

MISSISSIPPI COTTON

VARIETY TRIALS, 2017

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MISSISSIPPI'S OFFICIAL VARIETY TRIALS



MISSISSIPPI STATE UNIVERSITY™
MS AGRICULTURAL AND
FORESTRY EXPERIMENT STATION

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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, 2017

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The authors express their appreciation first and foremost to the five producers who participated in the 2017 OVT locations conducted on-farm. 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 present throughout the state. Thanks to Cliff Heaton and Brian Fife (Clarksdale), Michael Thompson (Eden), Kendall and Eddie Stringfellow (Lucedale), and Pace Perry (Senatobia and Tunica). Your hard work and willingness to participate in the variety trials are deeply valued. We at the Mississippi Agricultural and Forestry Experiment Station look forward to working with you and other willing producers in the future. Thanks also go to Chase Samples and Bradley Norris of the agronomy program in the MSU Department of Plant and Soil Sciences for their assistance with all aspects of conducting the trials. Their diligent work and assistance help ensure the success of the variety trials. We also want to recognize Savana Davis, Lucas Franca, Michael Plumbree, Bradley Wilson, Steven Hall, Jake McNeal, Tyler Soingier, and Brent Lindsey for their assistance with hand-harvesting, ginning, and preparing fiber quality samples. Their work allows us to provide timely data.

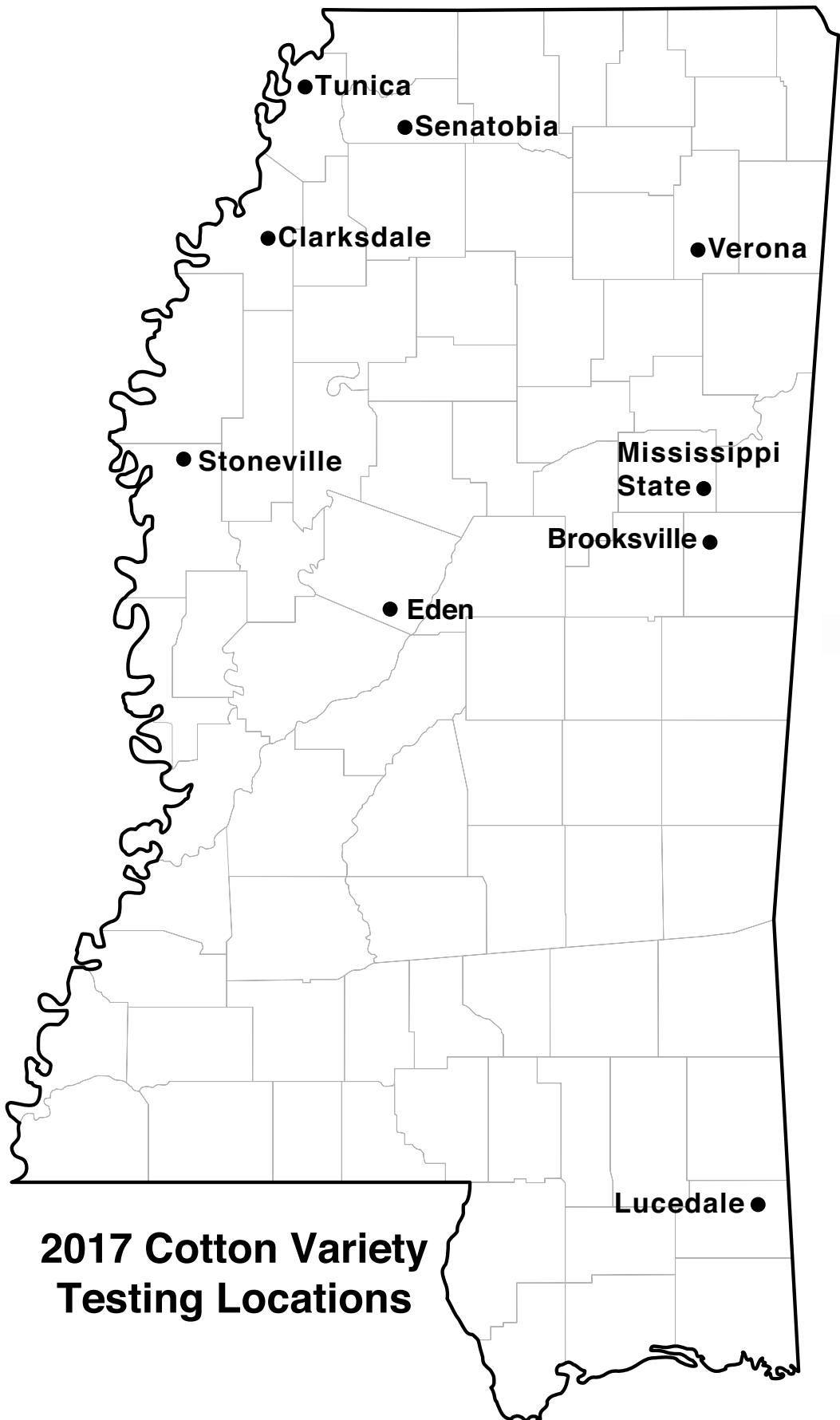
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Find variety trial information online at mafes.msstate.edu/variety-trials.

PREFACE

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



CONTENTS

Introduction	1
Testing Procedures	1
Interpreting the Data	2
Selecting a Variety/Trait	2
Considerations for Selection	3
Loan Valuation Decision Aid	3
Top-Yielding Varieties	3

Performance Tables for 2017-Tested Varieties

Table 1. Varieties submitted for testing in 2017	4
Table 2. One-year yield performance of all varieties submitted for testing in 2017	5
Table 3. Two-year yield performance of varieties cultivated in the Delta region	6
Table 4. Two-year yield performance of varieties cultivated in the Hill region.....	6
Table 5. One-year yield performance of varieties cultivated in the Delta region.....	7
Table 6. One-year yield performance of varieties cultivated in the Hill region.....	8
Table 7. Yield performance and fiber characteristics – Brooksville OVT trial.....	9
Table 8. Yield performance and fiber characteristics – Clarksdale OVT trial	10
Table 9. Yield performance and fiber characteristics – Eden OVT trial.....	11
Table 10. Yield performance and fiber characteristics – Lucedale OVT trial	12
Table 11. Yield performance and fiber characteristics – Senatobia OVT trial.....	13
Table 12. Yield performance and fiber characteristics – Starkville OVT trial.....	14
Table 13. Yield performance and fiber characteristics – Stoneville OVT trial.....	15
Table 14. Yield performance and fiber characteristics – Tunica OVT trial	16
Table 15. Yield performance and fiber characteristics – Verona OVT trial.....	17

Mississippi Cotton Variety Trials, 2017

INTRODUCTION

Annually, Mississippi State researchers evaluate cotton varieties at numerous locations in the cotton-growing regions in 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 on how particular cotton varieties performed near their bases of operation.

The cotton OVT is conducted annually at the Delta Research and Extension Center in Stoneville, North

Mississippi Research and Extension Center in Verona, R. R. Foil Plant Science Research Center at Mississippi State, and 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 identically (conventionally) with respect to herbicide and insecticide input to strive for unbiased evaluation of genetic potential. Mississippi State personnel attempt to conduct at least eight small-plot OVTs 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 using conventional chemical control for insect and weed pests. Each test plot consists of two rows of cotton 35 to 40 feet in length, with a row spacing of 38 or 40 inches. Each plot is analyzed statistically as a randomized complete block with four blocks or replications.

Management practices are determined and implemented by cooperators at each location based on soil texture, soil test value, and scouting for pest pressures. However, seeding rate and operation are controlled by the cotton-variety-testing coordinator. In addition, all locations are maintained free of lepidopteran insect pests in order to create parity among varieties with differing *Bt* technologies. A list of agronomically important management inputs or practices and dates is presented in Appendix 1. Agronomic date information allows the user to consider management practices at each location when evaluating yield.

All fiber parameters, including lint percent and HVI fiber-quality assessment, are based on 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 avoid bias in fiber-quality assessments 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, Texas.

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 of lint per acre.

INTERPRETING THE DATA

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

Mississippi State separates the greatest performing varieties by use of a Fisher's Protected Least Significant

Difference (LSD) at a 5% level of significance. The LSD associated with the 5% level lends 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 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 differing numerical yields but will perform very similarly at a given location. Statistical analysis is not conducted for across location averages. Producers should review data tables for the geographically closest location that is representative of their operation, but they should also review yield information across locations to get an idea of a variety's yield stability over a wide range of production environments.

SELECTING A VARIETY/TRAIT

Cultivar selection is one of the most important management decisions a producer must make each growing season. Improper variety selection generally cannot be overcome with management. Starting with the greatest genetic potential will generally lead to the highest yield, with all other things being considered equal. Careful consideration should go into selecting varieties that are well adapted to the 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, which lends the producer multiple options with respect to herbicide and insecticide traits. Below is a synopsis of the transgenic traits represented in this year's trials.

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

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 of glyphosate and dicamba. Enlist (FE) varieties are tolerant of glyphosate and 2,4-D. It is important to note that producers utilizing a multitude of

varieties with differing herbicide-tolerant traits in close proximity must use caution to avoid crop injury from spray drift, improperly cleaned applicators, or a combination of both. For more information on utilizing herbicide-resistant traits and alternative weed control practices, consult MSU Extension Service 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 the designation B2 on the seed bag or in the brand name contain genes that produce a protein toxic to heliothis. However, under high and persistent pressure, supplemental chemical control strategies are necessary to prevent economic damage from caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties, consult MSU Extension Publication 2471, *Insect Control Guide for Agronomic Crops*, available online at https://extension.msstate.edu/sites/default/files/publications/publications/p2471_0.pdf.

Bollgard 3 — Varieties with the designation B3 on the seed bag or in the brand name contain genes that produce a protein toxic to heliothis. For more information on utilization of transgenic traits with insecticidal properties consult the *Insect Control Guide for Agronomic Crops*.

WideStrike — These Phytogen varieties have the designation W on the bag or in the variety name. Like Bollgard 2,

Widestrike varieties contain two genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult the *Insect Control Guide for Agronomic Crops*.

WideStrike 3 — These Phytogen varieties have the designation W3 on the bag or in the variety name. Like Bollgard 3, Widestrike varieties contain three genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult the *Insect Control Guide for Agronomic Crops*.

TwinLink — These Bayer varieties have the designation T on the bag or in the variety name. Like Bollgard 2 or

Widestrike, TwinLink varieties contain two genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult the *Insect Control Guide for Agronomic Crops*.

TwinLink Plus — These Bayer varieties have the designation TP on the bag or in the variety name. Like Bollgard 3 or Widestrike 3, TwinLink Plus varieties contain three genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult the *Insect Control Guide for Agronomic Crops*.

CONSIDERATIONS FOR SELECTION

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

Lint yield and potential profitability should be the primary factors when attempting to select a variety, but do not discount fiber quality and traits contained within a

given variety. Do not underestimate the discounts associated with high micronaire, which can be significant.

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

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

LOAN VALUATION DECISION AID

For each trial conducted in 2017, 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 fairly

short. With changes in the cotton industry, the trend over the last 10 years has been for fewer varieties to be submitted for testing in university OVTs across the Midsouth. Therefore, it is important to select a variety that has performed well in the Mississippi OVT or other Midsouth university OVTs.

Table 1. Varieties submitted for testing by participating industry partners, 2017.

Industry contact	Variety trial entries
Americot Inc. — NexGen Varieties <i>Tom Brooks</i>	AMX 1710 B2XF AMX 1711 B2XF AMX 1715 B2XF NG 3406 B2XF
Bayer Crop Science <i>Andy White</i>	ST 4949GLT ST 5020GLT ST 5115GLT
Crop Production Services/Dyna-Gro Seed <i>Scott Cummings</i>	CPS 17251NR B2XF CPS 17330 B2XF DG 3526 B2XF
International Seed Technology <i>Carmen Carvajal</i>	BRS-286 BRS-336
Monsanto <i>Dave Albers</i>	DP 1518 B2XF DP 1522 B2XF DP 1555 B2RF DP 1614 B2XF DP 1639 B2XF DP 1646 B2XF
PhytoGen Seed Co. <i>Brooks Blanche</i>	PHY 300 W3FE PHY 312 WRF PHY 330 W3FE PHY 340 W3FE PHY 444 WRF PHY 450 W3FE PHY 490 W3FE PX 2A28 W3FE PX 3A82 W3FE
Seed Source Genetics <i>Ed Jungmann</i>	SSG CT 210 SSG UA 222
Winnfield Solutions LLC <i>Robert Cossar</i>	CG 9608 B3XF

Table 2. One-year mean yield performance and fiber characteristics for OVT varieties submitted for testing in 2017 averaged across all (nine) testing locations.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	lb/A	lb/A	%	in		g/tex	%	%	¢/lb
PHY 312 WRF	2904	1228	42.4	1.19	4.5	30.8	84.2	6.2	50.90
DG 3526 B2XF	2765	1220	44.2	1.14	4.7	29.7	83.8	8.0	50.80
DP 1646 B2XF	2742	1214	44.2	1.25	4.6	29.9	83.8	6.7	51.35
PHY 444 WRF	2804	1209	43.0	1.25	4.3	31.7	84.8	5.8	52.74
PX 3A82 W3FE	2758	1193	43.2	1.14	4.6	31.9	84.3	7.3	50.97
PHY 480 W3FE	2780	1189	42.7	1.17	4.5	30.7	84.1	7.3	51.54
DP 1555 B2RF	2646	1172	44.3	1.19	4.6	31.8	83.9	6.2	51.95
PX 4A57 W3FE	2603	1167	44.8	1.11	4.6	30.8	83.5	7.0	50.50
PX 4A54 W3FE	2669	1157	43.2	1.16	4.7	31.5	84.0	6.7	51.68
ST 5115GLT	2773	1146	41.2	1.16	4.3	31.1	82.8	6.5	52.06
NG 5007 B2XF	2677	1145	42.7	1.16	4.6	28.8	83.1	7.0	51.08
ST 6182GLT	2475	1139	46.0	1.15	4.7	29.7	83.3	6.2	51.09
PHY 340 W3FE	2539	1134	44.5	1.17	4.5	31.1	83.8	6.0	51.34
PX 3A99 W3FE	2655	1133	42.5	1.17	4.6	30.8	83.8	6.4	51.17
DG 3757 B2XF	2584	1127	43.6	1.15	4.7	29.9	83.8	7.0	51.36
PHY 300 W3FE	2515	1115	44.3	1.14	4.6	30.2	83.2	6.2	51.32
CG 9608 B3XF	2458	1108	45.2	1.18	4.5	29.8	83.4	5.5	51.50
DP 1845 B3XF	2573	1104	42.9	1.27	4.3	31.8	84.2	6.9	52.23
DP 1835 B3XF	2453	1098	44.9	1.19	4.6	30.3	83.3	5.3	51.70
NG 3522 B2XF	2551	1097	42.7	1.12	4.7	28.5	82.7	6.4	50.54
DP 1639 B2XF	2476	1095	44.3	1.15	4.8	31.9	84.0	7.1	50.52
DP 1823 NRB2XF	2502	1086	43.3	1.20	4.4	32.0	84.5	7.3	51.74
DP 1614 B2XF	2433	1084	44.5	1.18	5.0	30.3	83.9	7.5	49.66
PX 3A96 W3FE	2597	1082	41.6	1.18	4.5	30.6	84.0	6.5	51.22
ST 4949GLT	2394	1082	45.1	1.14	4.7	30.1	83.2	6.7	50.77
DP 1725 B2XF	2379	1077	45.2	1.17	4.6	30.0	83.0	5.7	50.93
PHY 330 W3FE	2426	1076	44.2	1.16	4.6	30.9	83.8	5.8	51.31
CPS 17251NR B2XF	2442	1075	43.9	1.21	4.6	30.7	83.3	6.4	51.79
UA 222	2623	1072	40.8	1.20	4.6	31.3	83.8	7.5	50.99
PX 5B76 W3FE	2567	1070	41.5	1.16	4.7	31.2	83.7	6.0	50.94
PHY 440 W3FE	2478	1070	43.0	1.21	4.3	32.7	83.5	5.8	52.48
ST 5517GLTP	2656	1069	40.2	1.19	4.5	32.2	82.9	6.3	52.10
DG 3605 B2XF	2479	1061	42.9	1.26	4.5	30.3	83.9	6.5	51.45
AMX 1710 B2XF	2557	1057	41.2	1.15	4.9	32.0	83.3	5.0	50.80
DP 1522 B2XF	2466	1053	42.5	1.17	4.8	31.1	83.9	7.8	50.75
PHY 450 W3FE	2484	1052	42.2	1.13	4.8	32.8	84.1	7.3	50.80
NG 3406 B2XF	2441	1043	42.5	1.15	4.6	29.9	83.8	7.4	51.18
DP 1851 B3XF	2389	1034	43.0	1.19	4.4	32.6	83.9	7.1	52.18
DP 1518 B2XF	2482	1027	41.4	1.17	4.4	29.3	83.5	6.1	51.15
ST 5020GLT	2502	1025	41.0	1.21	4.5	32.5	84.2	6.7	51.12
NG 4601 B2XF	2344	1022	43.6	1.19	4.8	32.6	84.0	6.5	50.68
PHY 490 W3FE	2391	1016	42.5	1.15	4.6	33.1	84.0	7.4	51.48
PX 2A28 W3FE	2404	1002	41.6	1.17	4.5	31.1	83.4	5.6	51.14
PX 5B73 W3FE	2345	997	42.4	1.16	4.5	30.4	83.3	6.1	51.44
BRS 335	2500	987	39.4	1.18	4.4	31.4	84.0	6.1	51.96
BRS 286	2494	972	39.9	1.13	4.6	31.4	82.9	5.7	51.00
AMX 1715 B2XF	2429	962	39.7	1.20	4.6	31.3	82.8	5.4	51.06
AMX 1711 B2XF	2267	955	42.3	1.22	4.5	31.1	83.7	6.2	51.89
HQ 210CT	2334	918	39.2	1.13	4.8	31.2	82.5	6.2	50.01
PX 5A57 W3FE	2183	914	41.7	1.16	4.4	31.6	84.0	6.1	52.10
CPS 17330 B2XF	1828	836	45.6	1.18	4.7	32.8	84.2	6.8	51.66
Overall Mean	2514	1078	42.8	1.17	4.6	31.0	83.7	6.5	51.30
LSD (0.05)	342	152	1.8	0.01	0.2	0.7	0.4	0.3	1.03
C.V. (%)	29.2	30.3	4.8	3.5	9.6	4.8	1.2	11.4	4.3

¹Lint 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 2016 and 2017.¹

Variety	Clarksdale		Stoneville		Tunica		Average across location and yr.
	2016	2017	2016	2017	2016	2017	
	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A
PHY 312 WRF	1617	1388	1594	1791	1654	1133	1530
DP 1646 B2XF	1467	1333	1350	1573	1661	1132	1419
DG 3526 B2XF	1621	1494	1471	1801	1010	843	1373
ST 4949GLT	1559	1170	1415	1495	1581	979	1367
PHY 444 WRF	1618	1221	1320	1495	1379	1133	1361
DP 1725 B2XF	1511	1192	1498	1428	1363	985	1330
NG 3522 B2XF	1380	1095	1379	1530	1514	1046	1324
DP 1555 B2RF	1624	1402	1107	1386	1352	1060	1322
ST 5115GLT	1395	1424	1144	1620	1358	931	1312
UA 222	1575	1027	1509	1524	1248	984	1311
DP 1522 B2XF	1312	1049	1280	1570	1674	955	1307
ST 6182GLT	1425	1357	1152	1764	1220	869	1298
DP 1639 B2XF	1616	1343	1049	1511	1338	855	1285
DP 1518 B2XF	1354	898	1290	1382	1576	1169	1278
DP 1614 B2XF	1204	1067	1496	1571	1232	985	1259
NG 3406 B2XF	1390	959	1190	1606	1401	957	1251
NG 5007 B2XF	1405	1132	1238	1554	1306	805	1240
DG 3757 B2XF	1564	1321	860	1561	1057	669	1172
BRS 286	1274	1103	1171	1389	901	778	1103
HQ 210CT	1333	956	726	1137	962	859	996
BRS 335	1397	1073	745	1262	754	722	992

¹Table 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 2016 and 2017.¹

Variety	Brooksville		Senatobia		Starkville		Verona		Avg. across location and yr.
	2016	2017	2016	2017	2016	2017	2016	2017	
	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A	Ib/A
PHY 444 WRF	1712	941	1413	973	2017	1454	1989	1716	1527
DP 1646 B2XF	1354	884	1850	1098	1774	1007	1742	1653	1420
DP 1555 B2RF	1547	908	1418	903	1747	1089	1886	1852	1419
PHY 312 WRF	1415	826	1519	1099	1609	1203	1724	1853	1406
NG 3522 B2XF	1540	883	1479	949	1717	1084	1675	1594	1365
NG 5007 B2XF	1318	734	1344	1102	1680	1259	1671	1755	1358
ST 6182GLT	1334	957	1060	906	1813	1198	1730	1741	1342
UA 222	1299	908	—	1025	1818	1002	1700	1633	1341
DG 3757 B2XF	1320	810	1346	762	1850	1135	1842	1656	1340
DP 1639 B2XF	1393	701	1375	939	1596	1167	1772	1755	1337
ST 5115GLT	1466	882	1226	988	1588	1190	1695	1486	1315
ST 4949GLT	1126	815	1607	936	1472	1003	1987	1519	1308
DP 1518 B2XF	1106	702	1651	1131	1654	809	1719	1371	1268
NG 3406 B2XF	1369	769	1123	859	1714	1155	1720	1354	1258
DP 1614 B2XF	1347	617	1440	1243	1354	995	1519	1525	1255
DG 3526 B2XF	963	837	1096	1145	1356	1432	1571	1580	1248
BRS 286	1263	511	—	845	1721	1142	1692	1543	1245
DP 1522 B2XF	1192	804	1437	531	1593	927	1764	1602	1231
BRS 335	1307	934	—	764	1607	965	1482	1520	1226
DP 1725 B2XF	1134	805	1350	965	1227	1062	1672	1488	1213
HQ 210CT	1183	706	—	781	1482	1005	1590	1446	1170

¹Table 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, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	/lb/A	/lb/A	%	in		g/tex	%	%	¢/lb
PHY 312 WRF	3188	1359	42.7	1.19	4.6	30.2	84.3	6.1	51.74
DP 1646 B2XF	2973	1313	44.0	1.27	4.6	29.9	83.8	7.0	51.49
PX 3A82 W3FE	2998	1285	43.0	1.14	4.7	31.9	84.4	7.4	51.37
ST 5115GLT	3048	1269	41.7	1.15	4.4	30.5	82.9	6.7	52.43
PHY 480 W3FE	2916	1258	43.1	1.17	4.5	30.2	84.4	7.4	52.31
DG 3526 B2XF	2851	1256	44.2	1.14	4.7	29.6	83.4	8.1	51.12
PX 3A99 W3FE	2925	1245	42.6	1.17	4.6	30.6	83.8	6.3	51.55
PHY 444 WRF	2896	1234	42.7	1.26	4.3	31.3	84.6	5.9	53.05
DP 1555 B2RF	2786	1230	44.1	1.20	4.7	31.6	83.9	6.4	52.25
DP 1614 B2XF	2714	1213	44.8	1.19	5.0	29.8	84.0	7.5	49.88
DP 1522 B2XF	2816	1210	43.1	1.18	5.0	31.0	84.0	8.0	50.97
DP 1725 B2XF	2649	1202	45.4	1.18	4.7	29.6	82.9	5.6	51.38
PX 4A57 W3FE	2699	1202	44.6	1.12	4.5	30.5	83.6	7.0	50.92
PHY 340 W3FE	2680	1197	44.7	1.18	4.5	30.6	83.8	5.9	51.28
NG 3522 B2XF	2747	1191	43.2	1.12	4.8	27.9	83.0	6.7	50.70
ST 4949GLT	2621	1190	45.5	1.15	4.8	29.7	83.1	6.9	50.99
AMX 1710 B2XF	2832	1176	41.5	1.16	5.0	32.1	83.1	5.0	50.36
PHY 300 W3FE	2647	1176	44.5	1.15	4.6	30.2	83.3	6.2	51.57
PX 4A54 W3FE	2692	1173	43.6	1.16	4.8	31.6	84.1	6.8	52.13
DP 1823 NRB2XF	2723	1172	43.1	1.21	4.3	31.9	84.5	7.2	52.06
NG 5007 B2XF	2754	1164	42.3	1.16	4.6	28.4	83.0	7.2	51.33
DP 1639 B2XF	2637	1162	44.2	1.16	4.8	32.1	84.1	7.2	51.29
ST 5517GLTP	2853	1155	40.4	1.18	4.5	31.9	82.5	6.5	52.27
NG 3406 B2XF	2694	1155	42.8	1.15	4.8	29.8	83.9	7.6	51.35
AMX 1715 B2XF	2923	1152	39.6	1.22	4.7	31.2	83.0	5.7	51.06
DP 1518 B2XF	2718	1144	42.3	1.18	4.6	28.8	83.5	6.1	51.41
DP 1845 B3XF	2696	1144	42.5	1.28	4.2	31.3	84.1	6.9	52.29
CG 9608 B3XF	2540	1140	45.0	1.19	4.3	29.4	83.7	5.6	51.91
CPS 17251NR B2XF	2588	1138	44.0	1.21	4.6	30.0	83.4	6.5	52.03
ST 6182GLT	2474	1137	46.0	1.17	4.6	29.3	83.3	6.2	51.52
PX 5B76 W3FE	2742	1134	41.3	1.17	4.6	30.8	83.7	5.9	51.23
DP 1835 B3XF	2550	1132	44.5	1.20	4.5	29.7	83.3	5.2	52.10
PHY 490 W3FE	2675	1129	42.6	1.16	4.6	33.1	83.9	7.5	51.85
DG 3757 B2XF	2572	1122	43.5	1.15	4.7	29.6	83.9	7.1	52.14
DG 3605 B2XF	2646	1121	42.4	1.28	4.4	30.2	83.8	6.4	51.73
PHY 440 W3FE	2633	1120	42.7	1.22	4.3	32.0	83.6	6.0	53.11
UA 222	2723	1110	40.8	1.21	4.7	31.3	83.8	7.8	51.65
DP 1851 B3XF	2613	1105	42.2	1.21	4.3	32.8	84.0	7.0	52.87
ST 5020GLT	2699	1105	41.0	1.22	4.6	32.3	84.3	6.7	51.80
PHY 450 W3FE	2589	1091	42.3	1.15	4.8	32.8	84.3	7.4	51.65
PX 3A96 W3FE	2618	1087	41.6	1.18	4.6	30.1	83.8	6.5	51.75
PX 2A28 W3FE	2590	1081	41.8	1.18	4.6	31.2	83.4	5.7	51.40
PHY 330 W3FE	2425	1064	43.9	1.17	4.6	30.2	83.9	5.9	51.52
NG 4601 B2XF	2396	1044	43.6	1.19	4.8	32.3	84.0	6.7	51.38
PX 5B73 W3FE	2453	1033	42.3	1.16	4.6	29.7	83.4	6.3	51.51
PX 5A57 W3FE	2425	1016	41.9	1.17	4.4	31.3	84.2	6.2	52.84
AMX 1711 B2XF	2394	1003	42.2	1.23	4.4	30.2	83.6	6.2	52.23
BRS 286	2417	972	40.5	1.14	4.6	31.4	82.8	5.8	51.09
BRS 335	2427	968	40.0	1.19	4.5	31.0	84.0	6.3	52.08
HQ 210CT	2387	945	39.5	1.14	4.8	31.4	82.6	6.2	50.36
CPS 17330 B2XF	2047	931	45.5	1.18	4.7	32.8	84.2	6.7	52.29
Overall Mean	2673	1144	42.9	1.18	4.6	30.8	83.7	6.6	51.66
LSD (0.05)	482	204	1.0	0.03	0.2	1.0	0.7	0.4	1.40
C.V. (%)	25.7	25.4	304	3.4	6.4	4.8	1.2	9.3	3.9

¹Lint 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 five locations in the Hill region, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	lb/A	lb/A	%	in	g/tex	%	%	%	¢/lb
DG 3526 B2XF	2696	1192	44.2	1.14	4.7	29.8	84.1	7.9	50.54
PHY 444 WRF	2730	1189	43.3	1.25	4.3	32.0	85.0	5.8	52.49
PX 4A57 W3FE	2605	1182	45.0	1.11	4.6	31.1	83.4	7.0	50.16
PX 4A54 W3FE	2650	1143	42.9	1.15	4.7	31.4	83.9	6.7	51.29
ST 6182GLT	2461	1140	46.1	1.14	4.8	29.9	83.4	6.3	50.75
PHY 480 W3FE	2671	1134	42.3	1.16	4.5	31.1	83.9	7.3	50.93
DP 1646 B2XF	2557	1134	44.3	1.24	4.5	29.9	83.7	6.5	51.24
NG 5007 B2XF	2616	1131	43.0	1.16	4.6	29.2	83.2	6.9	50.87
DP 1555 B2RF	2528	1124	44.5	1.18	4.6	32.0	83.9	6.1	51.72
PX 3A82 W3FE	2567	1119	43.4	1.13	4.6	32.0	84.2	7.1	50.66
DP 1835 B3XF	2453	1112	45.1	1.19	4.7	30.7	83.3	5.4	51.38
PHY 312 WRF	2651	1112	42.1	1.18	4.5	31.2	84.1	6.3	50.19
DG 3757 B2XF	2502	1093	43.6	1.15	4.7	30.1	83.7	6.8	50.75
PHY 340 W3FE	2433	1087	44.4	1.17	4.5	31.4	83.7	6.1	51.39
PHY 330 W3FE	2427	1085	44.5	1.16	4.6	31.5	83.7	5.8	51.14
PX 3A96 W3FE	2582	1079	41.5	1.18	4.5	30.9	84.1	6.4	50.79
CG 9608 B3XF	2385	1079	45.4	1.26	4.4	32.3	84.3	6.9	51.15
DP 1845 B3XF	2475	1073	43.3	1.13	4.6	30.2	83.1	6.2	52.19
PHY 300 W3FE	2416	1069	44.1	1.16	4.2	31.6	82.7	6.3	51.12
ST 5115GLT	2567	1053	40.8	1.17	4.6	31.0	83.8	6.4	51.79
PX 3A99 W3FE	2439	1044	42.3	1.19	4.6	31.3	83.8	7.3	50.87
UA 222	2547	1043	40.7	1.15	4.8	31.7	84.0	7.1	50.50
DP 1639 B2XF	2341	1038	44.5	1.20	4.3	33.3	83.5	5.7	49.91
PHY 440 W3FE	2354	1030	43.2	1.18	4.9	30.6	83.9	7.5	51.98
DP 1614 B2XF	2302	1024	44.2	1.11	4.6	29.0	82.6	6.2	49.48
NG 3522 B2XF	2394	1022	42.3	1.12	4.7	32.8	84.0	7.2	50.43
PHY 450 W3FE	2400	1020	42.1	1.16	4.7	31.4	83.6	6.0	50.12
PX 5B76 W3FE	2426	1019	41.7	1.19	4.4	32.2	84.5	7.4	50.72
DP 1823 NRB2XF	2325	1017	43.5	1.24	4.5	30.4	84.0	6.6	51.48
DG 3605 B2XF	2345	1014	43.3	1.19	4.9	32.8	84.0	6.4	51.23
NG 4601 B2XF	2305	1005	43.5	1.18	4.3	31.6	83.9	5.9	50.12
BRS 335	2555	1002	39.0	1.19	4.4	32.4	83.2	6.1	51.86
ST 5517GLTP	2497	1001	40.0	1.14	4.6	30.3	83.2	6.6	51.97
ST 4949GLT	2213	996	44.8	1.21	4.5	31.3	83.2	6.3	50.60
CPS 17251NR B2XF	2239	981	43.8	1.18	4.5	32.5	83.9	7.2	51.59
DP 1851 B3XF	2210	978	43.7	1.13	4.5	31.5	82.9	5.7	51.63
BRS 286	2551	973	39.4	1.16	4.6	30.4	83.1	5.7	50.92
DP 1725 B2XF	2151	972	45.0	1.15	4.5	30.9	83.2	6.0	50.54
PX 5B73 W3FE	2265	969	42.4	1.20	4.5	32.7	84.1	6.6	51.38
ST 5020GLT	2354	966	41.0	1.14	4.8	31.9	83.4	5.0	50.58
AMX 1710 B2XF	2337	961	41.0	1.14	4.5	30.0	83.7	7.2	51.16
NG 3406 B2XF	2238	953	42.3	1.16	4.5	31.0	83.4	5.5	51.05
PX 2A28 W3FE	2255	939	41.5	1.17	4.3	29.8	83.5	6.1	50.94
DP 1518 B2XF	2283	929	40.7	1.16	4.7	31.2	83.8	7.6	50.93
DP 1522 B2XF	2187	927	42.1	1.15	4.6	33.2	84.1	7.3	50.57
PHY 490 W3FE	2152	920	42.4	1.12	4.8	31.0	82.5	6.2	51.18
HQ 210CT	2293	899	39.0	1.18	4.5	31.4	82.6	5.3	49.74
AMX 1715 B2XF	2130	847	39.8	1.16	4.3	31.8	83.8	6.0	51.06
PX 5A57 W3FE	1989	832	41.5	1.21	4.6	31.8	83.8	6.3	51.50
AMX 1711 B2XF	1967	820	42.3	1.18	4.7	32.7	84.1	6.8	51.63
CPS 17330 B2XF	1749	836	45.6	1.17	4.6	30.1	83.3	5.5	51.15
Overall Mean	2388	1025	42.8	1.17	4.6	31.3	83.6	6.4	51.01
LSD (0.05)	467	217	1.5	0.03	0.3	0.9	0.6	0.5	1.47
C.V. (%)	31.3	33.8	5.7	3.6	9.9	4.7	1.2	12.9	4.6

¹Lint 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, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	Ib/A	Ib/A	%	in		g/tex	%	%	¢/lb
PX 4A57 W3FE	2370	1134	47.8	1.06	5.2	30.1	82.3	8.1	45.69
PX 4A54 W3FE	2394	1097	45.9	1.12	5.2	30.4	84.2	7.5	49.59
PHY 440 W3FE	2115	966	45.7	1.16	5.0	34.6	83.4	6.5	51.12
ST 6182GLT	1994	957	48.0	1.11	5.2	29.1	83.8	6.4	46.90
PHY 480 W3FE	2079	951	45.7	1.09	5.3	30.1	83.4	8.5	46.14
PHY 444 WRF	2014	941	46.7	1.21	4.8	31.2	84.3	6.3	51.39
BRS 335	2234	934	41.8	1.14	4.7	31.1	83.8	6.2	49.65
DP 1555 B2RF	1934	908	47.0	1.13	5.2	31.3	83.0	6.7	48.73
UA 222	2081	908	43.6	1.12	5.2	30.4	83.5	8.7	46.64
DP 1845 B3XF	1971	895	45.4	1.22	4.9	32.2	83.7	8.0	50.84
CG 9608 B3XF	1847	886	48.1	1.13	5.1	28.2	83.2	5.8	47.28
DP 1646 B2XF	1886	884	46.9	1.21	5.0	29.1	83.8	7.4	47.49
NG 3522 B2XF	1945	883	45.4	1.05	5.0	26.3	81.8	6.6	46.02
PX 3A99 W3FE	1973	882	44.6	1.15	5.3	31.4	84.6	7.2	45.65
ST 5115GLT	2042	882	43.2	1.10	4.6	29.7	82.0	6.8	50.83
PX 3A96 W3FE	1997	871	43.6	1.14	5.2	30.5	84.2	6.9	48.00
PX 5B73 W3FE	1906	862	45.3	1.12	5.1	30.9	83.0	6.8	48.57
PHY 330 W3FE	1767	843	47.6	1.12	5.1	30.5	83.9	6.2	48.02
DG 3526 B2XF	1776	837	47.1	1.10	5.2	28.8	83.8	8.9	47.49
PHY 450 W3FE	1880	836	44.5	1.07	5.3	33.5	83.7	8.5	46.39
PX 5B76 W3FE	1847	829	44.8	1.11	5.3	30.5	82.9	6.6	46.00
PHY 300 W3FE	1776	827	46.5	1.08	5.0	30.2	83.2	6.7	48.07
PHY 312 WRF	1850	826	44.6	1.17	5.0	31.0	84.0	6.5	47.52
DP 1823 NRB2XF	1742	822	47.1	1.11	5.0	31.2	83.8	8.6	49.42
DP 1835 B3XF	1724	820	47.6	1.14	5.1	30.0	82.9	5.6	47.54
PHY 490 W3FE	1809	818	45.3	1.10	5.1	33.4	83.9	8.6	47.75
ST 4949GLT	1722	815	47.4	1.06	5.1	28.2	82.4	7.7	45.47
DG 3757 B2XF	1791	810	45.2	1.09	5.1	28.4	83.4	7.3	45.67
DP 1725 B2XF	1681	805	47.8	1.13	5.2	29.4	82.6	6.2	45.84
DP 1522 B2XF	1765	804	45.4	1.10	5.1	28.8	82.4	8.3	46.08
PX 2A28 W3FE	1767	793	44.9	1.12	5.2	30.1	82.9	5.7	48.19
PX 5A57 W3FE	1746	788	45.1	1.13	5.0	31.6	84.3	6.5	47.54
NG 3406 B2XF	1688	769	45.5	1.08	4.9	28.8	83.0	8.0	47.60
PHY 340 W3FE	1631	760	46.5	1.11	5.0	31.0	83.5	6.7	48.79
ST 5517GLTP	1724	744	43.2	1.13	4.8	31.8	83.1	6.6	51.17
CPS 17251NR B2XF	1608	740	45.8	1.19	5.0	30.5	84.0	7.3	50.39
NG 5007 B2XF	1634	734	45.0	1.11	5.0	27.5	83.3	7.3	47.55
DG 3605 B2XF	1579	729	46.0	1.18	4.9	28.4	83.6	7.6	48.00
DP 1851 B3XF	1579	725	45.9	1.14	4.7	31.5	83.7	8.0	49.29
NG 4601 B2XF	1599	725	45.3	1.14	5.5	31.8	82.9	7.0	45.12
HQ 210CT	1718	706	41.2	1.06	5.3	30.4	82.0	6.7	44.02
DP 1518 B2XF	1595	702	43.8	1.13	4.8	28.4	83.2	6.3	48.04
DP 1639 B2XF	1491	701	47.1	1.09	5.4	31.1	83.5	7.6	45.79
PX 3A82 W3FE	1521	693	45.7	1.09	5.0	32.0	84.3	7.9	47.59
AMX 1710 B2XF	1510	649	43.1	1.08	5.0	30.9	82.3	5.1	49.12
CPS 17330 B2XF	1325	628	47.5	1.13	5.3	31.1	83.0	8.2	47.77
AMX 1715 B2XF	1480	621	41.8	1.16	4.9	30.2	81.9	5.4	48.52
DP 1614 B2XF	1344	617	45.9	1.11	5.4	29.9	83.0	9.1	45.09
ST 5020GLT	1368	594	43.3	1.17	4.8	32.1	83.3	7.1	48.08
AMX 1711 B2XF	1283	583	45.4	1.20	5.0	31.5	83.3	7.0	48.94
BRS 286	1236	511	41.3	1.05	4.7	29.2	82.4	6.1	47.50
Overall Mean	1771	805	45.4	1.12	5.0	30.4	83.3	7.1	47.79
LSD (0.05)	470	215	1.2	0.04	0.3	1.6	1.1	0.6	3.0
C.V. (%)	18.6	18.7	1.9	2.7	3.9	3.7	0.9	6.0	4.6

¹Lint 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, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
DG 3526 B2XF	3452	1494	43.6	1.13	4.7	29.4	83.0	7.7	50.60
CPS 17251NR B2XF	3405	1450	42.2	1.23	4.5	31.0	83.6	6.6	52.98
ST 5115GLT	3478	1424	40.9	1.16	4.6	31.6	82.4	6.7	52.60
DP 1555 B2RF	3279	1402	42.5	1.19	4.9	31.1	83.4	7.1	51.64
PHY 480 W3FE	3306	1390	42.1	1.16	4.7	30.2	84.5	7.7	52.13
PHY 312 WRF	3305	1388	42.1	1.19	4.6	31.0	84.7	6.3	52.57
ST 6182GLT	2992	1357	45.4	1.18	4.7	29.3	83.1	6.2	52.39
DP 1639 B2XF	3091	1343	43.4	1.17	4.9	33.1	84.1	7.6	53.27
DP 1646 B2XF	3071	1333	43.3	1.26	4.8	29.6	83.7	7.2	51.74
DG 3757 B2XF	3029	1321	43.6	1.15	4.7	29.1	84.2	7.5	52.33
DP 1835 B3XF	3015	1310	43.6	1.20	4.7	30.0	83.1	5.1	51.83
CG 9608 B3XF	2906	1284	44.3	1.18	4.4	29.1	83.5	5.7	52.25
DP 1823 NRB2XF	2978	1276	42.8	1.22	4.5	31.6	84.2	7.4	52.83
DP 1845 B3XF	2974	1270	42.8	1.29	4.5	31.4	84.5	7.2	52.62
PX 5B76 W3FE	3098	1256	40.6	1.17	4.8	31.3	83.7	6.0	50.88
PX 3A82 W3FE	3022	1254	41.6	1.15	4.9	32.7	84.2	7.5	51.34
PX 4A57 W3FE	2819	1230	43.5	1.12	4.6	30.8	83.3	7.6	52.07
PHY 444 WRF	2922	1221	41.8	1.26	4.3	32.0	84.9	6.1	52.93
PX 3A99 W3FE	2927	1206	41.2	1.16	4.5	31.3	84.3	6.5	52.74
PHY 300 W3FE	2742	1200	43.8	1.13	4.7	30.0	82.9	6.4	51.03
DP 1725 B2XF	2686	1192	44.4	1.18	5.0	29.0	83.3	6.2	51.12
PHY 450 W3FE	2907	1182	40.6	1.14	4.9	32.6	83.7	7.7	51.47
PX 5B73 W3FE	2818	1178	41.9	1.16	4.8	30.3	82.8	6.9	51.97
PX 4A54 W3FE	2787	1176	42.2	1.16	4.9	31.3	83.9	6.8	51.70
ST 4949GLT	2596	1170	45.0	1.14	4.8	30.2	82.9	6.9	52.23
DP 1851 B3XF	2766	1157	41.8	1.19	4.4	32.6	83.8	7.5	53.13
ST 5517GLTP	2889	1155	39.8	1.18	5.0	32.4	82.2	6.2	51.02
PX 2A28 W3FE	2832	1154	40.6	1.18	4.7	32.1	83.5	5.6	52.10
PHY 490 W3FE	2803	1151	41.4	1.15	4.6	33.1	83.5	7.6	52.69
PHY 340 W3FE	2662	1140	42.8	1.18	4.5	31.1	83.9	6.3	51.43
PX 3A96 W3FE	2839	1134	39.9	1.19	4.5	30.5	83.8	6.7	52.30
AMX 1711 B2XF	2678	1133	41.8	1.21	4.5	30.1	82.8	6.0	52.57
NG 5007 B2XF	2713	1132	41.7	1.15	4.8	27.7	82.4	7.5	51.42
AMX 1715 B2XF	2804	1111	39.7	1.19	4.9	32.0	83.1	5.0	50.75
BRS 286	2712	1103	40.6	1.13	4.8	30.8	82.7	5.9	51.30
NG 4601 B2XF	2511	1096	43.7	1.18	5.1	32.7	83.7	6.9	50.47
NG 3522 B2XF	2588	1095	42.3	1.11	5.0	27.2	82.9	7.3	50.08
DG 3605 B2XF	2585	1093	42.3	1.24	4.7	30.5	83.3	6.8	52.32
PHY 330 W3FE	2563	1083	42.2	1.18	4.7	30.9	83.9	5.9	50.99
BRS 335	2726	1073	39.3	1.17	4.6	30.7	83.9	6.6	52.55
DP 1614 B2XF	2437	1067	43.8	1.18	5.0	30.0	83.8	8.1	50.84
CPS 17330 B2XF	2353	1066	45.3	1.19	4.6	32.6	83.6	6.6	52.87
DP 1522 B2XF	2501	1049	42.3	1.19	5.2	32.0	84.0	8.0	49.59
PHY 440 W3FE	2565	1048	40.9	1.24	4.2	32.0	83.9	6.0	52.89
ST 5020GLT	2614	1032	39.5	1.20	4.7	31.9	84.2	7.1	51.67
UA 222	2598	1027	39.5	1.21	4.8	32.5	83.6	7.9	52.19
AMX 1710 B2XF	2498	1017	40.7	1.15	5.3	31.9	82.7	4.8	48.83
PX 5A57 W3FE	2416	1004	41.6	1.15	4.6	32.5	84.0	6.9	52.35
NG 3406 B2XF	2305	959	41.5	1.13	5.0	29.7	83.8	8.1	49.84
HQ 210CT	2461	956	38.9	1.12	5.0	32.1	82.3	6.7	50.42
DP 1518 B2XF	2234	898	40.3	1.18	4.8	29.8	83.7	6.2	51.67
Overall Mean	2809	1181	42.0	1.18	4.7	31.0	83.5	6.8	51.75
LSD (0.05)	629	262	1.7	0.04	0.4	1.7	1.1	0.8	2.0
C.V. (%)	16.0	15.8	2.8	2.5	5.5	4.0	1.0	8.5	2.8

¹Lint 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 furrow-irrigated Tensas silty clay loam on Michael Thompson Farms near Eden, Mississippi, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
DG 3757 B2XF	2990	1347	44.2	1.14	4.8	28.7	83.2	7.2	52.72
PHY 340 W3FE	2746	1273	46.1	1.13	4.7	28.8	82.7	5.8	51.93
NG 3522 B2XF	2806	1269	44.2	1.09	4.7	27.2	81.9	6.7	50.69
DP 1522 B2XF	2856	1266	44.3	1.15	5.1	29.7	83.4	8.7	51.55
PHY 480 W3FE	2824	1248	44.2	1.12	4.7	29.6	83.5	8.1	52.30
DP 1614 B2XF	2742	1230	44.9	1.16	5.1	29.2	83.6	7.5	50.67
DP 1646 B2XF	2733	1214	44.1	1.27	4.6	30.0	83.6	6.8	53.28
DP 1725 B2XF	2565	1205	46.8	1.14	4.8	29.2	82.4	5.7	52.73
DP 1555 B2RF	2653	1195	44.8	1.19	4.7	30.5	83.9	6.2	53.17
ST 5115GLT	2818	1188	41.9	1.15	4.5	29.4	82.5	6.7	52.85
ST 4949GLT	2526	1184	46.9	1.12	4.9	28.2	82.8	7.3	50.88
PX 3A82 W3FE	2578	1175	45.4	1.09	4.7	29.7	83.3	7.7	51.00
NG 5007 B2XF	2648	1166	43.8	1.10	4.7	27.0	82.8	7.2	51.60
PX 2A28 W3FE	2608	1147	43.9	1.13	4.9	29.6	82.0	5.8	51.42
AMX 1715 B2XF	2861	1145	40.2	1.22	4.7	30.6	82.6	5.7	52.83
PHY 440 W3FE	2578	1138	44.1	1.20	4.3	31.1	83.7	5.8	53.52
DP 1518 B2XF	2526	1129	45.0	1.14	4.7	27.7	82.3	6.6	52.63
PX 4A54 W3FE	2530	1128	44.6	1.11	4.8	30.3	83.2	7.1	51.97
PHY 312 WRF	2586	1125	43.4	1.15	4.7	29.1	84.0	6.0	52.72
CG 9608 B3XF	2461	1125	45.6	1.16	4.5	28.9	83.1	5.8	52.80
DP 1835 B3XF	2457	1120	45.4	1.18	4.5	29.7	83.6	5.4	53.17
PX 3A99 W3FE	2506	1115	44.4	1.14	4.9	29.2	83.2	6.4	51.57
ST 5020GLT	2625	1108	42.2	1.23	4.6	31.8	83.6	6.9	53.05
AMX 1710 B2XF	2593	1103	42.4	1.13	5.0	30.2	82.9	5.0	51.69
ST 5517GLTP	2699	1101	40.6	1.18	4.5	30.7	82.7	6.6	53.29
NG 3406 B2XF	2528	1100	43.3	1.13	4.8	28.5	83.5	7.5	52.39
PX 4A57 W3FE	2396	1098	45.8	1.08	4.7	29.8	83.4	7.2	50.47
PX 5A57 W3FE	2560	1090	42.5	1.13	4.4	29.4	83.5	6.1	52.97
PHY 444 WRF	2450	1086	44.1	1.27	4.1	30.3	84.8	6.1	53.37
DP 1845 B3XF	2463	1064	43.1	1.24	4.2	31.6	83.1	7.3	53.39
PHY 300 W3FE	2353	1064	45.1	1.13	4.8	29.0	83.4	6.1	52.37
PHY 330 W3FE	2310	1043	44.9	1.15	4.7	29.5	83.2	5.5	52.84
CPS 17251NR B2XF	2275	1042	45.5	1.18	4.7	28.4	82.0	6.8	52.54
PHY 450 W3FE	2308	1029	44.5	1.10	4.9	32.2	83.9	7.6	51.34
NG 4601 B2XF	2327	1018	43.5	1.18	4.7	32.2	83.8	6.8	52.47
DP 1823 NRB2XF	2323	1018	43.7	1.19	4.4	31.4	84.2	7.3	53.07
PHY 490 W3FE	2295	1013	44.1	1.13	4.7	31.9	83.4	7.5	52.53
UA 222	2414	1008	41.8	1.18	4.7	31.3	83.6	8.1	53.09
DP 1851 B3XF	2372	995	41.8	1.21	4.2	32.8	84.0	6.8	53.34
ST 6182GLT	2146	994	46.1	1.12	4.8	28.2	82.9	6.3	52.29
PX 3A96 W3FE	2163	958	44.0	1.13	4.8	28.7	83.3	6.3	52.68
DP 1639 B2XF	2094	939	44.7	1.12	5.1	31.3	83.7	7.4	50.75
DG 3605 B2XF	2150	928	43.1	1.25	4.5	28.7	83.0	6.5	52.67
AMX 1711 B2XF	2094	904	43.0	1.21	4.7	29.9	83.4	6.3	53.22
BRS 335	2150	888	41.1	1.15	4.7	30.3	82.8	6.0	53.03
DG 3526 B2XF	2009	886	43.9	1.12	4.8	29.0	82.8	8.8	52.20
HQ 210CT	2133	874	40.5	1.11	5.1	30.4	81.7	6.3	49.87
CPS 17330 B2XF	1893	867	45.7	1.13	4.9	31.7	83.9	6.9	52.72
PX 5B73 W3FE	1997	857	42.8	1.14	4.6	28.4	82.8	5.9	52.53
PX 5B76 W3FE	1886	789	41.7	1.11	4.7	29.0	82.1	5.8	51.87
BRS 286	1763	722	40.4	1.10	4.8	30.4	82.0	5.9	51.14
Overall Mean	2439	1070	43.8	1.15	4.7	29.9	83.1	6.7	52.30
LSD (0.05)	613	284	1.8	0.04	0.3	1.6	1.1	0.6	1.4
C.V. (%)	17.9	18.8	2.9	2.2	4.0	3.8	0.9	6.5	1.9

¹Lint 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 McLaurin fine sandy loam at Stringfellow Farms near Lucedale, Mississippi, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	Ib/A	Ib/A	%	in		g/tex	%	%	c/lb
DP 1555 B2RF	2662	1109	41.8	1.20	4.9	33.4	84.1	6.0	51.19
DG 3757 B2XF	2580	1076	41.7	1.16	4.9	31.7	83.3	6.8	51.00
DP 1646 B2XF	2461	1030	41.9	1.27	4.9	30.7	84.0	6.5	51.65
DP 1845 B3XF	2552	1027	40.2	1.28	4.5	33.1	84.5	6.8	51.65
DP 1823 NRB2XF	2512	1017	40.3	1.21	4.6	33.3	85.2	7.3	51.79
DG 3526 B2XF	2301	967	42.0	1.13	4.9	31.1	83.3	7.9	50.69
PHY 480 W3FE	2383	959	40.1	1.16	4.9	32.5	84.0	7.0	51.18
PX 3A82 W3FE	2299	949	41.2	1.13	5.1	32.8	84.2	6.8	49.08
DG 3605 B2XF	2308	944	40.9	1.27	4.8	31.5	84.3	6.1	51.65
DP 1835 B3XF	2178	923	42.3	1.20	4.9	32.4	83.5	4.7	51.83
PX 4A57 W3FE	2204	919	41.7	1.11	4.9	32.0	83.3	6.7	50.39
ST 6182GLT	2018	901	44.6	1.16	4.9	31.1	83.6	6.3	51.00
PX 4A54 W3FE	2176	891	40.9	1.14	5.1	33.2	83.8	6.0	49.67
PHY 300 W3FE	2115	888	42.1	1.14	4.8	30.8	83.5	6.0	50.85
CG 9608 B3XF	2018	871	43.0	1.17	5.0	31.2	83.3	5.0	50.57
PHY 444 WRF	2163	861	39.6	1.28	4.5	32.9	85.2	5.4	51.65
CPS 17251NR B2XF	2035	859	42.3	1.19	5.0	32.9	82.2	6.1	50.59
NG 4601 B2XF	2096	856	40.7	1.21	5.0	34.1	84.4	6.2	51.12
DP 1639 B2XF	2044	856	41.9	1.13	5.2	32.8	82.9	7.3	48.65
BRS 335	2215	828	37.4	1.18	4.8	33.5	83.8	5.5	51.77
PHY 330 W3FE	1919	800	41.5	1.16	4.9	32.7	83.8	5.2	50.68
BRS 286	2053	781	37.8	1.12	4.9	32.9	82.2	5.2	50.43
PX 3A96 W3FE	1994	772	38.7	1.17	4.7	31.7	84.0	6.3	51.44
PHY 340 W3FE	1845	763	41.1	1.16	4.7	31.2	83.4	5.5	51.58
DP 1614 B2XF	1837	758	41.1	1.20	5.3	32.1	84.6	7.0	48.37
ST 5517GLTP	2022	755	37.3	1.19	4.8	33.7	83.1	5.8	51.63
PHY 312 WRF	1884	746	39.6	1.19	5.0	32.9	83.5	5.9	50.07
PX 5B76 W3FE	1893	738	39.0	1.16	4.8	32.2	83.5	5.9	51.53
ST 5115GLT	1882	721	38.3	1.15	4.8	33.5	82.0	6.3	51.82
NG 5007 B2XF	1789	719	40.5	1.17	4.8	29.5	83.1	6.8	51.12
PX 5B73 W3FE	1830	712	39.0	1.14	4.7	30.8	82.5	6.1	51.02
ST 4949GLT	1638	707	43.0	1.14	4.9	32.1	83.4	6.0	51.25
PHY 450 W3FE	1787	701	39.2	1.12	5.0	34.1	83.2	6.5	49.15
AMX 1711 B2XF	1780	695	38.9	1.21	4.9	32.7	84.1	6.2	51.39
ST 5020GLT	1742	681	39.2	1.18	5.0	33.3	83.7	6.2	50.15
NG 3522 B2XF	1731	672	38.9	1.14	4.9	30.7	82.2	6.4	51.44
DP 1725 B2XF	1580	668	42.3	1.17	4.9	31.6	83.1	5.4	51.44
DP 1851 B3XF	1644	658	40.0	1.17	4.7	34.8	82.7	6.8	51.60
UA 222	1662	647	38.7	1.21	5.0	32.0	84.0	7.3	50.54
PHY 490 W3FE	1592	629	39.6	1.15	4.9	34.4	83.9	6.9	51.55
NG 3406 B2XF	1612	626	38.7	1.16	4.8	31.0	83.8	6.9	51.42
AMX 1710 B2XF	1595	622	39.0	1.14	5.0	32.1	83.2	4.5	50.22
DP 1522 B2XF	1603	621	38.8	1.17	5.0	32.5	83.7	7.4	49.85
PX 2A28 W3FE	1595	615	38.6	1.17	4.7	31.0	82.9	5.6	51.10
PX 3A99 W3FE	1543	610	39.6	1.14	5.0	31.1	82.7	6.4	50.68
PHY 440 W3FE	1525	603	39.4	1.19	4.4	33.7	82.9	5.2	51.82
AMX 1715 B2XF	1543	586	38.0	1.20	4.9	32.3	82.7	4.8	51.05
CPS 17330 B2XF	1337	570	42.6	1.17	5.2	34.2	84.1	6.8	49.30
HQ 210CT	1491	556	37.4	1.11	5.1	31.2	81.7	5.9	48.68
PX 5A57 W3FE	1404	537	38.2	1.18	4.5	33.5	84.0	6.1	51.80
DP 1518 B2XF	1335	529	38.8	1.19	4.7	31.1	84.1	5.7	51.84
Overall Mean	1922	775	40.2	1.17	4.9	32.3	83.5	6.2	50.86
LSD (0.05)	532	217	1.4	0.03	0.3	1.7	1.3	0.6	1.50
C.V. (%)	19.4	19.6	2.5	2.0	3.8	3.8	1.1	7.4	2.1

¹Lint 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 nonirrigated Falaya silt loam at Pace Farms near Senatobia, Mississippi, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	Ib/A	Ib/A	%	in		g/tex	%	%	c/lb
DP 1614 B2XF	2808	1243	44.1	1.21	4.9	30.6	83.8	6.4	50.34
PX 4A54 W3FE	2753	1202	43.7	1.17	4.5	31.0	83.4	6.5	52.07
PX 3A99 W3FE	2797	1145	41.0	1.19	4.2	30.7	83.4	5.6	52.29
DG 3526 B2XF	2684	1145	42.4	1.17	4.5	31.1	84.3	7.6	49.52
DP 1518 B2XF	2824	1131	40.0	1.21	4.1	28.9	83.1	5.4	50.12
PX 3A82 W3FE	2618	1108	42.2	1.14	4.2	32.3	84.1	6.7	51.99
NG 5007 B2XF	2649	1102	41.6	1.18	4.4	30.5	83.3	6.3	50.23
PHY 312 WRF	2722	1099	40.4	1.23	4.1	32.6	85.0	5.5	49.92
DP 1646 B2XF	2610	1098	42.0	1.28	4.2	30.3	83.8	5.5	51.29
PX 4A57 W3FE	2484	1097	43.9	1.13	4.3	31.8	83.9	5.9	50.69
PX 3A96 W3FE	2652	1067	40.2	1.22	4.1	31.3	83.9	5.5	48.72
DP 1823 NRB2XF	2517	1066	42.3	1.24	4.1	32.7	84.9	6.5	51.67
PHY 480 W3FE	2553	1064	41.6	1.18	4.4	31.5	83.7	6.6	52.27
PHY 340 W3FE	2464	1053	42.7	1.19	4.1	31.9	83.9	5.5	51.39
ST 5020GLT	2600	1042	40.1	1.25	4.4	33.3	84.8	5.7	49.82
AMX 1710 B2XF	2619	1025	39.2	1.20	4.6	33.3	83.3	4.3	52.34
UA 222	2550	1025	40.2	1.22	4.7	32.4	83.2	6.5	50.48
CG 9608 B3XF	2302	1023	44.4	1.19	4.3	30.5	82.6	4.9	52.04
ST 5517GLTP	2526	1000	39.5	1.20	4.3	33.4	83.0	5.6	51.42
CPS 17251NR B2XF	2370	992	41.8	1.25	4.2	31.4	83.4	5.8	52.27
ST 5115GLT	2472	988	39.9	1.17	4.3	32.2	82.2	5.9	51.28
PHY 444 WRF	2360	973	41.3	1.28	3.9	31.9	85.8	5.0	52.62
DP 1725 B2XF	2184	965	44.2	1.18	4.5	30.6	83.4	4.8	51.19
AMX 1715 B2XF	2481	965	38.9	1.22	4.5	31.0	83.2	4.6	50.29
NG 4601 B2XF	2243	961	42.8	1.21	4.6	33.2	84.2	5.4	49.72
PHY 300 W3FE	2259	953	42.1	1.14	4.1	29.1	82.2	5.6	51.82
NG 3522 B2XF	2326	949	40.2	1.13	4.3	29.0	82.1	5.4	50.34
DP 1835 B3XF	2141	941	43.8	1.22	4.4	30.0	83.2	4.4	51.18
DP 1639 B2XF	2183	939	43.0	1.19	4.7	32.7	84.5	6.1	50.64
PHY 490 W3FE	2262	937	41.2	1.19	4.1	32.9	84.3	6.2	51.57
ST 4949GLT	2110	936	44.4	1.13	4.4	30.5	82.7	6.1	50.94
PHY 440 W3FE	2211	924	41.8	1.21	3.9	33.0	82.8	4.9	52.39
PHY 330 W3FE	2120	913	42.8	1.18	4.1	31.1	83.6	5.0	51.32
PX 2A28 W3FE	2234	912	40.8	1.20	4.3	32.2	84.0	4.6	51.49
ST 6182GLT	2044	906	44.2	1.15	4.5	30.5	83.2	5.4	51.92
DP 1555 B2RF	2082	903	43.4	1.20	4.5	32.7	84.7	5.3	52.42
DG 3605 B2XF	2144	884	41.3	1.28	4.1	30.7	84.0	5.9	50.42
PHY 450 W3FE	2125	871	40.9	1.15	4.4	32.6	84.4	6.1	52.22
NG 3406 B2XF	2101	859	40.7	1.17	4.4	30.2	83.6	6.5	51.24
BRS 286	2212	845	38.1	1.15	4.4	32.3	82.7	5.1	51.88
DP 1851 B3XF	2010	836	41.6	1.21	4.2	33.4	84.1	6.4	50.67
PX 5B76 W3FE	2069	814	39.3	1.18	4.2	31.4	83.6	4.9	50.54
AMX 1711 B2XF	1915	784	40.9	1.25	4.4	31.8	83.2	5.3	51.50
HQ 210CT	2091	781	37.4	1.13	4.7	32.1	82.5	5.6	51.12
BRS 335	2052	764	37.1	1.19	4.1	32.3	83.6	5.2	52.37
DG 3757 B2XF	1824	762	41.7	1.18	4.5	31.3	84.5	6.6	51.47
DP 1845 B3XF	1766	755	42.8	1.28	4.1	31.7	84.2	6.3	52.49
PX 5B73 W3FE	1827	729	40.0	1.17	4.1	30.9	83.0	5.1	51.22
PX 5A57 W3FE	1767	706	39.9	1.18	3.9	33.3	83.6	5.5	52.39
CPS 17330 B2XF	1563	695	44.3	1.21	4.5	33.3	84.7	6.0	51.59
DP 1522 B2XF	1303	531	40.8	1.19	4.5	31.8	84.6	6.7	51.49
Overall Mean	2286	949	41.5	1.19	4.3	31.6	83.7	5.7	51.26
LSD (0.05)	459	197	1.3	0.04	0.2	1.6	1.4	0.5	2.04
C.V. (%)	14.1	14.6	2.2	2.1	3.9	3.6	1.2	6.4	2.9

¹Lint 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 Marietta fine sandy loam at the MSU Plant Science Research Center near Starkville, Mississippi, 2017.¹

Variety	Seed cotton yield lb/A	Lint yield lb/A	Lint %	Length in	Micronaire	Strength g/tex	Uniform. %	Elongation %	Loan value c/lb
PHY 444 WRF	3402	1454	42.7	1.22	4.2	31.7	84.9	6.0	53.17
DG 3526 B2XF	3294	1432	43.4	1.19	4.1	29.0	84.6	6.7	52.75
CG 9608 B3XF	3059	1352	44.1	1.21	4.1	30.6	83.8	6.1	53.34
PHY 340 W3FE	2905	1280	44.1	1.24	4.1	32.0	83.7	6.7	52.64
NG 5007 B2XF	2995	1259	42.0	1.21	4.3	30.0	83.0	6.7	52.97
PHY 440 W3FE	2878	1241	42.4	1.23	3.8	31.1	84.1	5.7	51.43
DP 1835 B3XF	2774	1232	44.2	1.21	4.3	30.6	83.2	6.3	53.03
PHY 330 W3FE	2783	1219	43.8	1.19	4.3	32.2	83.9	6.3	52.94
PHY 312 WRF	2932	1203	41.1	1.17	3.8	29.8	83.1	6.7	50.75
ST 6182GLT	2615	1198	45.7	1.15	4.4	29.2	82.7	6.7	52.14
ST 5115GLT	2965	1190	40.1	1.19	3.7	31.4	83.8	6.5	51.68
PX 5B76 W3FE	2890	1177	40.6	1.20	4.3	31.3	84.4	6.8	52.64
DP 1639 B2XF	2700	1167	43.2	1.21	4.1	31.1	84.6	6.6	52.84
PHY 300 W3FE	2692	1160	43.1	1.19	4.1	30.9	84.2	6.5	52.84
NG 3406 B2XF	2726	1155	42.4	1.19	4.0	29.7	83.7	6.7	52.74
DP 1845 B3XF	2701	1143	42.3	1.25	4.2	32.1	84.4	5.8	52.74
BRS 286	2928	1142	39.0	1.19	4.2	32.2	83.9	5.7	52.73
NG 4601 B2XF	2636	1139	43.2	1.19	4.3	30.6	84.0	6.2	53.24
DG 3757 B2XF	2653	1135	42.8	1.18	4.2	30.0	83.7	6.2	53.17
ST 5517GLTP	2842	1114	39.1	1.21	4.2	31.0	83.0	6.3	52.18
DP 1555 B2RF	2512	1089	43.3	1.17	4.1	30.8	83.4	6.1	52.80
PX 5B73 W3FE	2568	1086	42.2	1.19	4.3	31.7	83.3	5.8	53.09
NG 3522 B2XF	2569	1084	42.1	1.14	4.2	30.1	83.2	6.4	52.59
DG 3605 B2XF	2521	1080	42.9	1.26	4.4	31.3	84.8	6.4	53.17
DP 1725 B2XF	2410	1062	43.9	1.20	3.8	29.9	83.3	6.2	52.37
PX 3A96 W3FE	2575	1053	40.7	1.17	3.9	29.9	84.0	6.5	52.74
PX 4A57 W3FE	2424	1053	43.3	1.16	4.0	30.4	83.9	6.6	52.74
AMX 1710 B2XF	2573	1033	40.0	1.19	4.3	31.6	84.5	6.2	53.12
PX 4A54 W3FE	2616	1022	38.8	1.19	3.9	31.5	83.8	6.2	53.22
ST 5020GLT	2523	1014	40.3	1.20	4.0	32.4	84.2	7.5	52.09
DP 1646 B2XF	2298	1007	43.8	1.21	4.3	30.0	83.7	5.8	52.92
HQ 210CT	2623	1005	38.3	1.17	4.1	30.6	83.2	6.3	52.72
PX 2A28 W3FE	2557	1004	39.1	1.16	3.7	30.4	84.0	6.1	51.19
ST 4949GLT	2334	1003	42.7	1.22	3.8	30.1	83.5	6.4	52.39
UA 222	2551	1002	39.3	1.21	3.8	31.5	84.5	6.5	52.20
AMX 1711 B2XF	2427	995	40.6	1.19	4.1	31.5	84.2	6.0	52.90
DP 1614 B2XF	2269	995	43.7	1.20	4.1	29.6	83.6	6.7	52.77
AMX 1715 B2XF	2459	975	39.5	1.18	3.9	32.1	83.1	6.4	52.82
PHY 480 W3FE	2409	973	40.3	1.22	3.9	30.3	83.3	6.2	52.19
DP 1823 NRB2XF	2245	970	41.6	1.20	4.2	31.5	83.8	6.6	51.53
PX 5A57 W3FE	2368	968	40.7	1.16	4.1	29.7	82.5	6.0	52.59
BRS 335	2534	965	38.0	1.20	4.0	30.6	83.7	6.3	52.64
PHY 450 W3FE	2290	954	41.7	1.14	3.9	30.4	83.8	6.3	52.52
DP 1522 B2XF	2230	927	41.6	1.20	4.1	32.2	83.7	7.3	52.75
PX 3A82 W3FE	2199	905	41.9	1.19	4.0	30.1	83.9	6.3	52.04
CPS 17251NR B2XF	2089	892	42.7	1.21	3.8	30.5	82.6	5.9	52.29
PX 3A99 W3FE	2156	888	41.0	1.18	3.9	29.8	83.3	6.2	52.57
CPS 17330 B2XF	1826	832	45.5	1.22	4.1	32.3	83.9	5.9	53.34
DP 1518 B2XF	2114	809	38.3	1.19	3.8	31.3	83.9	6.9	52.40
DP 1851 B3XF	1861	805	43.9	1.20	4.4	30.9	84.4	6.9	53.14
PHY 490 W3FE	1828	741	40.7	1.17	4.2	32.1	83.8	6.4	52.82
Overall Mean	2555	1070	41.8	1.19	4.1	30.8	83.8	6.3	52.6
LSD (0.05)	545	247	2.2	0.06	0.5	2.1	1.3	1.2	1.5
C.V. (%)	15.0	16.2	3.8	3.7	8.9	5.0	1.1	13.9	2.0

¹Lint 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 an irrigated Bosket very fine sandy loam at the Delta Research and Extension Center near Stoneville, Mississippi, 2017.¹

Variety	Seed cotton yield <i>lb/A</i>	Lint yield <i>lb/A</i>	Lint %	Length <i>in</i>	Micronaire	Strength <i>g/tex</i>	Uniform.	Elongation	Loan value <i>¢/lb</i>
DG 3526 B2XF	4074	1801	44.2	1.18	4.5	30.6	84.6	7.6	53.47
PHY 312 WRF	4237	1791	42.3	1.24	4.5	30.7	84.7	6.1	53.17
ST 6182GLT	3842	1764	45.9	1.18	4.4	30.1	84.2	6.0	53.17
PHY 340 W3FE	3783	1672	44.2	1.23	4.3	31.1	85.0	5.6	53.27
AMX 1710 B2XF	4026	1668	41.4	1.19	4.9	34.0	83.7	4.7	51.97
PX 3A99 W3FE	3943	1666	42.2	1.22	4.2	31.3	84.5	6.2	53.47
PX 5B76 W3FE	3893	1635	42.0	1.21	4.5	31.7	85.3	5.7	53.52
PX 3A82 W3FE	3860	1626	42.1	1.20	4.5	32.7	85.6	7.0	53.49
ST 5115GLT	3933	1620	41.2	1.16	4.1	30.8	83.4	6.6	53.57
ST 5020GLT	3938	1617	41.0	1.26	4.2	32.9	85.0	6.5	53.64
NG 3406 B2XF	3758	1606	42.7	1.18	4.8	31.8	84.7	7.4	53.12
DP 1646 B2XF	3530	1573	44.5	1.30	4.5	30.4	84.0	7.2	53.24
DP 1614 B2XF	3554	1571	44.2	1.24	4.7	31.5	84.7	6.7	52.00
DP 1522 B2XF	3700	1570	42.4	1.21	4.7	32.2	85.1	7.7	53.69
PX 5B73 W3FE	3706	1564	42.1	1.20	4.3	29.9	84.4	6.0	53.17
DG 3757 B2XF	3648	1561	42.8	1.17	4.4	30.0	83.7	7.0	53.34
CPS 17251NR B2XF	3544	1560	44.0	1.26	4.6	30.8	84.5	6.4	53.34
NG 5007 B2XF	3755	1554	41.4	1.20	4.3	29.9	83.4	6.9	53.09
DP 1823 NRB2XF	3597	1533	42.6	1.25	4.0	32.6	84.7	7.1	53.54
PHY 300 W3FE	3463	1532	44.6	1.22	4.4	32.0	84.3	6.1	53.64
NG 3522 B2XF	3555	1530	43.0	1.17	4.8	29.8	85.0	6.3	52.52
DG 3605 B2XF	3631	1527	42.0	1.32	4.2	31.5	84.4	6.0	53.52
UA 222	3772	1524	40.4	1.24	4.5	30.7	84.2	7.9	53.14
DP 1639 B2XF	3459	1511	43.7	1.19	4.7	33.7	85.3	7.3	53.79
ST 4949GLT	3376	1495	44.2	1.18	4.7	31.1	84.2	6.6	53.17
PHY 444 WRF	3613	1495	41.3	1.28	4.2	31.9	84.9	5.4	53.49
ST 5517GLTP	3699	1493	40.4	1.19	4.3	32.0	82.5	6.6	53.48
AMX 1715 B2XF	3859	1487	38.5	1.24	4.6	32.6	83.1	5.3	52.87
PX 4A57 W3FE	3338	1474	44.2	1.17	4.1	32.1	84.4	6.7	53.64
DP 1851 B3XF	3383	1442	42.6	1.23	4.2	34.0	84.5	7.0	53.64
PHY 480 W3FE	3278	1442	43.9	1.22	4.3	31.5	85.1	7.1	53.72
PHY 490 W3FE	3508	1438	41.1	1.20	4.2	34.4	84.6	7.0	53.39
NG 4601 B2XF	3351	1429	42.5	1.23	4.4	32.7	84.5	6.7	53.54
DP 1845 B3XF	3462	1428	41.1	1.35	3.7	31.3	84.9	6.2	52.80
DP 1725 B2XF	3207	1428	44.5	1.22	4.2	31.0	83.8	5.2	53.44
PX 3A96 W3FE	3532	1426	40.5	1.23	4.3	31.1	84.8	6.5	53.37
BRS 286	3529	1389	40.7	1.17	4.4	32.2	83.9	5.5	53.19
DP 1555 B2RF	3109	1386	44.6	1.21	4.6	32.5	84.3	6.2	53.67
DP 1518 B2XF	3405	1382	40.5	1.22	4.1	29.3	84.4	5.8	53.12
CPS 17330 B2XF	2990	1379	46.0	1.24	4.4	34.3	84.9	6.4	53.79
PHY 440 W3FE	3266	1366	41.8	1.24	4.0	33.6	83.6	5.5	53.74
PX 4A54 W3FE	3069	1332	43.4	1.19	4.7	33.0	85.4	6.8	53.59
PHY 450 W3FE	3108	1283	41.2	1.21	4.4	34.1	84.9	6.7	53.57
CG 9608 B3XF	2858	1269	44.4	1.22	4.1	30.2	84.3	5.0	53.47
BRS 335	3241	1262	39.0	1.23	4.1	31.3	84.8	5.8	53.37
PHY 330 W3FE	2877	1257	44.1	1.22	4.4	30.0	84.9	6.2	53.14
PX 2A28 W3FE	3096	1255	40.5	1.22	4.0	32.5	84.2	5.8	53.57
PX 5A57 W3FE	2949	1228	41.5	1.21	4.1	31.4	84.6	5.9	53.67
DP 1835 B3XF	2802	1223	43.6	1.24	4.0	31.1	84.2	4.7	53.52
AMX 1711 B2XF	2935	1212	41.4	1.26	4.0	30.1	84.3	6.0	52.92
HQ 210CT	2911	1137	39.1	1.19	4.3	33.2	83.9	5.9	53.71
Overall Mean	3489	1479	42.4	1.22	4.3	31.7	84.4	6.3	53.34
LSD (0.05)	627	286	1.6	0.4	0.4	1.4	1.0	0.7	0.8
C.V. (%)	12.5	13.5	2.6	2.1	6.8	3.2	0.8	7.5	1.0

¹Lint 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 a furrow-irrigated Keyespoint silty clay at Pace Perry Farms near Tunica, Mississippi, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	<i>lb/A</i>	<i>lb/A</i>	%	<i>in</i>		<i>g/tex</i>	%	%	<i>¢/lb</i>
DP 1518 B2XF	2706	1169	43.2	1.17	4.7	28.2	83.6	5.8	48.22
PHY 444 WRF	2599	1133	43.6	1.22	4.4	31.2	83.8	5.9	52.42
PHY 312 WRF	2625	1133	43.1	1.18	4.5	30.3	83.8	6.2	48.53
DP 1646 B2XF	2559	1132	44.3	1.26	4.6	29.5	84.0	7.1	47.69
PX 3A82 W3FE	2530	1087	42.9	1.14	4.7	32.4	84.5	7.6	49.65
PHY 300 W3FE	2386	1065	44.7	1.14	4.6	29.8	82.7	6.4	49.27
DP 1555 B2RF	2363	1060	44.4	1.21	4.5	32.2	83.9	6.2	50.54
PX 4A54 W3FE	2381	1058	44.5	1.18	4.8	31.9	83.9	6.7	51.28
NG 3522 B2XF	2410	1046	43.3	1.12	4.7	27.3	81.8	6.4	49.12
PHY 330 W3FE	2275	1019	44.5	1.16	4.8	30.3	83.5	6.1	49.12
PHY 440 W3FE	2326	1010	43.8	1.19	4.6	31.1	83.4	6.6	52.29
PX 4A57 W3FE	2241	1006	44.8	1.10	4.7	29.2	83.4	6.7	47.53
PX 3A99 W3FE	2324	992	42.7	1.18	4.7	30.5	83.2	6.2	48.43
DP 1614 B2XF	2123	985	46.4	1.17	5.1	28.5	83.8	7.7	46.02
DP 1725 B2XF	2138	985	46.0	1.18	4.8	29.4	82.2	5.5	48.25
UA 222	2372	984	41.5	1.21	4.7	30.5	84.1	7.3	48.57
ST 4949GLT	2126	979	45.8	1.17	4.7	29.3	82.7	6.7	47.70
NG 3406 B2XF	2187	957	43.7	1.15	4.7	29.2	83.7	7.6	50.04
DP 1823 NRB2XF	2209	955	43.1	1.19	4.5	31.9	84.8	7.1	48.82
DP 1522 B2XF	2207	955	43.2	1.16	4.9	30.2	83.4	7.6	49.05
PHY 480 W3FE	2250	946	42.2	1.19	4.5	29.5	84.5	6.6	51.09
DG 3605 B2XF	2216	938	42.3	1.30	4.4	30.2	84.5	6.2	48.42
ST 5115GLT	2186	931	42.6	1.16	4.6	30.1	83.4	6.7	50.98
AMX 1710 B2XF	2210	918	41.5	1.18	5.0	32.2	83.3	5.6	48.94
PHY 490 W3FE	2096	916	43.7	1.16	4.8	32.9	84.0	7.7	48.79
PX 3A96 W3FE	2166	913	42.1	1.17	4.8	30.0	83.6	6.6	48.67
PHY 340 W3FE	1985	906	45.6	1.18	4.6	31.4	83.9	5.9	48.49
DP 1845 B3XF	2040	886	43.1	1.24	4.4	30.8	83.7	7.2	50.37
CG 9608 B3XF	1933	883	45.6	1.22	4.5	29.6	83.9	5.8	49.12
DP 1835 B3XF	1928	877	45.5	1.18	4.7	28.2	82.3	5.6	49.88
ST 5517GLTP	2126	872	41.0	1.19	4.5	32.7	82.6	6.6	51.29
PHY 450 W3FE	2036	871	42.7	1.14	5.0	32.5	84.7	7.4	50.24
ST 6182GLT	1871	869	46.5	1.20	4.6	29.8	82.8	6.4	48.25
AMX 1715 B2XF	2155	863	40.0	1.24	4.7	29.6	83.0	6.6	47.80
HQ 210CT	2176	859	39.4	1.15	4.8	30.4	82.7	5.7	48.28
PX 5B76 W3FE	2091	856	40.9	1.18	4.6	31.3	83.9	6.1	48.65
DP 1639 B2XF	1904	855	44.8	1.16	4.7	30.2	83.5	6.6	47.35
ST 5020GLT	2056	851	41.4	1.21	4.8	32.6	84.5	6.3	48.84
DG 3526 B2XF	1869	843	45.2	1.14	4.8	29.2	83.2	8.4	48.23
DP 1851 B3XF	1932	826	42.7	1.21	4.4	31.7	83.7	6.6	51.39
NG 5007 B2XF	1899	805	42.4	1.19	4.5	29.0	83.5	7.2	49.22
AMX 1711 B2XF	1868	795	42.4	1.25	4.5	30.7	83.5	6.3	50.30
BRS 286	1940	778	40.1	1.17	4.6	32.0	82.6	5.9	48.72
PX 5B73 W3FE	1837	778	42.3	1.15	4.7	30.1	83.5	6.4	48.37
PX 2A28 W3FE	1825	768	42.0	1.19	4.6	30.5	84.1	5.7	48.52
NG 4601 B2XF	1675	749	44.7	1.18	4.8	31.5	84.1	6.4	49.07
PX 5A57 W3FE	1776	744	41.8	1.18	4.5	32.1	84.7	6.2	52.39
BRS 335	1796	722	40.1	1.21	4.4	32.0	84.8	6.5	49.69
DG 3757 B2XF	1537	669	43.5	1.15	4.8	30.7	84.4	6.8	50.17
CPS 17251NR B2XF	1480	658	44.5	1.19	4.7	29.7	83.4	6.3	49.28
CPS 17330 B2XF	1311	592	45.2	1.18	4.8	32.8	84.5	6.9	49.79
Overall Mean	2103	911	43.3	1.18	4.6	30.6	83.6	6.6	49.28
LSD (0.05)	304	137	1.2	0.05	0.3	2.0	1.3	1.0	2.02
C.V. (%)	10.0	10.4	2.0	3.0	4.4	4.8	1.1	11.0	2.9

¹Lint 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 nonirrigated Leeper silt loam at the North Mississippi Research and Extension Center near Verona, Mississippi, 2017.¹

Variety	Seed cotton yield	Lint yield	Lint	Length	Micronaire	Strength	Uniform.	Elongation	Loan value
	Ib/A	Ib/A	%	in		g/tex	%	%	¢/lb
PHY 312 WRF	4181	1853	44.3	1.17	4.7	30.4	84.8	6.8	52.65
DP 1555 B2RF	3942	1852	47.0	1.19	4.6	32.1	84.2	6.5	53.44
PX 4A54 W3FE	3854	1774	46.0	1.15	4.8	31.1	84.5	7.3	52.12
AMX 1711 B2XF	3867	1767	45.7	1.21	4.7	31.5	84.2	6.9	53.42
DP 1639 B2XF	3724	1755	47.1	1.11	4.8	30.8	84.5	7.9	51.63
NG 5007 B2XF	3822	1755	46.0	1.13	4.7	28.3	83.5	7.3	52.50
DP 1851 B3XF	3710	1749	47.1	1.19	4.5	32.1	84.6	7.9	53.44
PX 3A82 W3FE	3803	1749	45.9	1.13	4.6	32.7	84.5	8.0	52.58
CG 9608 B3XF	3652	1747	47.9	1.18	4.3	30.3	83.4	5.6	53.01
ST 6182GLT	3635	1741	47.9	1.15	4.8	29.9	83.6	6.6	51.79
PHY 450 W3FE	3920	1740	44.4	1.11	5.0	33.5	84.8	8.6	50.34
PHY 490 W3FE	3802	1726	45.4	1.13	4.8	33.4	84.6	8.3	52.22
PHY 480 W3FE	3931	1725	43.9	1.16	4.3	31.3	85.0	8.4	52.88
PHY 444 WRF	3711	1716	46.3	1.25	4.2	32.3	85.0	6.3	53.62
PX 4A57 W3FE	3544	1706	48.1	1.08	4.7	31.3	83.6	7.8	51.28
PX 3A99 W3FE	3726	1694	45.4	1.19	4.7	31.9	84.9	6.9	53.17
DG 3757 B2XF	3544	1656	46.7	1.14	4.7	29.2	83.8	7.2	52.43
DP 1646 B2XF	3531	1653	46.8	1.23	4.4	29.5	83.3	7.2	52.84
PHY 330 W3FE	3545	1652	46.6	1.15	4.6	31.1	83.6	6.4	52.74
DP 1835 B3XF	3446	1645	47.7	1.16	4.7	30.5	83.5	5.9	53.32
CPS 17251NR B2XF	3527	1644	46.6	1.23	4.6	31.3	84.1	6.7	52.42
PX 3A96 W3FE	3691	1634	44.3	1.19	4.7	31.3	84.2	7.1	53.07
UA 222	3893	1633	41.9	1.21	4.2	30.5	83.7	7.5	52.62
DP 1522 B2XF	3664	1602	43.7	1.16	4.8	30.7	84.5	8.4	52.65
NG 3522 B2XF	3554	1594	44.8	1.11	4.6	28.7	83.5	6.3	51.74
PHY 440 W3FE	3403	1586	46.6	1.21	4.4	34.2	84.2	6.0	53.17
PHY 340 W3FE	3320	1581	47.6	1.16	4.6	31.3	84.2	6.3	52.55
DG 3526 B2XF	3422	1580	46.1	1.13	4.7	29.0	84.5	8.5	52.27
BRS 286	3872	1543	41.4	1.13	4.3	30.8	83.6	6.8	52.47
DP 1845 B3XF	3384	1543	45.6	1.27	4.4	32.4	84.7	7.9	53.20
PX 5B76 W3FE	3433	1538	44.8	1.15	4.8	31.9	83.9	6.1	52.87
DP 1614 B2XF	3289	1525	46.4	1.18	5.2	31.1	84.3	8.2	50.84
BRS 335	3741	1520	40.6	1.19	4.1	30.6	84.6	6.4	52.89
ST 4949GLT	3264	1519	46.5	1.15	4.7	30.9	84.1	7.0	52.94
PHY 300 W3FE	3236	1517	46.9	1.12	4.7	30.2	82.5	6.3	52.02
ST 5020GLT	3540	1501	42.3	1.22	4.5	32.4	84.4	6.6	52.75
DP 1823 NRB2XF	3248	1495	46.0	1.19	4.3	32.0	84.7	7.9	52.99
DP 1725 B2XF	3151	1488	47.2	1.15	4.7	30.4	83.3	6.0	52.32
ST 5115GLT	3474	1486	42.7	1.20	4.0	31.6	83.4	6.3	53.34
AMX 1710 B2XF	3386	1476	43.5	1.11	5.0	31.7	83.5	4.9	51.02
CPS 17330 B2XF	3012	1458	48.3	1.18	4.8	32.8	85.0	7.2	53.74
PX 5B73 W3FE	3192	1457	45.6	1.16	4.4	30.4	84.2	6.5	53.02
HQ 210CT	3545	1446	40.8	1.13	4.7	30.6	83.2	6.5	52.19
DG 3605 B2XF	3175	1431	45.2	1.23	4.6	30.1	83.2	6.9	52.93
ST 5517GLTP	3372	1391	41.2	1.21	3.9	32.4	83.8	6.4	53.47
PX 2A28 W3FE	3121	1371	43.9	1.18	4.7	31.3	83.1	5.5	52.72
DP 1518 B2XF	3255	1371	42.2	1.16	4.4	29.7	83.1	6.3	52.48
NG 3406 B2XF	3061	1354	44.2	1.14	4.5	30.1	84.4	7.8	52.25
NG 4601 B2XF	2950	1347	45.6	1.18	5.0	34.2	84.8	7.0	51.40
PX 5A57 W3FE	2661	1160	43.6	1.17	4.4	31.1	84.9	6.1	53.19
AMX 1715 B2XF	2686	1091	40.6	1.17	4.5	31.4	82.3	5.2	52.60
Overall Mean	3498	1579	45.2	1.17	4.6	31.2	84.0	6.9	52.58
LSD (0.05)	460	222	1.3	0.03	0.3	1.4	1.2	0.7	1.0
C.V. (%)	9.3	9.9	2.0	1.9	4.8	3.1	1.0	6.7	1.4

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



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George M. Hopper, Director

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