653	1765	1015	1179	1667
ST 6182GLT	1857	1807	2639	1826	529	1325	1664
ST 4747GLB2	1960	1626	2541	1777	823	1208	1656
ST 5032GLT	1841	1658	2576	1604	988	1170	1640
PHY 339 WRF	1883	1586	2473	1657	886	1350	1639
DG CT14515 B2RF	2146	1403	2322	1476	619	1192	1526
ST 6448GLB2	1510	1549	2426	1326	916	1340	1511
SSG CT 210	1676	1495	2335	1432	565	1372	1479
BRS 335	1739	1486	2309	1287	594	1033	1408
BRS 293	1679	1614	1986	1470	646	1019	1402

[1]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 lint yield performance of varieties cultivated at four locations in the Hill region during 2014 and 2015.[1]

Variety	Brooksville		Senatobia		Starkville		Verona		Avg. across location and yr.
	2014	2015	2014	2015	2014	2015	2014	2015	
	lb/A	*lb/A*	*lb/A*	*lb/A*	*lb/A*	*lb/A*	*lb/A*	*lb/A*	*lb/A*
PHY 444 WRF	1213	1565	1731	1818	1891	1332	1448	1908	1613
PHY 499 WRF	875	1340	1768	1908	1627	1232	1666	1742	1520
PHY 339 WRF	972	1262	1713	1696	1876	1435	1615	1568	1517
PHY 333 WRF	727	1489	1751	1791	1576	1281	1730	1677	1503
PHY 312 WRF	871	1202	1757	1696	1722	1174	1739	1740	1488
PHY 496 W3RF	750	1143	1791	1730	1629	1445	1731	1555	1472
ST 6182GLT	855	1275		1795	1630	1345	1529	1830	1466
ST 4946GLB2	991	1212	1441	1825	1576	1204	1527	1611	1423
PHY 552 WRF	873	1346	1825	1654	1388	1190	1398	1690	1421
BX 1531GLT	1164	1104	1268	1517	1538	1263	1704	1730	1411
ST 4747GLB2	1053	1150	1695	1621	1372	1196	1411	1735	1404
PHY 495 W3RF	1032	1418	1210	1661	1438	1154	1738	1564	1402
ST 6448GLB2	979	1219	1276	1599	1591	1406	1469	1535	1384
SSG UA 222	743	1090	1911	1326	1685	1236		1680	1382
ST 5115GLT	798	1302	1796	1678	1443	994	1365	1605	1373
DP 1321 B2RF	858	1053	1316	1685	1429	1199	1750	1661	1369
PHY 487 WRF	550	1301	1720	1691	1527	1113	1381	1651	1367
DG 2285 B2RF	841	826	1440	1581	1631	1263	1721	1511	1352
ST 5032GLT	881	1131	1370	1618	1295	879	1734	1590	1312
PHY 427 WRF	510	817	1768	1583	1449	1080	1336	1635	1272
BX 1532GLT	664	1125		1333	1340	1023	1551	1784	1260
DG CT14515 B2RF	1007	1509	1219	1248	1339	1004	1141	1580	1256
BRS 286	589	1085	1481	874	1487	1113		1283	1130
BRS 293	520	1139	998	1091	1378	981		1652	1108
SSG CT 210	714	1138	1484	113	1624	1065		1507	1092
BRS 335	615	1077		894	1375	1146		1349	1076

[1]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 four locations in the Delta region, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	Loan value
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*¢/lb*
PHY 312 WRF	4630	**1667**	0.41	1.19	4.8	31.7	84.7	7.33	4.78	53.86
PHY 552 WRF	4413	**1610**	0.42	1.19	4.6	31.8	84.3	7.17	4.35	54.37
DP 1522 B2XF	4479	**1600**	0.42	1.16	5.1	31.5	83.9	8.94	4.80	52.47
PHY 496 W3RF	4394	**1594**	0.42	1.14	5.0	31.5	83.8	7.89	4.85	52.43
DP 1321 B2RF	4455	**1578**	0.41	1.16	5.0	32.1	83.9	8.71	4.93	52.40
PHY 333 WRF	4344	**1570**	0.42	1.19	4.8	30.7	84.2	7.01	4.98	53.60
PHY 444 WRF	4362	**1569**	0.42	1.26	4.4	31.4	84.9	6.83	4.96	54.75
DG 2285 B2RF	4424	**1569**	0.40	1.18	4.8	30.6	84.3	8.24	5.03	53.98
BX 1531GLT	4113	**1557**	0.44	1.16	5.0	30.6	83.9	7.14	4.93	52.23
ST 4949GLT	4087	**1547**	0.44	1.15	5.1	30.3	83.4	7.30	5.15	52.30
PHY 487 WRF	4366	**1542**	0.41	1.11	5.1	30.3	82.7	8.09	4.77	51.41
DP 1518 B2XF	4548	**1541**	0.40	1.18	4.6	30.0	83.5	6.89	4.61	53.99
DP 1555 B2RF	4163	**1538**	0.43	1.19	4.8	32.5	83.4	7.35	4.98	53.63
NG 3405 B2XF	4302	**1536**	0.42	1.11	4.8	28.0	82.6	7.27	4.97	52.46
DG 3385 B2XF	4332	**1533**	0.41	1.16	5.0	30.5	84.4	8.42	4.65	52.66
ST 4848GLT	4119	**1522**	0.43	1.16	5.1	31.2	83.6	7.03	4.96	52.57
DP 1646 B2XF	4211	**1512**	0.42	1.27	4.7	30.7	84.1	7.71	4.59	54.40
ST 6182GLT	3956	**1502**	0.44	1.15	4.8	30.1	83.9	7.19	5.11	53.01
NG 3406 B2XF	4263	**1493**	0.41	1.16	4.8	30.9	84.0	8.45	4.97	53.74
PHY 427 WRF	4372	**1482**	0.39	1.16	4.8	31.6	83.9	8.29	4.51	53.48
BX 1532GLT	3882	**1475**	0.44	1.16	4.8	30.3	83.8	6.98	4.85	53.31
SSG UA 222	4419	**1475**	0.39	1.25	4.9	32.2	84.7	8.16	5.18	53.52
DP 1612 B2XF	4216	**1473**	0.40	1.20	4.8	32.6	83.9	8.40	4.92	53.91
PHY 495 W3RF	4001	**1471**	0.43	1.12	4.8	33.4	83.8	8.20	4.70	53.60
DP 1639 B2XF	3958	**1468**	0.43	1.15	5.0	33.1	83.9	8.34	4.44	52.18
DP 1614 B2XF	3999	**1466**	0.43	1.19	5.1	30.8	84.1	8.28	4.32	52.35
NG 5007 B2XF	4131	**1460**	0.41	1.16	4.6	29.3	82.7	7.99	4.71	53.77
DP 1558NR B2RF	3977	**1451**	0.42	1.19	5.0	33.1	83.9	7.49	5.44	52.49
PHY 499 WRF	3955	**1450**	0.43	1.15	5.0	33.0	84.2	8.31	4.85	52.71
DP 1538 B2XF	3963	**1449**	0.43	1.11	4.8	29.9	83.0	8.19	4.69	52.65
CG 3885 B2XF	3811	**1440**	0.42	1.15	4.8	30.8	83.4	8.19	4.96	53.32
ST 4747GLB2	4218	**1438**	0.40	1.21	4.9	29.7	83.2	5.73	4.97	53.47
BX 1634GLT	4039	**1429**	0.41	1.19	5.2	31.7	84.8	5.88	5.02	51.90
PHY 222 WRF	4148	**1424**	0.40	1.16	5.1	31.4	84.2	8.38	4.81	52.15
ST 5115GLT	4092	**1421**	0.40	1.16	4.8	32.3	83.4	7.38	5.42	53.21
DG CT 15426 B2RF	3755	**1419**	0.44	1.15	4.8	30.5	84.3	8.91	5.00	52.89
PHY 339 WRF	4062	**1417**	0.41	1.18	4.8	31.4	83.8	7.59	4.69	54.09
BX 1638GLT	3986	**1414**	0.41	1.22	4.8	32.6	83.5	7.04	4.93	53.63
DG CT 15557 B2RF	3811	1401	0.43	1.16	4.9	31.4	84.0	8.07	4.87	52.99
ST 4946GLB2	4035	1393	0.40	1.16	5.1	32.4	84.2	7.74	5.53	52.78
ST 5032GLT	4120	1391	0.39	1.21	4.7	32.5	84.2	7.60	5.06	54.20
DP 1553 B2XF	3730	1332	0.41	1.19	4.6	30.9	83.5	8.15	4.93	54.47
MON 15R513 B2X	3629	1274	0.41	1.19	4.9	31.4	84.5	7.81	4.83	52.75
ST 6448GLB2	3815	1263	0.39	1.21	4.8	29.5	83.0	6.11	4.64	53.72
SSG CT 210	3887	1248	0.37	1.15	5.2	32.4	83.2	7.25	5.29	51.50
DG CT 14515 B2RF	3609	1221	0.40	1.19	4.9	32.4	83.6	7.71	5.05	52.97
BRS 293	3704	1211	0.38	1.16	5.2	33.3	83.7	7.69	5.35	51.88
BRS 335	3574	1123	0.37	1.21	4.9	32.8	83.7	5.87	4.89	53.61
BRS 286	3054	1017	0.38	1.15	4.8	32.3	83.5	6.94	4.64	52.78
Overall Mean	**4081**	**1449**	**0.41**	**1.17**	**4.9**	**31.4**	**83.8**	**7.63**	**4.89**	**53.11**
LSD (0.05)	**768**	**258**	**0.01**	**0.04**	**0.2**	**1.0**	**0.8**	**0.27**	**0.34**	**1.20**
C.V. (%)	**27**	**25**	**4.42**	**4.55**	**6.6**	**4.5**	**1.4**	**4.97**	**9.89**	**3.22**

[1]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 four locations in the Hill region, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	Loan value
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*¢/lb*
PHY 444 WRF	4347	**1655**	0.44	1.26	4.5	31.7	84.9	6.82	5.24	54.29
DP 1555 B2RF	4087	**1642**	0.44	1.20	4.8	32.7	84.3	7.27	4.88	54.26
DP 1538 B2XF	3499	**1567**	0.44	1.11	4.8	29.3	82.8	8.08	5.08	52.77
DP 1553 B2XF	4116	**1564**	0.44	1.20	4.7	30.7	84.0	7.96	4.90	54.03
DG CT 15557 B2RF	4011	**1561**	0.45	1.15	4.9	29.9	83.4	7.79	4.95	53.14
ST 6182GLT	3893	**1561**	0.46	1.17	4.9	30.1	83.6	7.29	4.97	53.41
PHY 333 WRF	4122	**1560**	0.43	1.18	4.8	30.5	83.9	7.18	5.25	53.40
ST 4949GLT	3812	**1557**	0.45	1.13	5.0	30.6	83.7	7.61	5.38	52.74
PHY 499 WRF	4033	**1556**	0.44	1.14	5.0	32.5	84.1	8.27	5.11	52.48
DP 1646 B2XF	3937	**1508**	0.44	1.25	4.7	30.1	84.2	7.73	4.54	54.01
DP 1558NR B2RF	3827	**1491**	0.43	1.21	4.9	33.0	84.7	7.46	5.50	53.64
PHY 339 WRF	4130	**1490**	0.41	1.17	4.6	31.8	83.7	7.76	5.04	53.96
BX 1638GLT	3996	**1488**	0.43	1.21	4.7	32.4	83.7	7.19	5.08	53.88
NG 3406 B2XF	3932	**1486**	0.43	1.13	4.8	30.4	83.7	8.26	5.12	52.57
DG CT 15426 B2RF	3799	**1473**	0.44	1.14	4.8	30.3	83.6	8.67	5.42	53.45
PHY 552 WRF	3951	**1470**	0.43	1.16	4.7	32.1	84.0	7.49	4.56	54.03
PHY 496 W3RF	3892	**1468**	0.43	1.13	5.0	31.7	83.5	8.17	4.99	52.29
ST 4946GLB2	4087	**1463**	0.41	1.14	5.0	32.3	83.7	7.73	5.71	52.64
PHY 312 WRF	3955	**1453**	0.42	1.18	4.6	31.7	84.7	7.64	4.89	53.89
PHY 495 W3RF	3782	**1449**	0.44	1.12	4.7	33.3	84.2	8.40	4.96	53.90
DP 1639 B2XF	3734	**1449**	0.45	1.16	5.1	32.8	84.3	7.80	4.53	52.36
BX 1634GLT	3982	**1444**	0.42	1.17	5.0	31.3	84.1	6.54	5.35	52.63
CG 3885 B2XF	3806	**1444**	0.43	1.15	4.8	30.2	83.6	8.13	4.91	53.71
ST 6448GLB2	4062	1440	0.41	1.22	4.8	29.4	83.2	6.19	4.90	53.39
PHY 487 WRF	4046	1439	0.41	1.13	4.8	30.6	82.9	7.97	4.93	53.33
NG 3405 B2XF	3880	1438	0.43	1.11	4.7	28.3	82.8	7.47	5.28	52.88
DP 1518 B2XF	3961	1429	0.41	1.16	4.5	29.3	83.2	7.07	4.74	53.71
ST 4747GLB2	3964	1425	0.41	1.20	4.7	29.3	82.4	5.99	4.94	53.53
DP 1522 B2XF	3836	1421	0.42	1.14	5.0	31.2	83.3	8.72	4.77	52.45
BX 1531GLT	3281	1403	0.45	1.15	5.0	30.5	83.6	7.42	5.17	52.79
DP 1321 B2RF	3758	1399	0.43	1.15	5.0	31.9	83.9	8.76	4.91	52.49
ST 5115GLT	3879	1394	0.41	1.14	4.6	31.6	82.5	7.56	5.68	52.83
NG 5007 B2XF	3748	1393	0.43	1.16	4.5	29.0	83.1	7.74	4.69	54.04
DP 1612 B2XF	3897	1389	0.41	1.17	4.6	32.2	83.8	8.21	4.85	54.12
MON 15R513 B2XF	3652	1385	0.42	1.18	4.9	30.7	84.1	7.84	4.91	52.73
DG 3385 B2XF	3514	1375	0.43	1.16	4.8	30.4	84.5	8.18	4.93	52.98
DG 2285 B2RF	3607	1353	0.41	1.17	4.6	30.8	84.2	7.93	5.08	53.68
ST 4848GLT	3542	1346	0.43	1.15	5.0	31.2	83.7	7.42	4.99	52.57
SSG UA 222	3761	1333	0.41	1.21	4.9	31.7	84.0	8.30	5.08	53.25
BX 1532GLT	3257	1316	0.46	1.17	4.8	29.9	83.8	7.18	4.66	53.35
DG CT 14515 B2RF	3599	1307	0.41	1.20	4.9	33.0	84.2	7.58	5.75	53.39
ST 5032GLT	3698	1305	0.40	1.19	4.6	31.8	83.6	7.68	5.41	53.66
PHY 222 WRF	3547	1298	0.42	1.14	5.2	31.1	84.4	8.32	5.21	51.78
DP 1614 B2XF	3361	1286	0.44	1.20	5.0	31.6	84.0	8.19	4.36	53.08
PHY 427 WRF	3588	1279	0.41	1.14	4.7	31.6	83.4	8.24	4.67	53.90
SSG CT 210	3523	1206	0.39	1.13	5.1	32.2	83.1	7.29	5.08	52.17
BRS 293	3454	1179	0.39	1.17	5.0	34.2	83.7	7.90	5.50	52.91
BRS 335	3398	1116	0.37	1.19	5.1	32.9	83.2	6.12	5.33	52.74
BRS 286	3176	1089	0.39	1.14	4.9	32.7	83.3	7.06	5.24	52.67
Overall Mean	**3790**	**1419**	**0.42**	**1.17**	**4.8**	**31.2**	**83.7**	**7.66**	**5.05**	**53.22**
LSD (0.05)	**580**	**211**	**0.01**	**0.02**	**0.3**	**0.9**	**0.7**	**0.39**	**0.36**	**1.20**
C.V. (%)	**22**	**21**	**3.11**	**2.98**	**9.2**	**3.9**	**1.2**	**7.25**	**10.19**	**3.23**

[1]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 nonirrigated Brooksville silty clay at the Black Belt Branch Experiment Station in Noxubee County, Mississippi, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
PHY 444 WRF	4041	**1565**	0.44	1.24	4.8	33.4	85.1	6.90	5.48	52.94
DP 1558NR B2RF	4004	**1520**	0.44	1.19	5.1	32.7	85.1	7.55	5.60	52.48
DG CT 14515 B2RF	4118	**1509**	0.42	1.18	5.0	32.9	83.8	7.40	5.88	52.45
DG CT 15557 B2RF	3809	**1507**	0.45	1.13	5.4	30.3	83.5	7.85	5.23	51.24
PHY 333 WRF	3771	**1489**	0.45	1.14	5.2	31.1	83.4	7.20	5.68	51.35
DP 1555 B2RF	3720	**1461**	0.45	1.18	5.0	33.5	84.4	7.30	5.05	52.80
DP 1553 B2XF	3720	**1451**	0.45	1.18	5.0	32.4	83.9	7.38	5.08	53.26
BX 1638GLT	3735	**1420**	0.44	1.19	5.2	32.5	83.0	7.20	5.30	51.96
PHY 495 W3RF	3654	**1418**	0.44	1.11	5.0	34.0	83.9	8.38	5.35	52.75
CG 3885 B2XF	3533	**1365**	0.44	1.13	5.1	31.4	83.6	8.43	5.15	52.49
PHY 552 WRF	3477	**1346**	0.44	1.12	5.0	33.2	83.6	7.73	4.50	52.44
PHY 499 WRF	3464	**1340**	0.44	1.14	5.3	33.5	84.1	8.65	5.20	52.03
DP 1639 B2XF	3326	**1319**	0.45	1.12	5.4	33.2	83.6	7.70	4.60	50.83
ST 5115GLT	3543	**1302**	0.42	1.10	5.1	31.5	81.2	7.58	5.65	50.93
PHY 487 WRF	3620	**1301**	0.41	1.12	4.9	30.4	82.8	8.23	5.15	52.79
DP 1518 B2XF	3548	**1299**	0.42	1.13	5.0	29.7	82.8	6.83	4.95	52.40
ST 6182GLT	3136	1275	0.47	1.13	5.2	30.8	83.0	7.23	5.25	52.03
DP 1646 B2XF	3301	1272	0.44	1.24	4.9	31.1	83.7	7.98	4.28	53.28
PHY 339 WRF	3430	1262	0.42	1.15	4.9	32.7	83.5	8.13	5.23	52.61
DP 1538 B2XF	2470	1237	0.45	1.09	5.2	29.7	82.0	8.25	5.13	50.58
ST 6448GLB2	3369	1219	0.41	1.19	5.1	29.3	83.0	6.00	5.13	52.39
ST 4946GLB2	3252	1212	0.43	1.08	5.5	32.5	82.7	8.28	6.23	49.64
PHY 312 WRF	3183	1202	0.43	1.15	5.1	32.6	84.8	7.40	4.88	52.46
NG 5007 B2XF	3070	1182	0.44	1.14	4.9	28.5	83.0	7.80	4.70	53.39
BX 1634GLT	3202	1173	0.42	1.12	5.4	30.9	83.6	6.35	5.60	51.28
NG 3405 B2XF	3060	1156	0.43	1.08	5.1	28.3	82.2	7.53	5.58	51.23
ST 4949GLT	2868	1151	0.46	1.08	5.7	31.4	83.5	8.13	5.85	50.14
ST 4747GLB2	3210	1150	0.41	1.17	5.0	30.0	81.8	5.83	4.65	51.96
PHY 496 W3RF	2976	1143	0.44	1.13	5.3	32.6	83.7	8.10	4.98	51.70
BRS 293	3385	1139	0.38	1.15	5.0	34.1	83.6	7.88	5.35	52.39
SSG CT 210	3223	1138	0.41	1.09	5.5	31.7	82.4	7.73	5.20	50.70
ST 5032GLT	3070	1131	0.42	1.15	5.0	31.7	83.2	7.70	5.85	51.66
BX 1532GLT	2725	1125	0.47	1.15	5.2	30.3	83.2	7.18	4.78	51.76
BX 1531GLT	2715	1104	0.47	1.12	5.3	31.3	83.3	7.05	4.93	51.79
SSG UA 222	2968	1090	0.42	1.15	5.2	32.2	83.5	8.60	5.28	51.38
DP 1614 B2XF	2831	1086	0.44	1.17	5.4	32.7	83.7	8.80	4.60	51.95
BRS 286	3098	1085	0.40	1.10	5.1	31.9	83.0	7.10	5.10	50.86
BRS 335	3218	1077	0.38	1.17	5.3	33.3	82.7	6.08	5.43	51.93
DP 1321 B2RF	2769	1053	0.44	1.12	5.4	31.8	83.2	9.23	5.10	50.70
DG CT 15426 B2RF	2662	1048	0.45	1.14	5.0	31.3	83.5	8.73	5.43	52.73
MON 15R513 B2XF	2770	1019	0.42	1.15	5.3	31.9	83.0	8.48	5.03	51.20
DP 1522 B2XF	2686	1008	0.43	1.11	5.3	32.3	82.4	9.20	4.98	51.68
NG 3406 B2XF	2553	981	0.44	1.08	5.1	31.0	83.0	8.38	5.28	50.89
ST 4848GLT	2502	971	0.44	1.14	5.3	31.3	83.0	7.43	4.85	50.48
DP 1612 B2XF	2710	964	0.41	1.13	4.6	32.4	82.9	8.48	4.53	53.90
PHY 222 WRF	2439	943	0.44	1.12	5.4	31.8	83.7	8.13	5.08	50.70
DG 3385 B2XF	2208	835	0.43	1.12	4.8	30.0	83.8	8.35	4.50	51.06
DG 2285 B2RF	2224	826	0.42	1.13	4.7	30.8	83.0	8.08	5.05	52.25
PHY 427 WRF	2252	817	0.42	1.12	4.8	32.0	82.7	8.73	4.85	52.78
Overall Mean	**3158**	**1198**	**0.43**	**1.14**	**5.1**	**31.7**	**83.3**	**7.76**	**5.15**	**51.84**
LSD (0.05)	**742**	**269**	**0.02**	**0.04**	**0.4**	**1.8**	**1.2**	**0.48**	**0.62**	**2.34**
C.V. (%)	**17**	**16**	**2.68**	**2.62**	**6.1**	**4.1**	**1.1**	**4.45**	**8.62**	**3.22**

[1]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 nonirrigated Dubbs very fine sandy loam on Cliff Heaton Farms in Coahoma County near Clarksdale, Mississippi, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
PHY 552 WRF	5443	**2097**	0.44	1.14	4.8	31.5	83.7	6.98	4.35	54.53
PHY 444 WRF	5130	**1929**	0.43	1.22	4.6	31.1	84.4	6.93	5.10	54.70
PHY 312 WRF	5038	1869	0.43	1.16	5.0	31.2	84.1	7.13	4.75	53.18
BX 1531GLT	4659	1861	0.46	1.12	5.4	29.7	83.1	7.18	5.10	50.15
SSG UA 222	5309	1855	0.40	1.20	5.2	32.1	84.2	8.05	5.45	51.74
NG 3405 B2XF	4834	1815	0.43	1.09	5.1	27.2	82.2	7.55	5.13	50.76
ST 6182GLT	4516	1807	0.46	1.12	5.1	28.4	83.2	6.95	5.18	52.19
PHY 427 WRF	4918	1779	0.41	1.12	5.1	30.4	83.5	8.15	4.53	52.14
BX 1532GLT	4472	1774	0.45	1.14	5.0	29.5	83.0	6.78	4.93	53.55
DP 1321 B2RF	4770	1773	0.43	1.14	5.3	31.7	83.8	8.30	4.88	51.50
PHY 499 WRF	4546	1768	0.45	1.11	5.1	32.4	84.0	8.75	4.95	51.73
DP 1646 B2XF	4684	1752	0.43	1.24	5.0	31.7	83.8	8.05	4.60	54.00
DP 1555 B2RF	4558	1737	0.44	1.16	4.9	31.4	82.8	7.30	4.78	53.18
PHY 333 WRF	4425	1723	0.45	1.12	5.2	29.7	83.0	6.68	5.18	51.14
DP 1538 B2XF	4477	1708	0.44	1.08	4.9	29.1	82.1	8.05	4.75	51.28
DP 1558NR B2RF	4600	1703	0.42	1.18	5.1	32.5	84.3	7.55	5.28	52.73
CG 3885 B2XF	4553	1697	0.43	1.15	5.1	31.7	83.4	8.30	5.05	52.55
BX 1638GLT	4459	1692	0.44	1.17	5.1	31.4	82.9	6.60	5.13	52.85
BX 1634GLT	4639	1692	0.42	1.13	5.4	30.7	83.4	5.78	4.98	50.55
DP 1553 B2XF	4521	1688	0.43	1.17	4.8	31.6	83.8	8.28	4.90	54.64
PHY 487 WRF	4595	1687	0.42	1.06	5.3	29.0	81.8	7.88	4.85	48.63
ST 4848GLT	4324	1684	0.45	1.12	5.6	30.5	83.1	6.88	4.93	50.10
DP 1612 B2XF	4743	1673	0.40	1.16	4.9	33.2	83.2	8.30	4.75	53.28
PHY 496 W3RF	4393	1671	0.44	1.10	5.2	30.5	83.5	8.00	4.88	50.65
DG 2285 B2RF	4575	1669	0.42	1.12	5.1	29.5	83.7	8.38	4.95	52.20
NG 5007 B2XF	4565	1667	0.42	1.15	4.7	28.9	82.8	8.28	4.58	54.11
DP 1639 B2XF	4356	1664	0.44	1.13	5.1	33.5	83.2	8.48	4.60	52.51
ST 4949GLT	4188	1662	0.45	1.11	5.5	30.2	83.5	7.23	5.13	49.84
ST 5032GLT	4686	1658	0.41	1.17	5.1	31.8	83.5	7.60	5.20	53.30
ST 4946GLB2	4674	1646	0.40	1.15	5.3	32.8	84.0	7.73	5.80	51.34
DG CT 15557 B2RF	4339	1644	0.43	1.14	5.2	30.8	83.6	8.13	4.83	51.78
PHY 495 W3RF	4363	1636	0.43	1.10	4.8	32.7	83.6	8.25	4.63	53.91
ST 4747GLB2	4647	1626	0.40	1.18	5.0	29.0	82.9	5.65	4.75	52.24
BRS 293	4664	1614	0.40	1.11	5.4	32.2	83.4	7.80	5.43	50.64
DP 1614 B2XF	4282	1613	0.43	1.16	5.4	30.9	83.9	8.25	4.40	51.46
DG CT 15426 B2RF	4152	1612	0.45	1.13	5.3	30.7	84.0	8.80	5.13	51.51
ST 5115GLT	4420	1609	0.42	1.12	5.2	31.6	82.6	7.40	5.13	51.20
NG 3406 B2XF	4371	1606	0.42	1.14	5.1	30.2	83.5	7.90	4.78	51.70
DG 3385 B2XF	4329	1601	0.42	1.12	5.3	30.6	84.5	8.43	4.68	50.99
DP 1522 B2XF	4307	1588	0.42	1.13	5.4	31.1	83.5	9.15	5.00	50.73
PHY 339 WRF	4361	1586	0.42	1.15	4.9	31.0	83.6	7.45	4.95	53.76
DP 1518 B2XF	4386	1553	0.41	1.10	4.8	27.6	82.3	6.88	4.58	52.95
ST 6448GLB2	4432	1549	0.40	1.18	4.9	28.6	83.0	5.98	4.68	53.53
PHY 222 WRF	4260	1548	0.42	1.13	5.2	31.5	83.6	8.48	4.85	51.81
SSG CT 210	4413	1495	0.39	1.09	5.4	31.1	81.8	7.38	5.05	49.45
BRS 335	4524	1486	0.38	1.14	5.2	31.1	82.5	5.65	5.10	52.04
BRS 286	4265	1471	0.39	1.12	5.2	31.7	83.4	6.78	4.65	51.96
MON 15R513 B2XF	3807	1410	0.42	1.17	5.3	31.7	83.6	7.95	4.78	51.49
DG CT 14515 B2RF	4041	1403	0.40	1.18	5.2	32.5	83.2	7.63	4.90	51.65
Overall Mean	**4531**	**1674**	**0.42**	**1.14**	**5.1**	**30.8**	**83.3**	**7.59**	**4.91**	**52.04**
LSD (0.05)	**590**	**222**	**0.01**	**0.03**	**0.2**	**1.6**	**1.1**	**0.47**	**0.49**	**1.83**
C.V. (%)	**9**	**10**	**1.75**	**1.91**	**3.4**	**3.7**	**0.9**	**4.46**	**7.09**	**2.51**

[1]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 a nonirrigated Falaya silt loam on Pace Perry Farms in Tate County near Senatobia, Mississippi, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
PHY 499 WRF	4922	**1908**	0.44	1.13	5.3	32.2	84.0	7.95	4.93	51.45
DP 1555 B2RF	4315	**1888**	0.44	1.20	4.9	32.7	84.6	7.15	4.80	54.76
MON 15R513 B2XF	4484	**1849**	0.42	1.20	5.1	31.2	85.0	7.23	5.10	52.70
DP 1522 B2XF	4947	**1829**	0.42	1.15	5.1	31.4	83.1	8.58	4.63	52.18
ST 4946GLB2	5092	**1825**	0.41	1.16	5.3	33.7	84.3	7.38	5.28	52.66
NG 3406 B2XF	4876	**1821**	0.43	1.16	4.9	30.6	84.4	8.13	5.10	52.63
PHY 444 WRF	4886	**1818**	0.43	1.24	4.6	31.0	84.7	6.50	4.93	54.68
ST 4949GLT	4063	**1803**	0.44	1.15	5.1	30.4	84.1	7.05	5.33	52.10
ST 6182GLT	4548	**1795**	0.45	1.17	5.0	30.4	83.6	6.68	4.98	52.73
PHY 333 WRF	4863	**1791**	0.42	1.19	4.6	31.2	84.7	6.88	5.43	54.11
DP 1646 B2XF	4792	**1784**	0.43	1.27	4.8	31.1	85.0	7.23	4.65	54.04
BX 1634GLT	4926	**1755**	0.41	1.19	5.2	32.0	84.0	5.75	5.13	52.68
PHY 496 W3RF	4656	**1730**	0.43	1.14	5.2	31.7	84.0	7.88	5.00	51.80
DP 1518 B2XF	4827	**1728**	0.41	1.17	4.6	30.1	84.3	6.80	4.80	53.89
PHY 312 WRF	4724	**1696**	0.41	1.20	4.7	32.1	84.2	7.28	4.58	54.74
PHY 339 WRF	4736	**1696**	0.41	1.18	4.7	32.1	84.0	7.23	5.10	54.00
DP 1612 B2XF	4802	**1694**	0.40	1.20	4.8	33.0	84.6	7.90	4.48	53.78
PHY 487 WRF	4808	1691	0.40	1.14	4.9	30.9	83.3	7.80	4.80	53.40
DP 1321 B2RF	4575	1685	0.42	1.16	5.0	33.1	84.3	8.35	4.35	53.01
ST 5115GLT	4639	1678	0.41	1.17	4.9	32.8	83.8	7.40	5.85	53.01
DG 3385 B2XF	4560	1667	0.42	1.19	4.8	31.1	84.8	7.90	5.13	54.55
PHY 495 W3RF	4400	1661	0.43	1.14	4.7	33.7	84.7	7.93	4.70	54.03
DG CT 15426 B2RF	4386	1657	0.43	1.16	5.0	31.4	84.2	8.60	5.80	53.26
PHY 552 WRF	4527	1654	0.42	1.14	4.8	31.0	83.2	7.05	4.60	54.25
DP 1553 B2XF	4423	1621	0.42	1.21	4.7	31.3	84.0	7.88	4.50	53.95
ST 4747GLB2	4663	1621	0.40	1.22	4.8	30.3	83.4	5.50	5.13	54.46
BX 1638GLT	4409	1619	0.42	1.21	4.8	33.5	84.1	6.93	5.25	54.08
ST 5032GLT	4628	1618	0.40	1.19	4.9	32.7	83.8	7.48	5.33	54.04
ST 6448GLB2	4568	1599	0.40	1.23	5.0	30.7	84.2	5.88	4.48	52.59
DP 1538 B2XF	3613	1597	0.43	1.12	5.0	29.9	83.2	7.88	5.55	52.70
NG 3405 B2XF	4374	1594	0.42	1.13	4.7	28.9	83.3	6.98	5.25	53.48
ST 4848GLT	4327	1591	0.42	1.16	5.2	31.6	84.0	7.23	5.10	52.08
PHY 427 WRF	4474	1583	0.41	1.15	4.7	32.0	83.7	7.80	4.33	53.91
DG CT 15557 B2RF	4177	1582	0.44	1.17	5.0	31.1	83.9	7.50	4.75	53.56
DG 2285 B2RF	4571	1581	0.40	1.20	4.6	30.9	84.4	7.48	5.03	54.63
PHY 222 WRF	4298	1539	0.41	1.14	5.2	31.6	84.9	7.78	5.28	51.38
BX 1531GLT	2900	1517	0.44	1.17	5.1	31.3	83.6	7.23	5.40	52.70
DP 1614 B2XF	4038	1511	0.43	1.24	4.9	31.9	84.9	7.80	4.48	54.14
DP 1639 B2XF	3986	1479	0.43	1.18	5.2	33.7	84.9	7.78	4.45	52.18
DP 1558NR B2RF	3344	1409	0.42	1.21	5.1	33.7	84.5	6.90	5.65	53.11
NG 5007 B2XF	3919	1377	0.40	1.20	4.2	30.3	83.8	7.48	4.58	54.51
CG 3885 B2XF	3743	1373	0.42	1.18	4.9	30.5	84.4	7.65	4.68	53.88
BX 1532GLT	3382	1333	0.45	1.18	5.0	30.9	84.4	6.45	4.70	52.90
SSG UA 222	3869	1326	0.39	1.26	5.0	33.2	84.6	7.90	4.85	53.78
DG CT 14515 B2RF	3597	1248	0.40	1.23	5.2	34.0	84.8	7.48	5.85	52.83
SSG CT210	3418	1113	0.37	1.16	5.2	33.0	83.7	6.75	5.10	52.64
BRS 293	3240	1091	0.39	1.18	5.3	35.3	83.4	7.58	5.75	51.84
BRS 335	2878	894	0.35	1.22	5.2	33.2	83.7	5.48	5.48	52.11
BRS 286	2698	874	0.37	1.18	5.2	33.7	84.3	6.53	5.10	52.46
Overall Mean	**4283**	**1587**	**0.42**	**1.18**	**4.9**	**31.8**	**84.1**	**7.30**	**5.01**	**53.27**
LSD (0.05)	**749**	**215**	**0.02**	**0.04**	**0.4**	**1.4**	**1.3**	**0.51**	**0.86**	**1.90**
C.V. (%)	**13**	**10**	**2.62**	**2.22**	**0.6**	**3.2**	**1.1**	**4.98**	**12.24**	**2.55**

[1]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 nonirrigated Marietta fine sandy loam on the MSU main campus in Oktibbeha County near Starkville, Mississippi, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
ST 4949GLT	3822	**1700**	0.44	1.15	4.5	30.6	83.6	7.65	5.13	54.41
DP 1538 B2XF	3391	**1580**	0.44	1.15	4.4	28.9	83.3	8.00	4.98	54.18
NG 3406 B2XF	3964	**1499**	0.43	1.15	4.3	29.9	83.5	8.25	4.68	54.41
PHY 496 W3RF	3890	1445	0.43	1.15	4.5	30.7	83.5	8.23	4.80	54.44
PHY 339 WRF	4057	1435	0.41	1.18	4.1	31.2	83.7	7.60	4.73	54.64
DP 1553 B2XF	3786	1431	0.43	1.22	4.4	29.5	83.9	8.18	5.10	54.45
ST 6448GLB2	3970	1406	0.41	1.24	4.3	28.5	82.5	5.98	5.13	54.31
DG CT 15557 B2RF	3578	1372	0.44	1.16	4.6	29.1	83.4	7.85	5.00	53.64
NG 3405 B2XF	3706	1359	0.42	1.13	4.2	28.2	82.5	7.50	5.00	54.12
DG CT 15426 B2RF	3530	1359	0.44	1.16	4.5	29.0	83.5	8.90	5.20	54.29
NG 5007 B2XF	3628	1354	0.43	1.17	4.3	28.9	82.5	8.08	4.58	54.16
DP 1555 B2RF	3508	1353	0.44	1.23	4.5	32.4	84.2	7.45	4.90	54.75
ST 6182GLT	3377	1345	0.46	1.18	4.5	29.5	83.6	7.35	4.55	54.40
CG 3885 B2XF	3540	1332	0.43	1.16	4.6	30.0	83.0	8.20	4.98	54.31
PHY 444 WRF	3582	1332	0.43	1.31	4.0	31.4	84.9	6.88	4.93	54.84
DP 1646 B2XF	3418	1331	0.45	1.25	4.4	29.2	84.2	7.78	4.55	54.46
DP 1558NR B2RF	3469	1318	0.44	1.22	4.5	32.4	84.4	7.58	5.13	54.76
PHY 333 WRF	3457	1281	0.42	1.20	4.5	29.6	83.5	6.85	4.60	53.78
DP 1639 B2XF	3238	1274	0.45	1.18	4.7	32.2	83.9	8.13	4.30	54.01
BX 1531GLT	3214	1263	0.45	1.16	4.5	29.3	83.1	7.53	5.05	54.24
DG 2285 B2RF	3537	1263	0.41	1.20	4.2	30.9	84.5	8.18	4.90	54.65
BX 1638GLT	3506	1262	0.41	1.25	4.3	31.5	83.8	7.33	4.73	54.79
DP 1522 B2XF	3403	1247	0.42	1.17	4.4	30.8	84.2	8.63	4.70	54.61
SSG UA 222	3559	1236	0.40	1.24	4.3	30.5	84.0	8.30	4.95	54.58
PHY 499 WRF	3294	1232	0.43	1.17	4.5	32.7	84.2	8.45	4.95	54.70
ST 4946GLB2	3444	1204	0.40	1.17	4.4	31.0	83.3	7.63	5.68	54.60
DP 1321 B2RF	3296	1199	0.42	1.18	4.5	31.7	83.6	8.70	4.98	54.65
ST 4747GLB2	3336	1196	0.41	1.23	4.1	28.9	82.6	5.63	4.70	54.29
PHY 552 WRF	3341	1190	0.41	1.21	4.1	31.7	84.2	7.18	4.40	54.71
PHY 222 WRF	3277	1179	0.41	1.17	4.9	30.3	84.8	8.75	5.00	53.46
DG 3385 B2XF	3146	1176	0.43	1.19	4.4	30.3	84.9	8.55	4.95	54.60
DP 1612 B2XF	3351	1175	0.40	1.21	4.0	31.6	84.1	8.20	4.78	54.85
PHY 312 WRF	3282	1174	0.41	1.22	3.8	31.0	84.6	7.70	4.85	54.36
PHY 495 W3RF	3092	1154	0.43	1.14	4.3	33.3	84.4	8.65	4.88	54.71
BRS 335	3475	1146	0.38	1.20	4.7	33.2	83.0	6.20	4.95	54.61
BX 1634GLT	3186	1131	0.41	1.22	4.4	30.6	85.4	6.50	5.13	54.69
BRS 286	3247	1113	0.39	1.15	4.5	33.4	83.2	7.10	5.18	54.58
PHY 487 WRF	3241	1113	0.39	1.17	4.3	31.3	83.2	8.18	4.70	54.55
PHY 427 WRF	3182	1080	0.39	1.18	4.3	31.1	83.8	8.08	4.68	54.66
SSG CT 210	3157	1065	0.39	1.16	4.5	33.1	83.2	7.53	4.68	53.90
ST 4848GLT	2801	1047	0.43	1.18	4.5	31.2	83.7	7.45	4.85	54.60
MON 15R513 B2XF	2935	1029	0.40	1.22	4.2	29.7	84.2	7.65	4.83	54.56
BX 1532GLT	2556	1023	0.46	1.18	4.1	28.9	83.7	7.30	4.58	54.41
DG CT 14515 B2RF	2774	1004	0.41	1.22	4.3	32.6	84.0	7.60	5.43	54.85
DP 1614 B2XF	2619	996	0.44	1.23	4.4	31.3	83.5	8.68	3.88	54.64
ST 5115GLT	2868	994	0.40	1.15	3.6	30.5	82.1	7.58	4.88	52.94
BRS 293	2907	981	0.39	1.19	4.5	34.2	83.9	7.60	5.20	54.76
DP 1518 B2XF	2781	978	0.40	1.20	3.9	28.9	83.1	7.15	4.43	54.38
ST 5032GLT	2560	879	0.39	1.23	3.9	31.0	83.4	7.65	4.73	54.26
Overall Mean	**3332**	**1225**	**0.42**	**1.19**	**4.3**	**30.8**	**83.7**	**7.72**	**4.85**	**54.42**
LSD (0.05)	**706**	**249**	**0.01**	**0.03**	**0.4**	**1.6**	**1.2**	**0.42**	**0.62**	**0.86**
C.V. (%)	**15**	**14**	**1.57**	**2.08**	**5.9**	**3.6**	**1.0**	**3.86**	**9.17**	**1.12**

[1]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 an irrigated Commerce very fine sandy loam at the Delta Research and Extension Center near Stoneville, Mississippi, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
ST 4949GLT	5986	**2153**	0.44	1.18	5.0	30.8	83.40	7.50	5.23	52.89
PHY 552 WRF	5973	**2094**	0.42	1.21	4.6	32.7	84.98	7.23	4.68	54.76
DP 1321 B2RF	6141	**2063**	0.41	1.19	5.1	32.7	85.15	8.68	5.20	52.46
DP 1522 B2XF	5881	**2024**	0.42	1.21	5.2	33.5	85.23	8.73	5.03	52.24
DP 1555 B2RF	5683	**2022**	0.43	1.22	5.0	33.8	83.95	7.20	5.25	53.44
DP 1639 B2XF	4885	**1998**	0.42	1.19	5.3	34.7	84.95	8.03	4.65	51.20
PHY 496 W3RF	5807	**1997**	0.42	1.19	5.0	33.4	84.83	8.08	5.05	53.14
PHY 333 WRF	5800	**1976**	0.41	1.22	4.9	32.3	85.30	7.45	5.35	54.21
PHY 312 WRF	5873	**1968**	0.40	1.22	5.1	33.2	86.15	7.53	4.90	53.01
ST 4848GLT	5471	**1958**	0.43	1.19	5.4	32.4	84.75	7.05	5.13	51.39
DP 1646 B2XF	5641	**1944**	0.42	1.29	4.8	31.1	85.48	7.55	5.00	54.71
PHY 495 W3RF	5458	**1910**	0.42	1.17	5.0	35.1	84.95	8.10	4.80	53.75
DP 1558NR B2RF	5441	1881	0.42	1.21	5.3	34.6	84.65	7.45	5.98	51.88
BX 1638GLT	5493	1873	0.41	1.24	5.1	33.4	84.85	7.53	5.43	52.24
DP 1518 B2XF	5770	1846	0.39	1.22	4.8	31.7	84.25	6.80	5.08	54.09
ST 1614 B2XF	5239	1840	0.42	1.23	5.4	32.2	85.33	8.13	4.30	51.15
ST 6182GLT	5026	1826	0.44	1.18	5.0	32.3	85.28	7.73	5.23	54.08
BX 1634GLT	5311	1818	0.41	1.22	5.3	32.6	85.43	5.83	5.15	51.53
PHY 487 WRF	5693	1797	0.41	1.16	5.1	31.4	83.98	8.25	5.18	53.56
NG 3406 B2XF	5336	1790	0.40	1.18	4.8	32.6	84.80	8.85	5.40	54.75
DG 3385 B2XF	5296	1787	0.41	1.20	5.2	31.2	85.48	8.70	5.18	51.78
PHY 444 WRF	5253	1786	0.41	1.29	4.5	32.8	86.13	6.95	5.05	54.96
PHY 427 WRF	5403	1783	0.40	1.17	5.1	32.9	84.75	8.43	4.50	52.80
ST 4747GLB2	5417	1777	0.40	1.24	5.0	30.2	83.85	5.83	5.15	53.88
ST 5115GLT	5288	1765	0.40	1.18	5.0	33.7	84.45	7.15	5.48	53.06
DG 2285 B2RF	5356	1759	0.40	1.22	4.9	32.1	85.18	8.30	5.35	54.70
PHY 499 WRF	5111	1750	0.41	1.17	5.1	34.7	85.03	7.90	5.08	52.18
SSG UA 222	5450	1739	0.39	1.27	5.0	32.4	85.53	8.08	5.25	53.56
BX 1532GLT	4647	1736	0.45	1.20	5.0	32.2	85.23	7.00	5.18	53.54
NG 5007 B2XF	5022	1725	0.41	1.19	4.6	30.2	84.35	7.88	4.70	54.49
PHY 222 WRF	5209	1713	0.40	1.18	5.1	31.8	84.83	8.63	4.83	52.73
DP 1538 B2XF	4861	1711	0.43	1.13	5.1	31.1	83.58	8.05	5.08	52.34
NG 3405 B2XF	5066	1708	0.41	1.14	4.9	29.1	83.95	7.28	5.10	54.26
MON 15R513 B2XF	5005	1692	0.41	1.21	5.1	32.3	85.55	7.75	5.10	52.53
DP 1612 B2XF	5190	1686	0.39	1.23	4.9	33.8	84.90	8.50	5.08	53.51
BX 1531GLT	4650	1680	0.44	1.19	5.2	32.3	84.88	7.28	5.30	52.45
DG CT 15557 B2RF	4646	1674	0.44	1.17	5.2	32.6	84.68	8.10	5.10	51.76
PHY 339 WRF	5006	1657	0.40	1.21	4.9	33.0	84.88	7.53	4.83	54.16
DG CT 15426 B2RF	4568	1619	0.43	1.19	4.8	31.4	85.45	8.43	5.65	54.78
CG 3885 B2XF	4617	1618	0.42	1.19	5.0	31.8	84.90	8.25	5.08	54.04
ST 5032GLT	4995	1604	0.39	1.23	4.9	34.4	85.03	7.58	5.63	54.20
DP 1553 B2XF	4642	1582	0.41	1.20	4.7	31.6	84.58	8.00	5.40	54.65
DG CT 14515 B2RF	4620	1476	0.39	1.25	5.0	33.2	84.83	7.63	5.35	54.18
BRS 293	4728	1470	0.38	1.20	5.4	34.6	84.65	7.40	5.93	51.11
SSG CT 210	4737	1432	0.37	1.19	5.3	33.1	83.78	7.10	5.58	51.35
ST 4946GLB2	4851	1419	0.41	1.18	5.2	32.9	85.05	7.80	5.48	52.44
ST 6448GLB2	4277	1326	0.38	1.26	4.8	30.6	83.30	6.15	4.80	54.45
BRS 335	4361	1287	0.36	1.27	4.8	34.2	84.83	5.93	5.45	54.83
BRS 286	3325	1280	0.39	1.17	4.9	33.2	84.45	7.05	5.00	54.00
Overall Mean	**5174**	**1758**	**0.41**	**1.20**	**5.0**	**32.6**	**84.81**	**7.64**	**5.15**	**53.25**
LSD (0.05)	**864**	**269**	**0.02**	**0.04**	**0.3**	**1.9**	**1.16**	**0.52**	**0.45**	**1.70**
C.V. (%)	**12**	**11**	**3.72**	**2.32**	**3.6**	**4.1**	**0.98**	**4.85**	**6.23**	**2.28**

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

Table 12. Mean yield performance and fiber characteristics for cotton varieties cultivated on a nonirrigated Sharkey clay on George Perry Farms in Tunica County near Tunica, Mississippi, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
DG 3385 B2XF	4741	**1652**	0.40	1.20	4.7	30.2	84.4	8.70	4.37	54.55
DP 1518 B2XF	4750	**1594**	0.38	1.24	4.3	30.5	84.3	7.13	4.57	54.73
PHY 487 WRF	4510	**1577**	0.40	1.19	5.1	30.8	84.0	7.93	4.67	52.85
BX 1531GLT	4277	**1563**	0.42	1.20	4.3	29.8	83.7	7.20	3.83	54.48
PHY 496 W3RF	4227	**1536**	0.42	1.21	4.9	31.7	84.3	7.65	4.73	54.08
PHY 312 WRF	3944	**1481**	0.40	1.23	4.4	30.6	84.1	7.25	4.63	54.59
DG 2285 B2RF	3895	**1468**	0.38	1.21	4.6	30.1	84.0	8.48	4.48	54.51
NG 3405 B2XF	4121	**1441**	0.40	1.16	4.5	28.6	82.9	7.18	4.80	54.16
DP 1612 B2XF	3759	**1418**	0.39	1.26	4.6	31.7	84.5	8.50	4.80	54.78
PHY 444 WRF	4021	**1408**	0.40	1.33	4.1	30.8	85.3	6.88	5.10	54.75
DP 1522 B2XF	4006	**1403**	0.40	1.22	4.9	30.5	84.0	8.85	4.48	54.58
NG 3406 B2XF	4106	**1402**	0.39	1.20	4.6	30.2	84.3	8.58	4.50	54.51
NG 5007 B2XF	4058	**1401**	0.40	1.20	4.3	29.1	82.8	8.13	4.63	54.35
DP 1639 B2XF	3767	**1373**	0.42	1.20	4.7	32.6	84.3	8.43	4.28	54.74
CG 3885 B2XF	3102	**1372**	0.39	1.19	4.3	30.2	83.6	8.10	5.03	54.50
SSG CT 210	4255	**1372**	0.37	1.18	5.0	32.9	83.9	7.18	5.28	53.69
PHY 339 WRF	3903	**1350**	0.39	1.22	4.6	30.8	84.2	7.90	4.25	54.63
ST 6448GLB2	4128	**1340**	0.37	1.27	4.6	29.8	82.8	6.20	4.53	54.30
PHY 427 WRF	4160	**1335**	0.37	1.24	4.5	31.7	84.0	8.25	4.70	54.70
ST 6182GLT	3635	**1325**	0.42	1.20	4.4	30.3	84.6	7.30	4.88	54.51
DP 1614 B2XF	3473	**1275**	0.42	1.25	4.7	30.3	84.2	8.15	4.33	54.49
PHY 552 WRF	3555	**1268**	0.41	1.25	4.4	31.4	85.1	7.15	4.10	54.79
PHY 222 WRF	3780	**1258**	0.38	1.20	5.1	31.0	84.5	8.23	4.63	52.64
ST 4946GLB2	3724	1253	0.39	1.20	4.9	31.0	84.1	7.70	5.65	54.53
DP 1646 B2XF	3654	1252	0.39	1.35	4.3	30.3	84.7	7.78	4.78	54.61
ST 4848GLT	3399	1247	0.42	1.20	4.8	30.8	83.7	7.08	5.18	54.55
DP 1558NR B2RF	3207	1245	0.39	1.26	4.4	32.8	84.1	7.43	5.43	54.78
DP 1538 B2XF	3507	1244	0.41	1.16	4.4	30.3	83.5	8.65	4.15	54.40
PHY 499 WRF	3397	1227	0.41	1.20	4.9	33.0	84.4	8.20	4.85	53.10
ST 4747GLB2	3602	1208	0.38	1.25	4.8	29.9	83.3	5.83	5.00	54.35
BX 1634GLT	3435	1195	0.40	1.25	4.9	31.7	85.9	6.20	5.03	53.60
DG CT 15426 B2RF	3061	1193	0.44	1.18	4.3	29.7	84.0	9.43	4.78	54.44
DG CT 14515 B2RF	3520	1192	0.39	1.26	4.4	32.5	83.9	7.67	4.53	54.77
PHY 495 W3RF	3263	1191	0.42	1.17	4.7	33.2	84.0	8.38	4.55	54.66
ST 5115GLT	3506	1179	0.39	1.20	4.6	32.7	84.0	7.55	5.50	54.64
DP 1555 B2RF	3266	1172	0.41	1.27	4.3	32.7	84.8	7.60	4.90	54.85
ST 5032GLT	3586	1170	0.37	1.26	4.5	32.1	84.6	7.65	4.43	54.76
BX 1532GLT	3050	1165	0.44	1.22	4.3	29.6	84.0	7.07	4.70	54.47
DP 1321 B2RF	3276	1124	0.40	1.21	4.6	32.1	83.5	8.95	4.40	54.00
ST 4949GLT	2866	1109	0.44	1.19	5.0	30.5	83.7	7.20	5.08	53.19
SSG UA 222	3385	1104	0.37	1.29	4.9	31.7	84.9	8.28	5.20	54.69
BX 1638GLT	3219	1101	0.39	1.29	4.3	32.3	84.0	7.30	4.40	54.80
DG CT 15557 B2RF	3122	1082	0.40	1.23	4.1	30.2	84.3	8.53	4.33	54.57
MON 15R513 B2XF	3068	1041	0.39	1.26	4.4	30.6	85.1	7.80	4.83	54.69
BRS 335	3269	1033	0.36	1.26	4.6	32.4	84.0	5.83	4.37	54.82
DP 1553 B2XF	2984	1032	0.40	1.23	4.2	30.2	83.5	8.45	4.58	54.50
PHY 333 WRF	3757	1030	0.40	1.25	4.5	30.3	84.6	6.93	4.50	54.59
BRS 293	3238	1019	0.36	1.22	4.7	33.8	84.1	7.75	5.05	54.80
BRS 286	2545	801	0.36	1.21	4.4	33.0	83.5	6.70	4.48	54.69
Overall Mean	**3627**	**1267**	**0.40**	**1.22**	**4.6**	**31.1**	**84.1**	**7.73**	**4.70**	**54.40**
LSD (0.05)	**1257**	**397**	**0.02**	**0.03**	**0.3**	**1.5**	**1.2**	**0.46**	**0.81**	**0.94**
C.V. (%)	**24**	**21**	**3.52**	**1.94**	**4.7**	**3.2**	**1.0**	**4.04**	**11.87**	**1.18**

[1]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 nonirrigated Leeper silty loam at the North Mississippi Research and Extension Center near Verona, Mississippi, 2015.[1]

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
PHY 444 WRF	4880	**1908**	0.45	1.24	4.5	31.1	84.8	7.00	5.63	54.71
DP 1555 B2RF	4803	**1869**	0.45	1.22	4.7	32.2	84.0	7.18	4.78	54.74
ST 6182GLT	4510	**1830**	0.46	1.19	4.9	29.9	84.4	7.90	5.10	54.48
ST 4949GLT	4493	**1799**	0.46	1.14	4.8	29.9	83.6	7.63	5.23	54.30
DG CT 15557 B2RF	4478	**1786**	0.46	1.14	4.8	29.1	82.9	7.95	4.83	54.14
BX 1532GLT	4366	**1784**	0.47	1.16	4.7	29.7	84.1	7.80	4.58	54.34
ST 4848GLT	4536	**1778**	0.45	1.14	5.1	30.5	84.1	7.58	5.15	53.11
DP 1538 B2XF	4522	**1773**	0.45	1.10	4.8	28.8	82.6	8.18	4.68	53.61
DP 1553 B2XF	4535	**1753**	0.44	1.19	4.7	29.6	84.3	8.43	4.93	54.44
PHY 499 WRF	4452	**1742**	0.45	1.12	5.1	31.7	83.9	8.03	5.35	51.74
PHY 312 WRF	4630	**1740**	0.43	1.17	5.0	31.0	85.2	8.20	5.25	54.00
ST 4747GLB2	4646	1735	0.43	1.16	4.8	28.1	81.6	7.03	5.28	53.41
BX 1531GLT	4296	1730	0.46	1.15	5.0	30.2	84.3	7.88	5.30	52.43
DP 1639 B2XF	4384	1724	0.45	1.17	5.2	32.0	84.9	7.60	4.75	52.43
DG CT 15426 B2RF	4333	1721	0.46	1.12	4.8	29.8	83.3	8.45	5.25	53.35
DP 1612 B2XF	4725	1721	0.42	1.16	4.9	31.9	83.8	8.25	5.63	53.95
BX 1634GLT	4616	1718	0.43	1.17	5.2	31.6	83.7	7.55	5.55	51.89
DP 1558NR B2RF	4492	1716	0.44	1.20	4.9	33.3	85.0	7.83	5.63	54.21
DP 1518 B2XF	4689	1713	0.42	1.15	4.6	28.7	82.8	7.50	4.78	54.16
CG 3885 B2XF	4408	1706	0.44	1.14	4.7	29.1	83.4	8.23	4.85	54.18
PHY 552 WRF	4459	1690	0.43	1.18	4.7	32.6	84.9	8.03	4.75	54.74
SSG UA 222	4647	1680	0.41	1.21	5.0	30.9	84.1	8.40	5.23	53.29
PHY 333 WRF	4398	1677	0.44	1.17	4.8	30.1	83.9	7.80	5.30	54.38
DP 1321 B2RF	4393	1661	0.43	1.14	5.3	31.1	84.6	8.75	5.20	51.59
NG 5007 B2XF	4374	1658	0.43	1.15	4.7	28.3	83.0	7.60	4.93	54.11
BRS 293	4282	1652	0.40	1.15	5.1	33.2	84.0	8.55	5.70	52.65
PHY 487 WRF	4515	1651	0.42	1.11	5.0	29.7	82.4	7.68	5.08	52.59
BX 1638GLT	4335	1651	0.44	1.21	4.8	32.2	83.7	7.33	5.03	54.69
DP 1646 B2XF	4236	1644	0.44	1.24	4.8	29.2	83.7	7.95	4.68	54.28
NG 3405 B2XF	4380	1642	0.43	1.11	4.9	28.0	83.0	7.88	5.28	53.00
NG 3406 B2XF	4335	1642	0.43	1.13	5.1	30.1	83.8	8.30	5.43	52.36
MON 15R513 B2XF	4419	1641	0.43	1.16	5.0	29.9	84.3	8.03	4.68	52.48
PHY 427 WRF	4442	1635	0.42	1.13	4.9	31.2	83.7	8.35	4.83	54.24
ST 4946GLB2	4560	1611	0.40	1.16	5.0	32.2	84.4	7.65	5.65	53.66
ST 5115GLT	4466	1605	0.41	1.15	4.7	31.6	83.1	7.68	6.33	54.44
DP 1522 B2XF	4307	1599	0.43	1.14	5.2	30.3	83.5	8.48	4.78	51.35
ST 5032GLT	4534	1590	0.40	1.20	4.6	31.9	84.2	7.90	5.75	54.68
DG 3385 B2XF	4144	1584	0.44	1.14	5.1	30.0	84.6	7.93	5.15	51.73
DG CT 14515 B2RF	3907	1580	0.43	1.19	5.0	32.7	84.3	7.85	5.85	53.45
PHY 339 WRF	4296	1568	0.42	1.17	4.7	31.2	83.7	8.08	5.13	54.58
PHY 495 W3RF	3981	1564	0.45	1.11	4.8	32.4	84.1	8.65	4.90	54.11
PHY 496 W3RF	4047	1555	0.44	1.10	5.2	31.7	82.8	8.48	5.18	51.21
DP 1614 B2XF	3958	1551	0.45	1.18	5.2	30.4	84.1	7.48	4.48	51.59
ST 6448GLB2	4342	1535	0.41	1.23	4.8	29.1	83.3	6.93	4.88	54.26
PHY 222 WRF	4172	1530	0.42	1.14	5.3	30.8	84.3	8.63	5.48	51.58
DG 2285 B2RF	4097	1511	0.42	1.15	5.0	30.4	84.8	8.00	5.33	53.21
SSG CT 210	4295	1507	0.40	1.12	5.2	30.9	83.3	7.15	5.33	51.44
BRS 335	4022	1349	0.38	1.18	5.2	32.1	83.6	6.73	5.45	52.33
BRS 286	3661	1283	0.40	1.13	4.9	31.7	82.9	7.50	5.58	52.76
Overall Mean	**4384**	**1659**	**0.43**	**1.16**	**4.9**	**30.7**	**83.8**	**7.87**	**5.19**	**53.35**
LSD (0.05)	**456**	**170**	**0.01**	**0.02**	**0.2**	**1.2**	**1.1**	**1.09**	**0.55**	**1.46**
C.V. (%)	**7**	**7**	**1.26**	**1.51**	**3.2**	**2.8**	**0.9**	**9.89**	**7.61**	**1.97**

[1]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 Adler/Morganfield silt loam soil at George Cunningham Farms in Yazoo County near Eden, Mississippi, 2015.

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniformity	Elongation	Ind. boll weight	100 seed weight
	lb/A	*lb/A*	*%*	*in*		*g/tex*	*%*	*%*	*g*	*g*
DP 1522 B2XF	3723	**1386**	0.43	1.11	4.9	31.0	83.0	9.0	4.70	52.34
DG 2285 B2RF	3871	**1380**	0.41	1.17	4.8	30.7	84.2	7.8	5.33	54.51
DP 1321 B2RF	3634	**1353**	0.43	1.13	5.1	32.0	83.4	8.9	5.25	51.64
PHY 312 WRF	3666	**1349**	0.42	1.17	4.7	31.7	84.4	7.4	4.83	54.68
PHY 333 WRF	3393	**1270**	0.43	1.16	4.7	30.5	83.9	7.0	4.90	54.45
ST 4949GLT	3306	**1266**	0.44	1.13	4.8	29.9	83.1	7.3	5.18	53.30
DG CT 15426 B2RF	3240	**1253**	0.44	1.09	4.9	30.5	83.6	9.0	4.45	50.85
SSG UA 222	3533	**1204**	0.39	1.22	4.4	32.5	84.0	8.2	4.80	54.08
ST 4848GLT	3284	**1200**	0.42	1.14	4.7	31.0	83.1	7.1	4.63	54.24
DP 1518 B2XF	3336	**1186**	0.41	1.17	4.5	30.2	83.4	6.8	4.20	54.39
NG 3405 B2XF	3188	**1179**	0.42	1.06	4.6	27.0	81.4	7.1	4.85	50.64
PHY 222 WRF	3344	**1179**	0.40	1.13	5.1	31.3	84.1	8.2	4.93	51.41
NG 3406 B2XF	3237	**1175**	0.42	1.15	4.8	30.7	83.5	8.5	5.20	54.00
PHY 496 W3RF	3149	**1174**	0.43	1.08	4.9	30.4	82.6	7.9	4.75	51.86
PHY 444 WRF	3045	1156	0.44	1.22	4.6	31.1	83.9	6.6	4.58	54.59
BX 1532GLT	3151	1150	0.43	1.10	4.8	29.8	82.9	7.1	4.55	51.96
PHY 495 W3RF	2920	1147	0.45	1.06	4.8	32.6	82.6	8.1	4.83	52.08
DP 1614 B2XF	3001	1137	0.44	1.13	5.1	30.0	82.9	8.6	4.25	52.31
DP 1538 B2XF	3008	1136	0.44	1.07	4.8	29.0	82.7	8.0	4.78	52.60
ST 5032GLT	3213	1134	0.41	1.18	4.5	32.0	83.6	7.6	4.98	54.55
ST 5115GLT	3154	1132	0.41	1.13	4.6	31.1	82.7	7.4	5.58	53.93
DP 1555 B2RF	2922	1129	0.44	1.15	4.8	32.2	82.5	7.4	4.98	53.36
BX 1531GLT	2905	1126	0.44	1.15	5.0	30.2	83.9	6.9	5.23	52.40
DG CT 15557 B2RF	2966	1125	0.43	1.14	4.8	31.6	83.4	7.7	5.08	54.24
DG 3385 B2XF	3063	1123	0.42	1.12	4.8	29.9	83.3	7.9	4.30	53.79
DP 1612 B2XF	3173	1114	0.40	1.15	4.6	31.8	83.0	8.3	5.05	54.08
DP 1646 B2XF	2868	1100	0.44	1.20	4.7	29.7	82.6	7.5	4.00	54.29
DP 1639 B2XF	2826	1097	0.45	1.09	5.1	31.8	82.9	8.5	4.23	50.26
ST 4747GLB2	3053	1082	0.41	1.18	4.8	29.6	82.7	5.6	5.00	53.64
PHY 339 WRF	2979	1074	0.41	1.14	4.7	30.6	82.4	7.5	4.73	53.80
CG 3885 B2XF	2794	1057	0.43	1.09	4.8	29.6	81.7	8.1	4.70	52.50
PHY 499 WRF	2767	1054	0.44	1.13	4.8	32.2	83.4	8.4	4.53	53.83
ST 6182GLT	2646	1050	0.46	1.11	4.9	29.5	82.6	6.8	5.15	51.26
NG 5007 B2XF	2880	1045	0.42	1.10	4.6	29.2	81.1	7.7	4.95	52.13
ST 4946GLB2	2890	1039	0.41	1.11	5.0	32.8	83.6	7.8	5.20	52.81
PHY 427 WRF	3006	1031	0.39	1.13	4.4	31.3	83.2	8.3	4.30	54.30
DP 1553 B2XF	2772	1026	0.42	1.14	4.6	30.3	82.4	7.9	4.83	54.09
BX 1634GLT	2769	1011	0.42	1.15	5.1	31.8	84.3	5.7	4.93	51.91
BX 1638GLT	2772	989	0.41	1.19	4.5	33.3	82.5	6.8	4.78	54.63
PHY 487 WRF	2703	983	0.42	1.06	4.9	29.9	81.6	8.3	4.38	50.95
PHY 552 WRF	2683	980	0.42	1.14	4.7	31.8	83.5	7.3	4.28	53.40
MON 15R513 B2XF	2636	953	0.41	1.14	5.0	31.0	83.9	7.7	4.63	52.29
DP 1558NR B2RF	2469	924	0.43	1.12	5.2	32.4	82.6	7.5	5.08	51.16
ST 6448GLB2	2501	858	0.39	1.16	4.8	29.0	82.9	6.1	4.53	52.74
DG CT 14515 B2RF	2232	807	0.41	1.10	4.8	31.3	82.4	7.9	5.28	51.75
BRS 293	2188	742	0.39	1.12	5.3	32.6	82.5	7.8	5.00	50.98
BRS 286	2082	715	0.39	1.08	4.7	31.4	82.7	7.3	4.45	50.46
SSG CT 210	2144	693	0.37	1.13	5.2	32.6	83.4	7.4	5.28	51.53
BRS 335	2065	664	0.37	1.19	4.8	33.4	83.4	6.1	4.53	53.06
Overall Mean	**2962**	**1084**	**0.42**	**1.13**	**4.8**	**31.0**	**83.0**	**7.6**	**4.79**	**52.86**
LSD (0.05)	**604**	**229**	**0.02**	**0.06**	**0.3**	**1.6**	**1.39**	**0.5**	**0.69**	**2.29**
C.V. (%)	**15**	**15**	**3.76**	**3.48**	**4.9**	**3.7**	**1.19**	**4.9**	**10.35**	**3.10**

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

Appendix 1. Dates (month/day) of agronomically important events for all cotton variety trials and locations in Mississippi in 2015.

Event	Location and soil texture[1]							
	Brooksville Brooksville SC	Clarksdale Dubbs VFSL	Senatobia Falaya SL	Starkville Marietta FSL	Stoneville Commerce VFSL	Tunica Sharkey Clay	Verona Leeper SL	Yazoo City Adler/Morganfield SL
Planting date	5/21	5/6	5/5	6/5	5/5	5/5	5/14	6/8
Irrigation	N/A	N/A	N/A	N/A	7/16, 7/20, 8/6	N/A	N/A	
N application	6/12	6/4, 7/8	1/28, 5/14, 6/10	5/13, 7/13	6/10	1/28, 5/10, 6/4	6/22	
Pre herbicide	5/23	5/6	5/5	6/5	5/8	5/5	5/14	6/8
Early post herbicide	6/26	6/28	6/23	7/8	6/8	6/24	6/10, 6/15	
Layby herbicide	N/A	N/A	7/10	N/A	7/16	7/16	6/22, 7/15	
Early insecticide	6/10, 6/17	6/4,6/15, 6/22, 6/27	6/26	N/A	6/23	6/21	6/8	6/24
Mid insecticide	7/8, 7/30	7/2, 7/6, 7/11, 7/16	7/13, 7/27	N/A	7/8, 7/15, 7/20, 7/22	7/6, 7/30	6/29, 7/14	7/1, 7/17, 7/31
Late insecticide	N/A	8/6, 8/14, 8/22	N/A	N/A	8/6	8/20	8/3	8/14, 8/24
PGR	7/13	7/11, 8/6	6/26	N/A	7/15, 7/20, 8/6	7/6, 7/30	7/27, 8/10	7/31, 8/14
Harvest aid	9/22, 10/2	9/28, 10/6	9/18, 9/25	N/A	9/7, 9/18	9/23, 9/30	9/17, 9/23	9/28, 10/4
Harvest	10/15	10/13	10/5	11/9	10/6	10/20	10/7	11/16

[1]FSL = Fine sandy loam, VFSL = Very fine sandy loam, SCL = Silty clay loam, SL = Silt loam, SC= silty clay

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