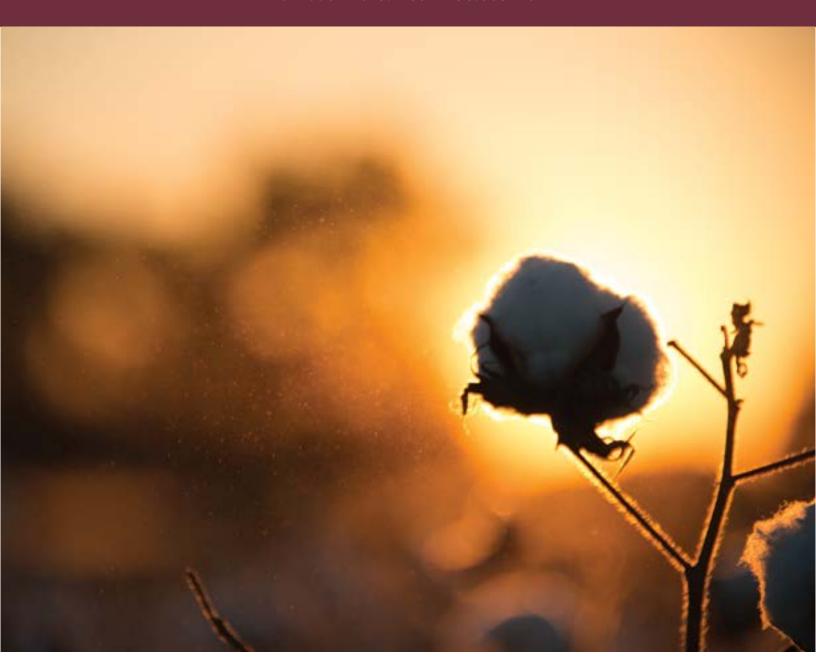
# **MISSISSIPPI COTTON**

VARIETY TRIALS, 2023

Information Bulletin 584 • October 2024



MISSISSIDDI'S OFFICIAL VADIETY TDIALS



# **PREFACE**

The main objective of the Mississippi Cotton Official Variety Trials (OVT) is to provide unbiased evaluation of yield and fiber performance of commercial and experimental cotton varieties. The ultimate goal is to provide Mississippi producers with adequate information to make well-informed seed selection decisions for cultivation in the major production regions in Mississippi. This Mississippi Agricultural and Forestry Experiment Station 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.



# Mississippi Cotton Variety Trials, 2023

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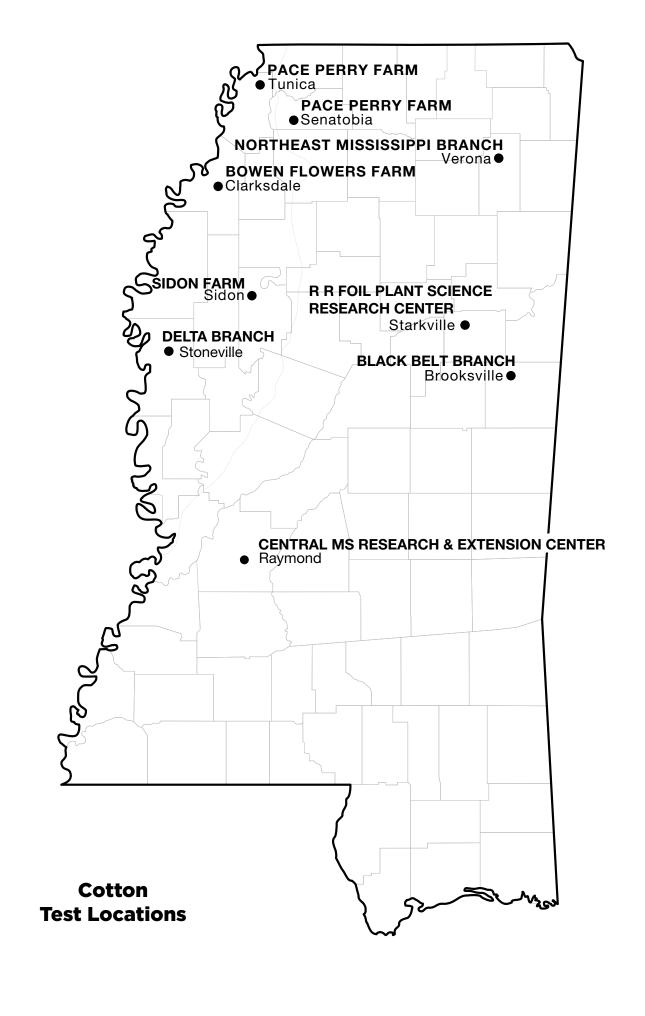
The authors would like to express their appreciation first and foremost to the producers who participated in the 2023 Official Cotton Variety Trial locations that were conducted on-farm. The on-farm trials provide an added benefit to the data by expanding the footprint of the trials into differing areas in the state to better represent the environmental, soil textural, and management differences that are present throughout the state of Mississippi. Thank you to Bowen Flowers (Clarksdale) and Pace Perry (Senatobia and Tunica); your hard work and willingness to participate in the variety trials are deeply valued. We at the Mississippi Agriculture and Forestry Experiment Station look forward to working with you and other willing producers in the future.

Gratitude is expressed to all the student workers in the Agronomy program in the Department of Plant and Soil Sciences at Mississippi State University for your assistance with all aspects of conducting the trials. Without your diligent work and assistance, the variety trials would not be a success, thanks again for all you do. We would also like to recognize Bryce Bullock, Luke Noah, Ty Dickson, Will Duke, Dalton Tanner, Aiden Mathews, Cade Sumrall, Carson Walker, Lane Walker, Chase Felsher, Junior Borkowski, and Samuel Chitolina for their assistance with hand harvesting, ginning, and preparing fiber quality samples. Your work allows us to provide data in a timely fashion.

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



# Mississippi Cotton Variety Trials, 2023

#### INTRODUCTION

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

The Official Variety Trial (OVT) for cotton is conducted annually at the Delta Research and

Extension Center, the North Mississippi Research and Extension Center, the R.R. Foil Plant Science Research Center at Mississippi State University, and the Black Belt Branch Experiment Station in Brooksville, as well as at cooperating producer locations in both the Delta and Hill cotton-producing regions. At each location, all varieties entered into the trial are treated identically (conventional) 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 official variety trials per year in areas that well represent the majority of the state's cotton-producing acreage.

#### **TESTING PROCEDURES**

All varieties submitted for testing are grown utilizing conventional chemical control for insect and weed pests. Each test plot consists of two rows of cotton 35 to 40 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 is controlled by the cotton variety testing coordinator. In addition, all locations are maintained free of lepidopteran insect pests in order to create parity among varieties with differing **Bt** technologies.

All fiber parameters such as lint percent as well

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

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

#### INTERPRETING THE DATA

Field variability is inherent to production research with any cropping system. Unlike strip trials, small-plot research allows for replication with a 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 the genetic potential of a given variety 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 yield-producing 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 presented at the bottom of the

data variable columns.

The varieties listed in bold may have slightly differing numerical yield, but they will perform very similarly at a given location. Statistical analysis is not conducted for cross-location averages. Producers should review data tables for the closest location that is geographically representative of their operation, but should also review yield information across locations to get an idea of a variety's yield stability over a 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 produce greater 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. This lends 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 — 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 to glufosinate and dicamba. Enlist (FE) varieties are also tolerant to glufosinate and 2,4-D. For more information on utilizing herbicide resistant traits and alternative weed control practices consult MSU extension publication 1532, "Weed Control Guidelines for Mississippi" available online at http://extension.msstate.edu/publications/weed-control-guidelines-for-mississippi

**Glufosinate tolerance** — generally indicated on the seed bag with an LL. These varieties can withstand over-the-top applications of Liberty. XtendFlex (XF) varieties are also tolerant to glyphosate and dicamba. Enlist (FE) varieties are also tolerant to glyphosate and 2,4-D. It is important to note that producers utilizing a multitude of varieties with differing herbicide tolerant traits in close proximity must use caution to avoid crop injury from spray drift, improperly cleaned

applicators, and or a combination of both. For more information on utilizing herbicide resistant traits and alternative weed control practices, consult MSU Extension Publication 1532, "Weed Control Guidelines for Mississippi."

Bollgard 2 - Varieties with designations B2 on the seed bag or in the brand name contain genes that produce protein toxic to heliothis. However, under high and persistent pressure supplemental chemical control strategies are necessary to prevent economic damage from caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication 2471, "Insect Control Guide for Agronomic Crops" available online at http://extension.msstate.edu/publications/publications/insect-control-guide-for-agronomic-crops

**Bollgard 3** — designated B3 on the seed bag or in the brand name; contains genes that produce protein toxic to heliothis. For more information on utilization of transgenic traits with insecticidal properties, consult MSU extension publication 2471, "Insect Control Guide for Agronomic Crops."

WideStrike — Phytogen varieties with the designation W on the bag or in the variety name. Like Bollgard 2, Widestrike varieties contain two genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties, consult MSU extension publication 2471, "Insect Control Guide for Agronomic Crops."

**WideStrike 3** — Phytogen varieties with the designation W3 on the bag or in the variety name. Like Bollgard 3, Widestrike varieties contain three genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties, consult MSU extension publication 2471, "Insect Control Guide for Agronomic Crops."

**TwinLink** — Bayer varieties with the designation T on the bag or in the variety name. Like Bollgard 2 or Widestrike, TwinLink varieties contain two genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties, consult MSU extension publication 2471, "Insect Control Guide for Agronomic Crops."

**TwinLink Plus** — Bayer varieties with the designation TP on the bag or in the variety name. Like Bollgard 3 or Widestrike 3, TwinLink Plus varieties contain three genes that produce proteins toxic to caterpillar pests. For more information on utilization of transgenic traits with insecticidal properties, consult MSU extension publication 2471, "Insect Control Guide for Agronomic Crops."

**ThryvOn -** Varieties with designations T on the seed bag or in the brand name contain genes that produce toxins that suppress <u>Frankliniella fusca</u> and <u>lygus</u> spp. species. For more information on utilization of transgenic traits with insecticidal properties consult MSU extension publication 2471, "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 yield-producing varieties. Newer varieties with limited data available should be cultivated to minimal acreage until further testing validates performance across multiple years and locations. Generally, there is no one variety that is the "silver bullet"; therefore, choosing multiple varieties allows for flexibility in relative maturity, management decisions, and risk aversion.

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

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

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

#### **LOAN VALUATION DECISION AID**

For each trial conducted in 2023, data were submitted to the upland cotton loan valuation aid. This tool was developed by Dr. Larry Falconer (retired) and is supported by Cotton Incorporated. The loan calculator was updated by Dr. Will Maples, assistant professor of

agricultural economics at Mississippi State University. The tool allows for calculation of Commodity Credit Corporation cotton loan premium and discount values based on yield and HVI classing information.

#### **TOP-YIELDING VARIETIES**

There are numerous methods to choose or highlight the top yield-producing varieties across locations to develop a "short list" of promising varieties for the future. 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 OVT programs 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 OVT trials.

	Planting and	Harvest Dates	
Location	Planting Date	Harvest Date	Seeding Rate
Brooksville	May 30, 2023	November 6, 2023	45,000
Clarksdale	May 9, 2023	September 29,2023	45,000
Mississippi State	May 5, 2023	October 9, 2023	45,000
Sidon	May 15, 2023	September 26, 2023	45,000
Stoneville	May 24, 2023	November 1, 2023	45,000
Senatobia	May 11, 2023	October 12, 2023	45,000
Tunica	May 11, 2023	October 10, 2023	45,000
Raymond	May 23, 2023	October 3, 2023	45,000

Table 1. V	arieties submitted for testing l	by participating industry part	ners, 2023.
Industry Contact	Variety Tr	ial Entries	
Americot Inc. — NexGen Varieties Mike Robinson	NG 3195 B3XF NG 4190 B3XF NG 4335 B3TXF NG 4343 B3TXF	AMX21C005 B3TXF AMX160030-A B3XF AMX160030-B B3XF	AMX20T079 B3XF AMX20T114 B3XF AMX20T157 B3XF
BASF Andy White	ST 4990B3XF ST 4595B3XF ST 5091B3XF ST 5091B3XF		
Crop Production Services/ Dyna-Gro Seed Scott Cummings	DG 3503 B3XF DG 4530 B3TXF	DG 3528 B3XF DG 4484 B3TXF	
<b>DeltaPine</b> Dave Albers	DP 1646 B2XF DP 2012 B3XF DP 2038 B3XF DP 2115 B3XF	DP 2127 B3XF DP 2141NR B3XF DP 2239 B3XF DP 2131 B3TXF	DP 2317 B3TXF DP 2328 B3TXF DP 2211 B3TXF
PhytoGen Seed Co. Shawn Butler	PHY 332 W3FE PHY 360 W3FE PHY 400 W3FE PHY 411 W3FE PHY 415 W3FE	PHY 443 W3FE PHY 475 W3FE PX1130B333-04 PX1130D303-04	PX1140B373-04 PX1140D328-04 PX1140A385-04 PX1150D490-04
Winnfield Solutions LLC Robert Cossar	Armor 9371 B3XF Armor 9383 B3TXF Armor 23X1424 B3TXF		

Table 2. One-year mean yield performance and fiber characteristics for OVT varieties submitted for testing in 2023 averaged across (8) testing locations excluding Brooksville.

	11.120.11				Measurement		
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	(lb/acre)	%	(in.)		(g/tex)		(¢/lb)
PHY 411 W3FE	1764	45.35	1.11	4.8	33.4	83.3	50.15
ST 4595 B3XF	1758	44.01	1.17	4.6	32.8	83.8	52.45
Armor 9371 B3XF	1740	43.79	1.16	4.4	30.9	83.9	52.72
PX1140D328-04	1683	44.16	1.18	4.6	34.7	83.8	52.39
PHY 415 W3FE	1680	43.64	1.18	4.4	35.3	83.7	52.86
DP 2127 B3XF	1674	44.10	1.13	4.7	31.3	83.8	51.68
PX1140A385-04	1665	45.11	1.13	4.7	35.2	84.3	50.87
NG 4190 B3XF	1649	42.91	1.17	4.5	32.6	83.8	52.31
PX1130D303-04	1646	43.36	1.12	4.7	32.7	84.1	51.25
DG 4530 B3TXF	1632	43.38	1.17	4.3	31.9	84.0	52.88
PHY 332 W3FE	1631	42.71	1.20	4.4	34.6	83.8	53.17
PX1130B333-04	1627	43.26	1.14	4.6	35.7	84.8	51.71
NG 3195 B3XF	1624	42.68	1.15	4.5	32.2	83.8	52.74
ST 5091 B3XF	1624	42.78	1.15	4.4	30.1	82.5	52.58
PHY 360 W3FE	1623	43.09	1.15	4.5	31.2	82.9	50.95
DP 2211 B3TXF	1622	44.21	1.16	4.4	30.9	83.6	52.61
PHY 400 W3FE	1602	43.76	1.17	4.4	35.1	83.5	52.12
DG 3528 B3XF	1590	42.92	1.18	4.5	32.1	83.9	52.13
DP 2131 B3TXF	1585	43.56	1.20	4.3	31.0	83.4	52.79
PHY 443 W3FE	1585	43.95	1.13	4.6	34.6	83.6	51.97
DP 2115 B3XF	1575	43.41	1.16	4.6	31.8	83.9	52.40
DP 2328 B3TXF	1571	43.81	1.15	4.4	30.9	82.8	52.90
DP 2012 B3XF	1571	41.85	1.17	4.4	31.8	83.6	52.85
DP 2038 B3XF	1545	45.22	1.12	4.7	32.0	82.7	52.25
DP 2317 B3TXF	1542	41.68	1.17	4.2	31.9	83.2	53.06
DP 2239 B3XF	1531	44.27	1.21	4.6	32.4	84.0	53.42
AMX20T079 B3XF	1512	42.13	1.18	4.6	32.3	83.9	52.74
Armor 23X1424 B3TX	1512	41.94	1.17	4.5	34.4	84.0	52.20
PX1140B373-04	1505	42.68	1.15	4.5	34.9	84.5	51.96
Armor 9383 B3TXF	1486	40.86	1.17	4.3	31.5	84.0	53.02
AMX20T157 B3XF	1470	42.67	1.17	4.5	32.7	83.8	52.64
DP 2141NR B3XF	1466	41.74	1.18	4.7	35.2	84.0	52.76
ST 4990 B3XF	1465	40.60	1.18	4.5	31.7	84.6	52.47

Table 2. One-year mean yield performance and fiber characteristics for OVT varieties submitted for testing in 2023 averaged across (8) testing locations excluding Brooksville. (continued).

Madaha	Line Winds	l int	Measurement						
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value		
	(lb/acre)	%	(in.)		(g/tex)		(¢/lb)		
NG 4335 B3TXF	1464	41.51	1.18	4.4	33.0	84.7	52.52		
DG 4484 B3TXF	1435	44.12	1.13	4.2	33.0	83.4	52.22		
PX1150D490-04	1434	43.37	1.16	4.4	32.8	82.9	52.56		
NG 4343 B3TXF	1433	41.74	1.18	4.3	31.3	83.7	52.71		
AMX21C005 B3TXF	1414	40.68	1.16	4.2	32.3	84.0	53.22		
DP 1646 B2XF	1392	43.32	1.21	4.6	32.0	83.9	53.40		
PX1150B437-04	1383	41.63	1.14	4.6	34.8	83.1	51.30		
AMX160030-B B3XF	1350	42.04	1.17	4.6	34.0	83.9	53.48		
AMX20T114 B3XF	1347	42.26	1.18	4.7	31.0	84.6	52.70		
DG 3503 B3XF	1341	43.02	1.23	3.9	35.6	84.3	53.12		
AMX160030-A B3XF	1321	44.10	1.19	4.5	32.5	84.0	53.19		
OVERALL MEAN	1547	43.03	1.16	4.5	32.8	83.8	52.44		
LSD (0.05)	103	0.53	0.02	0.2	1.0	0.6	1.03		
C.V (%)	12.3	2.5	3.0	6.0	5.2	1.2	3.3		
Yield in bold type are no	ot significantly d	ifferent from the	e highest yieldin	g variety.					

Table 3. 2023 mean yield performance of varieties cultivated at 4 locations in the Delta Region. Measurement Lint Yield† Lint Variety Length Mic. Strength Uniformity Loan Value lb/acre % g/tex ¢/lb in. DP 2127 B3XF 1953 44.13 1.13 5.0 31.5 84.0 50.31 ST 4595B3XF 1938 43.68 1.17 4.6 32.9 83.9 52.25 Armor 9371 B3XF 1920 43.93 1.16 4.5 30.9 83.9 52.07 **PHY 411 W3FE** 1888 45.00 1.11 4.8 83.5 49.69 33.3 PX1140A385-04 1887 45.39 1.13 4.6 35.9 84.0 50.29 44.32 4.6 DP 2211 B3TXF 1852 1.16 30.7 83.8 51.76 PX1140D328-04 1844 43.78 4.5 51.39 1.18 35.0 83.3 NG 3195 B3XF 42.90 4.6 83.9 52.20 1822 1.15 32.2 NG 4190 B3XF 1815 42.88 1.17 4.6 33.4 84.1 52.29 DG 3528 B3XF 1800 1.17 83.9 51.73 43.26 4.6 31.9 **PHY 415 W3FE** 1793 43.37 1.18 4.3 35.3 83.5 52.32 PX1130D303-04 1778 43.37 1.13 4.7 33.2 84.2 50.78 DG 4530 B3TXF 1769 43.14 4.4 32.5 84.5 52.66 1.18 ST 5091B3XF 1766 42.85 1.16 4.4 30.7 82.8 52.22 DP 2012 B3XF 1751 42.17 1.18 4.5 32.0 83.7 52.38 **PHY 332 W3FE** 1739 42.24 1.21 4.3 34.7 84.1 52.72 DP 2038 B3XF 1738 45.48 1.13 4.8 32.3 83.0 51.20 DP 2115 B3XF 1736 43.30 1.16 4.8 31.3 84.0 51.47 4.4 DP 2131 B3TXF 1729 43.56 1.20 31.3 83.5 52.17 PHY 443 W3FE 1725 43.59 1.14 4.5 34.8 83.6 51.00 PX1130B333-04 1716 42.93 1.15 4.5 35.8 84.4 50.98 DP 2239 B3XF 1714 44.16 1.22 4.7 32.5 84.3 52.49 **PHY 400 W3FE** 1713 44.03 1.16 4.5 34.6 83.2 50.92 **PHY 360 W3FE** 1709 42.88 1.16 4.5 31.9 83.0 50.25 DP 2328 B3TXF 1708 44.03 1.16 4.4 31.1 83.2 52.82 DP 2317 B3TXF 1702 41.79 1.17 4.3 32.3 83.2 52.39 Armor 9383 B3TXF 1658 40.75 1.16 4.4 31.6 84.2 52.43 **DP 2141NR B3XF** 1652 41.78 1.19 4.7 35.6 84.1 52.31 AMX20T157 B3XF 1644 42.47 1.16 4.6 32.9 83.8 51.81 4.6 ST 4990B3XF 1634 40.31 1.20 32.4 84.8 52.31

1623

1620

1611

41.90

41.87

44.36

1.17

1.19

1.14

4.4

4.3

4.3

33.4

31.6

33.4

84.4

84.0

83.7

NG 4335 B3TXF

NG 4343 B3TXF

DG 4484 B3TXF

52.60

52.18

51.97

Table 3. 2023 mean yield performance of varieties cultivated at 4 locations in the Delta Region (continued). Lint Yield† Strength Uniformity Loan Value Variety Lint Length Mic. % ¢/lb lb/acre in. ---g/tex ----Armor 23X1424 B3TX 1602 41.69 1.18 4.6 35.1 84.0 52.00 PX1140B373-04 1599 42.78 1.15 4.5 35.3 84.5 51.26 AMX20T079 B3XF 1567 41.94 1.19 4.6 32.5 84.0 52.28 AMX21C005 B3TXF 1559 41.14 1.18 4.3 32.6 84.2 52.58 42.87 PX1150D490-04 1538 1.16 4.3 32.8 82.9 51.78 PHY 475 W3FE 1509 41.40 1.14 4.7 35.3 83.2 50.22 DP 1646 B2XF 1488 43.03 1.22 4.5 32.6 84.1 52.34 DG 3503 B3XF 1482 43.11 1.22 4.0 35.6 52.65 84.2 AMX160030-B B3XF 1442 42.21 1.18 4.7 34.2 83.9 52.62 AMX160030-A B3XF 43.69 1.20 32.6 53.01 1434 4.6 84.0 **AMX20T114 B3XF** 1425 42.24 1.18 4.7 31.4 84.6 52.28 OVERALL MEAN 42.99 4.5 51.85 1695 1.17 33.1 83.8 LSD (0.05) 151 0.69 0.02 0.2 1.5 8.0 1.45

2.3

6.0

2.3

12.4

5.4

1.1

3.4

C.V (%)

Table 4. Two-year mean yield performance of varieties cultivated at 4 locations in the Delta region during 2022 and 2023.

			Locati	ion and Year					Average across
	Ston	eville	Clark	sdale	Sic	don	Tur	nica	location and
Variety	2022	2023	2022	2023	2022	2023	2022	2023	year
				Lint yield (	lb lint/acre)				
DP 2127 B3XF	2214	2993	1169	1580	1184	1060	1184	2178	1695
ST 4595B3XF	2052	2767	1423	2036	1006	1081	1006	1866	1655
Armor 9371 B3XF	2100	2996	864	1868	874	1055	1551	1709	1627
NG 3195 B3XF	2017	2577	1250	1818	915	1098	915	1791	1548
PHY 415 W3FE	2170	2735	1197	1530	942	1002	942	1836	1544
NG 4190 B3XF	2046	2884	816	1647	985	1028	985	1701	1512
ST 5091B3XF	1870	2509	1142	1785	1007	1083	1007	1685	1511
PHY 360 W3FE	2010	2308	998	1799	992	1087	992	1892	1510
PHY 411 W3FE	2112	2731	1000	1548	700	1240	700	1872	1488
PHY 400 W3FE	1834	2657	927	1535	917	1240	917	1803	1479
PHY 332 W3FE	2032	2571	1014	1347	916	1166	916	1772	1467
PX1130B333-04	2136	2591	835	1493	975	1126	975	1505	1455
DP 2141NR B3XF	1897	2451	795	1615	1164	895	1164	1648	1454
PHY 443 W3FE	2064	2551	897	1476	804	1208	804	1662	1433
DP 1646 B2XF	1909	2783	898	1340	1007	946	1007	1530	1428
DP 2038 B3XF	1914	2633	850	1607	971	732	971	1726	1426
DP 2239 B3XF	2008	2746	780	1536	859	963	859	1609	1420
DP 2012 B3XF	1777	2431	850	1791	859	1001	859	1778	1418
DP 2115 B3XF	1908	2555	868	1491	860	939	860	1760	1405
ST 4990B3XF	1719	2395	718	1359	1066	1025	1066	1723	1384
PX1140B373-04	1992	2493	828	1301	866	998	866	1602	1368
Table is sorted based	d on average	lint yield mear	s across locat	ion and year (	i.e. from great	est to lowest	lint yield).	<u> </u>	

Table 5. 2023 mean yield performance of varieties cultivated at 3 locations in the Hill region excluding Brooksville. Variety Lint Yield† Lint Mic. Strength Uniformity Loan Value Length lb/acre % ¢/lb in. ---g/tex ----**PHY 411 W3FE** 1608 45.78 1.10 4.8 33.5 83.1 50.67 **PHY 415 W3FE** 1526 44.02 1.17 4.5 35.2 84.0 53.52 ST 4595B3XF 1519 44.46 4.6 32.6 83.6 52.71 1.17 **PHY 332 W3FE** 1496 43.35 1.19 4.5 34.4 83.5 53.71 4.7 PX1130B333-04 1473 43.68 1.14 35.5 85.2 52.52 Armor 9371 B3XF 1469 53.59 43.62 1.15 4.4 30.9 83.7 31.8 NG 4190 B3XF 1463 42.94 1.17 4.5 83.6 52.33 PX1140A385-04 1457 44.75 1.12 4.9 34.4 84.6 51.58 PX1140D328-04 44.68 34.4 53.49 1450 1.17 4.6 84.3 AMX20T079 B3XF 1439 42.38 1.18 4.6 32.1 83.7 53.30 PHY 360 W3FE 4.5 30.5 51.71 1437 43.35 1.15 82.8 ST 5091B3XF 1435 42.68 1.13 4.2 29.5 82.1 53.00 DP 2328 B3TXF 1423 43.53 1.15 4.3 30.7 82.3 53.01 PX1130D303-04 1400 43.35 1.11 4.6 32.2 84.0 51.83 PHY 443 W3FE 1398 44.43 1.12 4.7 34.3 83.6 53.14 DP 2131 B3TXF 1394 43.58 1.20 4.1 30.6 83.2 53.61 PHY 400 W3FE 1383 43.41 1.18 4.3 35.6 83.9 53.57 PX1140B373-04 1379 42.55 1.15 4.6 34.4 84.4 52.91 NG 3195 B3XF 1362 42.38 1.14 4.3 32.4 83.8 53.45 PX1150D490-04 1353 44.05 1.15 4.5 32.6 82.9 53.50 DG 4530 B3TXF 1350 43.68 1.16 4.3 31.2 83.5 53.13 DP 2317 B3TXF 1342 41.53 1.18 4.0 31.5 83.2 53.81 Armor 23X1424 B3TX 1315 42.28 1.16 4.5 33.5 83.9 52.44 DP 2012 B3XF 1309 41.43 1.15 4.2 31.5 83.4 53.42 DG 3528 B3XF 1309 42.47 1.18 4.4 32.4 83.9 52.60 DP 2211 B3TXF 1308 44.08 1.15 4.1 31.2 83.4 53.55 DP 2038 B3XF 1305 44.88 4.4 31.6 53.50 1.11 82.4 DP 2127 B3XF 1299 44.06 1.13 4.4 31.0 83.6 53.50 DP 2239 B3XF 1288 44.42 1.19 4.4 32.4 83.6 54.53 DP 1646 B2XF 1281 43.70 1.19 4.7 31.3 83.6 54.68 1272 40.99 1.18 4.2 31.4 83.8 53.67 Armor 9383 B3TXF ST 4990B3XF 1269 40.98 1.16 4.3 30.9 84.3 52.66 PHY 475 W3FE 1257 41.92 1.13 4.6 34.3 83.0 52.49

Table 5. 2023 mean yield performance of varieties cultivated at 3 locations in the Hill region excluding Brooksville. (continued)

Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	lb/acre	%	in.		g/tex		¢/lb
NG 4335 B3TXF	1251	40.99	1.19	4.4	32.6	84.9	52.43
AMX20T157 B3XF	1248	42.93	1.18	4.4	32.4	83.8	53.56
AMX20T114 B3XF	1244	42.29	1.18	4.6	30.4	84.6	53.26
AMX21C005 B3TXF	1238	40.07	1.14	4.2	32.0	83.9	54.00
AMX160030-B B3XF	1237	41.83	1.17	4.6	33.7	83.8	54.53
DP 2141NR B3XF	1216	41.69	1.16	4.7	34.7	83.8	53.31
DP 2115 B3XF	1211	43.56	1.15	4.4	32.3	83.8	53.43
DG 4484 B3TXF	1200	43.81	1.13	4.1	32.5	83.0	52.53
NG 4343 B3TXF	1185	41.57	1.18	4.2	31.1	83.5	53.35
AMX160030-A B3XF	1182	44.66	1.18	4.3	32.3	84.0	53.40
DG 3503 B3XF	1136	42.90	1.23	3.8	35.5	84.3	53.76
OVERALL MEAN	1343	43.08	1.16	4.4	32.5	83.7	53.15
LSD (0.05)	145	0.79	0.04	0.2	1.4	0.9	1.46
C.V (%)	13.2	2.3	3.7	5.9	4.9	1.2	3.1
Yield in bold type are r	not significantly	different from t	he highest yield	ing variety.			

Table 6. Two-year mean yield performance of varieties cultivated at 3 locations in the Hill region during 2022 and 2023.

			Location	and Year			Average			
	Broo	ksvile	M:	SU	Sena	tobia	across location and			
Variety	2022	2023	2022	2023	2022	2023	year			
	Lint yield (lb lint/ acre)									
PHY 415 W3FE	1516	684	1680	1280	985	1985	1355			
ST 5091B3XF	1098	596	1854	1393	1144	1881	1328			
Armor 9371 B3XF	1345	508	1238	1245	1894	1728	1326			
NG 4190 B3XF	1098	556	1173	1148	1792	1911	1280			
PHY 360 W3FE	1364	709	783	1122	1839	1810	1271			
ST 4595B3XF	1245	655	1889	1278	840	1660	1261			
NG 3195 B3XF	1284	622	933	1088	1898	1716	1257			
PHY 332 W3FE	1199	598	764	1332	1784	1822	1250			
ST 4990B3XF	1049	628	1537	1271	1109	1883	1246			
DP 2012 B3XF	1277	545	1127	1112	1645	1720	1238			
PHY 400 W3FE	1228	655	998	1260	1805	1475	1237			
PX1130B333-04	1286	549	652	1327	1734	1841	1232			
DP 2127 B3XF	1450	689	880	1159	1810	1337	1221			
PHY 411 W3FE	1015	495	754	1454	1699	1833	1208			
PX1140B373-04	1188	368	884	1266	2016	1511	1206			
PHY 443 W3FE	896	373	1113	1419	1798	1528	1188			
DP 2115 B3XF	1202	608	722	1084	1720	1620	1159			
DP 2038 B3XF	1069	628	953	944	1615	1654	1144			
DP 2239 B3XF	1403	589	810	1002	1433	1556	1132			
DP 1646 B2XF	1179	606	1206	1090	1249	1371	1117			
DP 2141NR B3XF	1189	440	1036	975	1529	1500	1112			

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

# PERRY FARMS, SENATOBIA

Table 7. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Keyespoint silty clay soil at Pace Perry Farms near Senatobia, MS during 2023.

	1 1 - 4 3/1 - 1 - 14	11	Measurement							
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value			
	lb/acre	%	in.		g/tex		¢/lb			
NG 4190 B3XF	1911	42.83	1.20	4.3	33.7	84.1	50.11			
DP 2328 B3TXF	1909	43.75	1.19	4.2	32.4	82.8	51.48			
ST 4595B3XF	1889	44.55	1.21	4.2	34.9	84.3	50.74			
ST 5091B3XF	1854	43.15	1.17	4.1	32.2	82.5	52.76			
PX1130B333-04	1841	44.53	1.18	4.1	37.6	85.2	50.81			
PHY 411 W3FE	1833	45.28	1.13	4.3	34.4	83.3	50.04			
PHY 332 W3FE	1822	42.53	1.22	4.1	35.2	83.3	52.38			
PHY 360 W3FE	1810	43.93	1.18	4.2	32.8	83.1	50.04			
DG 4530 B3TXF	1796	43.60	1.22	3.9	33.3	83.8	51.54			
AMX20T079 B3XF	1780	42.58	1.22	4.5	33.9	84.3	51.58			
DP 2211 B3TXF	1764	44.70	1.22	4.0	34.4	84.5	52.43			
DP 2317 B3TXF	1748	42.25	1.22	4.0	33.6	84.0	51.58			
PX1140D328-04	1745	44.05	1.20	4.4	35.1	85.0	51.60			
PX1130D303-04	1737	43.55	1.16	4.4	33.2	84.0	51.46			
Armor 9371 B3XF	1728	43.48	1.16	4.3	33.1	83.7	51.45			
DP 2012 B3XF	1720	41.83	1.23	4.0	33.2	84.8	52.46			
NG 3195 B3XF	1716	42.68	1.19	4.5	35.4	84.8	51.83			
PX1140A385-04	1694	44.70	1.18	4.4	37.2	85.0	50.77			
PHY 415 W3FE	1680	43.50	1.21	3.9	35.7	84.2	50.72			
DP 2038 B3XF	1654	44.73	1.16	4.3	33.2	82.8	53.05			
AMX20T157 B3XF	1629	43.00	1.21	4.4	34.3	84.6	52.41			
DG 3528 B3XF	1626	42.90	1.23	4.1	35.1	84.1	50.76			
DP 2115 B3XF	1620	43.55	1.21	4.3	34.7	84.6	50.76			
DP 2131 B3TXF	1608	43.43	1.23	4.0	32.2	83.8	49.46			
AMX20T114 B3XF	1576	42.78	1.22	4.4	32.4	84.6	51.77			
DP 2239 B3XF	1556	43.83	1.23	4.4	33.7	83.7	54.04			
PX1150D490-04	1555	42.20	1.20	3.9	34.7	83.2	51.03			
Armor 9383 B3TXF	1538	40.30	1.20	3.9	33.2	83.8	52.35			
ST 4990B3XF	1537	41.10	1.24	4.1	32.3	84.4	51.53			
Armor 23X1424 B3TX	1532	43.35	1.18	4.4	34.1	83.8	51.44			
NG 4343 B3TXF	1532	41.98	1.20	4.1	32.1	83.8	52.33			
PHY 443 W3FE	1528	42.95	1.18	4.1	36.7	84.4	51.85			
PX1140B373-04	1511	42.60	1.19	4.3	34.2	84.7	51.58			

Table 7. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Keyespoint silty clay soil at Pace Perry Farms near Senatobia, MS during 2023 (continued).

			Measurement					
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value	
	lb/acre	%	in.		g/tex		¢/lb	
DP 2141NR B3XF	1500	41.58	1.22	4.2	37.5	84.6	50.19	
PHY 400 W3FE	1475	43.33	1.20	4.1	36.7	84.0	50.75	
AMX21C005 B3TXF	1435	41.83	1.20	4.2	34.4	83.9	51.56	
DG 3503 B3XF	1393	43.25	1.26	3.9	36.6	84.4	52.45	
NG 4335 B3TXF	1383	42.33	1.24	4.3	33.6	85.2	51.00	
DP 1646 B2XF	1371	43.30	1.26	4.4	31.5	84.2	53.09	
DG 4484 B3TXF	1368	44.88	1.14	4.0	34.2	83.4	52.29	
AMX160030-B B3XF	1366	41.93	1.20	4.4	34.3	83.8	52.93	
AMX160030-A B3XF	1341	43.55	1.23	4.1	34.5	84.3	50.95	
DP 2127 B3XF	1337	44.55	1.16	4.3	32.9	84.1	52.28	
PHY 475 W3FE	1305	41.13	1.19	4.3	36.8	83.9	50.76	
OVERALL MEAN	1619	43.13	1.20	4.2	34.2	84.0	51.55	
LSD (0.05)	321	1.81	0.04	0.4	2.6	1.5	NS	
C.V (%)	13.9	3.0	2.2	6.7	5.2	1.2	NS	
*Yield in bold type are	not significantly	different from	the highest yield	ding variety.				

# R.R. FOIL PLANT SCIENCE RESEARCH CENTER, MISSISSIPPI STATE

Table 8. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Marietta Fine Sandy Loam at the R. R. Foil Plant Science Research Center Mississippi State, MS during 2023.

		1.1			Measurement		
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	lb/acre	%	in.		g/tex		¢/lb
PHY 415 W3FE	1516	42.50	1.20	4.6	37.6	84.6	57.40
PHY 411 W3FE	1454	44.25	1.13	4.8	34.4	83.7	56.49
PHY 443 W3FE	1419	43.53	1.11	4.7	33.6	84.0	57.23
PHY 332 W3FE	1332	41.43	1.22	4.5	34.9	84.0	57.44
PX1140D328-04	1330	43.28	1.20	4.6	35.0	84.0	56.79
PX1130B333-04	1327	41.43	1.14	4.8	36.2	85.9	56.26
PX1130D303-04	1279	42.38	1.13	4.5	31.7	84.5	56.46
PX1140B373-04	1266	40.93	1.15	4.6	35.5	84.9	56.35
PHY 400 W3FE	1260	41.83	1.20	4.1	35.8	84.3	57.49
DP 2131 B3TXF	1246	42.43	1.20	4.2	29.4	83.1	57.16
Armor 9371 B3XF	1245	41.10	1.17	4.2	29.2	83.8	56.98
ST 4595B3XF	1245	42.13	1.19	4.6	31.9	83.7	57.14
DG 4530 B3TXF	1222	41.50	1.15	4.2	30.0	83.5	56.73
PX1150D490-04	1199	42.50	1.16	4.7	31.5	82.9	56.95
DP 2127 B3XF	1159	41.73	1.15	4.3	30.4	83.5	56.83
AMX20T079 B3XF	1148	40.48	1.19	4.4	32.6	83.9	57.14
NG 4190 B3XF	1148	40.78	1.20	4.4	30.9	83.7	57.20
PHY 475 W3FE	1137	39.73	1.13	4.5	33.8	82.5	56.73
PHY 360 W3FE	1122	41.00	1.18	4.4	30.2	83.2	56.98
DG 3528 B3XF	1112	39.80	1.21	4.3	30.8	84.2	56.95
DP 2012 B3XF	1112	39.38	1.15	4.1	30.9	82.7	57.11
ST 5091B3XF	1098	41.43	1.14	4.1	28.4	81.8	55.95
DP 2211 B3TXF	1095	41.50	1.12	3.9	28.6	82.8	56.98
DP 1646 B2XF	1090	42.30	1.17	4.9	31.0	83.6	56.65
NG 3195 B3XF	1088	39.88	1.16	3.9	31.2	83.6	56.80
DP 2115 B3XF	1084	41.73	1.13	4.3	31.0	83.5	56.36
NG 4335 B3TXF	1066	38.83	1.22	4.2	32.7	85.5	57.00
DP 2317 B3TXF	1057	38.65	1.19	3.7	31.2	82.7	57.24
ST 4990B3XF	1049	39.20	1.12	4.2	30.8	84.7	56.45
PX1140A385-04	1026	43.63	1.14	4.9	34.1	84.7	55.43
AMX20T157 B3XF	1024	40.23	1.20	4.1	31.6	83.8	56.60
AMX160030-B B3XF	1021	40.68	1.20	4.5	34.4	84.3	57.59
DG 4484 B3TXF	1010	41.45	1.17	3.8	32.1	83.4	56.46

Table 8. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Marietta Fine Sandy Loam at the R. R. Foil Plant Science Research Center, Mississippi State, MS during 2023 (continued).

	Line Wielde	Link Wieldt		Measurement					
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value		
	lb/acre	%	in.		g/tex		¢/lb		
AMX21C005 B3TXF	1003	38.38	1.11	4.0	30.7	84.0	56.89		
DP 2239 B3XF	1002	42.23	1.20	4.1	32.1	84.0	56.63		
DP 2328 B3TXF	1000	41.25	1.16	4.0	30.3	81.7	57.08		
Armor 23X1424 B3TX	983	39.80	1.20	4.3	34.5	84.5	56.64		
Armor 9383 B3TXF	975	38.68	1.19	4.1	30.2	84.4	57.15		
DP 2141NR B3XF	975	40.23	1.13	4.8	33.6	83.5	57.24		
DP 2038 B3XF	944	43.05	1.11	4.1	31.7	82.1	57.08		
DG 3503 B3XF	929	41.55	1.22	3.6	35.2	84.4	54.89		
NG 4343 B3TXF	902	40.00	1.21	4.0	30.8	83.7	55.08		
AMX20T114 B3XF	880	40.50	1.21	4.4	30.2	85.3	56.10		
AMX160030-A B3XF	840	43.20	1.16	4.3	31.4	83.7	56.71		
OVERALL MEAN	1123	41.19	1.17	4.3	32.1	83.8	56.74		
LSD (0.05)	216	1.26	0.08	0.3	1.9	1.3	NS		
C.V (%)	13.7	2.2	4.8	5.4	4.2	1.1	NS		
Yield in bold type are r	ot significantly	different from t	he highest yield	ling variety.					

# BOWEN FLOWERS FARM, CLARKSDALE

Table 9. Mean yield performance and fiber characteristics for cotton varieties cultivated on a furrow irrigated Dubbs/Dundee very fine sandy loam on Bowen Flowers farm near Clarksdale, MS during 2023.

					Measurement		
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	lb/acre	%	in.		g/tex		¢/lb
DP 2328 B3TXF	2200	45.38	1.13	4.8	29.9	82.3	54.23
ST 4595B3XF	2036	44.35	1.14	5.0	31.2	83.2	53.68
Armor 9371 B3XF	1868	45.98	1.11	5.0	28.8	83.3	53.26
NG 3195 B3XF	1819	44.08	1.11	4.8	31.4	82.8	52.06
PX1140A385-04	1816	47.23	1.08	5.2	33.7	83.4	50.06
PHY 360 W3FE	1800	44.78	1.09	5.2	28.6	81.6	47.85
DP 2012 B3XF	1791	42.90	1.13	4.9	30.6	83.2	54.19
ST 5091B3XF	1785	44.30	1.11	4.8	28.0	81.9	53.59
DP 2211 B3TXF	1695	46.13	1.12	5.1	29.5	83.6	51.81
DG 3528 B3XF	1688	44.33	1.17	5.0	31.1	84.1	52.34
DG 3503 B3XF	1671	44.13	1.22	4.3	36.1	84.3	55.64
PX1140D328-04	1660	45.38	1.16	4.9	34.8	83.3	52.43
NG 4190 B3XF	1647	45.15	1.13	5.0	32.5	83.7	52.94
DG 4530 B3TXF	1645	44.58	1.18	4.8	30.3	84.8	54.28
DP 2141NR B3XF	1615	42.83	1.16	5.0	34.7	83.2	52.70
DP 2317 B3TXF	1608	43.20	1.14	4.7	30.8	82.8	54.56
DP 2038 B3XF	1608	47.28	1.11	5.0	31.0	82.6	50.35
NG 4335 B3TXF	1597	42.90	1.13	4.8	34.2	83.8	53.89
PX1130D303-04	1596	44.78	1.07	5.2	30.9	82.8	49.54
DP 2127 B3XF	1581	46.08	1.07	5.4	28.7	83.4	49.11
PX1150D490-04	1550	44.75	1.13	4.9	31.9	81.6	52.61
PHY 411 W3FE	1549	46.98	1.05	5.4	29.4	82.8	47.31
DP 2239 B3XF	1536	46.00	1.20	5.1	32.0	84.6	53.29
PHY 400 W3FE	1535	45.68	1.11	4.9	33.0	81.8	52.25
PHY 415 W3FE	1530	44.53	1.16	4.9	35.7	83.4	55.45
Armor 9383 B3TXF	1526	40.90	1.15	4.8	31.3	84.5	55.06
AMX20T157 B3XF	1524	44.23	1.11	5.0	30.8	83.0	52.06
PX1130B333-04	1493	44.15	1.11	5.2	34.7	84.1	50.33
DP 2115 B3XF	1492	44.63	1.12	5.2	30.4	83.3	51.84
PHY 475 W3FE	1479	42.70	1.08	5.3	33.1	81.7	49.91
PHY 443 W3FE	1477	45.75	1.09	5.1	34.2	83.1	50.81
DP 2131 B3TXF	1475	44.83	1.17	4.9	31.2	83.3	52.03
DG 4484 B3TXF	1458	44.83	1.14	4.6	33.8	83.8	53.15

Table 9. Mean yield performance and fiber characteristics for cotton varieties cultivated on a furrow irrigated Dubbs/Dundee very fine sandy loam on Bowen Flowers farm near Clarksdale, MS during 2023 (continued).

			Measurement						
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value		
	lb/acre	%	in.		g/tex		¢/lb		
AMX20T114 B3XF	1443	43.75	1.14	5.1	30.1	84.6	53.10		
AMX21C005 B3TXF	1408	41.73	1.13	4.6	30.7	83.1	55.16		
Armor 23X1424 B3TX	1389	42.20	1.16	5.0	34.3	84.5	52.89		
NG 4343 B3TXF	1366	43.53	1.16	4.9	31.1	83.8	52.73		
ST 4990B3XF	1359	41.43	1.17	5.1	30.3	84.3	52.90		
AMX20T079 B3XF	1349	42.95	1.15	5.0	31.7	82.9	52.99		
PHY 332 W3FE	1348	44.15	1.18	4.8	32.9	83.5	54.80		
DP 1646 B2XF	1340	44.45	1.22	5.0	32.4	84.0	53.21		
PX1140B373-04	1302	44.80	1.08	5.3	31.9	83.5	49.73		
AMX160030-B B3XF	1292	42.93	1.13	5.0	33.0	83.0	53.41		
AMX160030-A B3XF	1205	44.88	1.19	4.8	32.0	83.9	54.68		
OVERALL MEAN	1571	44.37	1.13	5.0	31.8	83.3	52.50		
LSD (0.05)	363	1.28	0.04	0.4	2.7	1.4	3.02		
C.V (%)	16.1	2.1	2.6	5.2	6.1	1.2	4.1		
Yield in bold type are r	Yield in bold type are not significantly different from the highest yielding variety.								

# PACE PERRY FARMS, TUNICA

Table 10. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Keyespoint silty clay soil at Pace Perry Farms near Tunica, MS during 2023.

					Measurement		
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
variety	lb/acre	%					¢/lb
DD 0107 D7VF	,		in.		g/tex		•
DP 2127 B3XF	2179	42.10	1.19	4.7	33.6	85.0	50.75
PX1140D328-04	2134	41.95	1.22	4.3	34.0	83.3	49.90
DG 3528 B3XF	1905	40.80	1.23	4.2	31.9	83.8	50.06
PHY 360 W3FE	1892	41.53	1.21	4.0	33.5	83.5	50.68
PHY 411 W3FE	1872	43.75	1.17	4.4	35.4	83.8	50.71
ST 4595B3XF	1867	41.73	1.22	4.5	33.6	84.3	50.73
PHY 415 W3FE	1837	42.25	1.21	4.1	35.0	83.3	50.74
PX1130D303-04	1817	41.55	1.18	4.2	35.0	85.0	49.61
DP 2328 B3TXF	1813	43.20	1.19	4.1	30.8	83.3	51.36
PHY 400 W3FE	1804	41.98	1.22	4.3	35.5	83.9	49.59
NG 3195 B3XF	1792	41.13	1.19	4.5	33.7	85.0	50.71
DP 2211 B3TXF	1791	42.13	1.20	4.3	31.3	83.6	51.43
PX1140A385-04	1785	43.53	1.20	4.3	36.1	84.4	50.19
DP 2012 B3XF	1778	40.35	1.25	4.3	32.2	84.5	50.68
PHY 332 W3FE	1772	39.93	1.23	3.9	34.0	83.8	51.55
DP 2115 B3XF	1760	42.00	1.20	4.7	31.7	84.5	50.64
Armor 23X1424 B3TX	1759	40.83	1.19	4.4	34.4	83.4	51.54
NG 4335 B3TXF	1754	40.70	1.22	4.2	32.9	85.1	50.78
Armor 9383 B3TXF	1751	39.43	1.20	4.1	31.1	84.0	50.56
DG 4484 B3TXF	1743	43.80	1.16	4.1	32.2	83.5	50.68
DP 2038 B3XF	1726	44.05	1.16	4.9	32.1	83.3	51.24
ST 4990B3XF	1723	37.88	1.23	4.2	32.2	84.4	50.70
DP 2131 B3TXF	1716	41.48	1.25	4.0	31.8	83.5	51.48
DP 2317 B3TXF	1712	39.60	1.22	4.1	33.8	83.5	50.75
Armor 9371 B3XF	1709	42.00	1.19	4.3	32.0	84.0	51.46
NG 4190 B3XF	1701	40.25	1.21	4.2	34.5	84.2	50.78
ST 5091B3XF	1685	40.23	1.23	4.2	31.7	83.8	50.64
AMX20T157 B3XF	1680	40.40	1.21	4.4	33.6	84.2	51.55
PHY 443 W3FE	1663	41.25	1.19	4.1	36.1	84.1	50.79
DP 2141NR B3XF	1648	39.38	1.24	4.4	36.3	85.0	50.79
DP 2239 B3XF	1609	40.35	1.27	4.2	33.5	83.9	50.73
PX1140B373-04	1603	40.45	1.20	4.0	36.7	84.8	50.83
NG 4343 B3TXF	1603	39.88	1.24	4.1	32.1	84.3	51.50
		1		1	1	1	

Table10. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Keyespoint silty clay soil at Pace Perry Farms near Tunica, MS during 2023 (continued).

	Reference only elay son der deer entry raining flear runned; the during 2020 (continued).							
	Lint Yield†	Lint			Measurement			
Variety		Lint	Length	Mic.	Strength	Uniformity	Loan Value	
	lb/acre	%	in.		g/tex		¢/lb	
DG 4530 B3TXF	1587	41.20	1.20	4.0	32.9	84.3	51.51	
DP 1646 B2XF	1531	40.70	1.27	4.2	32.0	84.0	50.65	
PHY 475 W3FE	1522	39.45	1.20	4.4	36.2	83.9	50.15	
PX1130B333-04	1506	41.33	1.20	4.0	36.6	84.9	50.20	
AMX21C005 B3TXF	1444	39.03	1.22	3.8	33.0	84.7	50.16	
AMX160030-B B3XF	1412	40.03	1.21	4.6	34.6	84.5	52.40	
AMX20T079 B3XF	1408	39.73	1.23	4.4	33.3	84.2	51.54	
AMX160030-A B3XF	1338	42.20	1.25	4.4	32.9	84.2	52.35	
PX1150D490-04	1290	39.10	1.19	3.7	32.6	83.2	48.91	
DG 3503 B3XF	1268	41.75	1.26	3.7	35.1	84.2	50.74	
AMX20T114 B3XF	1112	39.80	1.22	4.5	31.9	85.2	50.64	
OVERALL MEAN	1682	41.05	1.21	4.2	33.5	84.1	50.80	
LSD (0.05)	274	1.19	0.03	0.3	1.7	NS	NS	
C.V (%)	11.3	2.1	1.7	4.9	3.7	NS	NS	
Yield in bold type are r	not significantly	different from tl	he highest yield	ing variety.				

# PORTER FARMS, SIDON

Table 11. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Dubbs Loam/Tensas Silty Clay Loam at Porter Farms near Sidon, MS during 2023.

		11			Measurement		
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	lb/acre	%	in.		g/tex		¢/lb
PX1130D303-04	1262	42.83	1.15	4.8	33.5	84.8	53.19
PHY 400 W3FE	1240	42.75	1.17	4.4	35.4	83.9	50.91
PHY 411 W3FE	1240	43.73	1.11	4.4	35.6	84.2	51.48
PHY 443 W3FE	1209	42.88	1.15	4.3	34.3	83.5	51.41
DG 4530 B3TXF	1178	42.23	1.15	4.4	34.9	84.2	52.03
DP 2211 B3TXF	1176	42.73	1.17	4.3	31.8	84.4	52.30
PHY 332 W3FE	1166	41.60	1.22	4.1	37.2	84.9	51.80
AMX20T079 B3XF	1143	40.78	1.19	4.4	32.5	85.0	52.31
PX1130B333-04	1126	41.90	1.14	4.2	36.1	84.2	52.88
AMX21C005 B3TXF	1126	42.63	1.20	4.4	34.0	84.8	52.41
DP 2328 B3TXF	1119	41.95	1.16	4.3	32.6	83.9	52.88
Armor 9383 B3TXF	1103	41.67	1.13	4.5	32.8	83.9	51.40
NG 3195 B3XF	1099	42.28	1.17	4.6	31.3	83.9	53.83
PHY 360 W3FE	1087	42.00	1.19	4.2	34.0	84.2	52.90
NG 4343 B3TXF	1086	40.95	1.17	4.1	31.6	83.8	52.33
ST 5091B3XF	1083	42.13	1.15	4.3	32.3	82.8	52.44
ST 4595B3XF	1081	42.90	1.16	4.4	33.9	84.3	52.34
Armor 23X1424 B3TX	1065	41.48	1.18	4.4	36.4	84.1	51.56
AMX160030-A B3XF	1061	42.25	1.18	4.5	33.1	84.0	52.01
DP 2127 B3XF	1061	41.98	1.12	5.0	32.3	83.8	51.06
Armor 9371 B3XF	1055	41.43	1.17	4.2	31.8	84.6	51.49
NG 4335 B3TXF	1035	42.20	1.16	4.1	33.1	84.4	53.14
DP 2131 B3TXF	1029	42.98	1.18	4.4	30.8	83.8	53.01
NG 4190 B3XF	1028	40.87	1.17	4.4	33.3	84.5	52.92
ST 4990B3XF	1026	39.65	1.21	4.5	34.7	85.6	53.33
AMX20T114 B3XF	1022	41.35	1.17	4.5	32.3	84.0	53.11
PX1140A385-04	1015	43.50	1.12	4.1	38.7	84.4	50.72
PHY 415 W3FE	1003	42.13	1.17	4.2	35.3	83.8	51.55
DP 2012 B3XF	1001	41.50	1.17	4.4	33.1	83.5	52.29
PX1140B373-04	999	41.93	1.16	4.3	37.4	85.1	53.23
DG 4484 B3TXF	986	44.23	1.12	4.1	34.2	83.9	52.08
DP 2317 B3TXF	972	40.75	1.13	4.0	32.4	83.6	51.67
DP 2239 B3XF	963	43.93	1.18	4.8	31.9	84.4	53.46

Table 11 Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Dubbs Loam/Tensas Silty Clay Loam at Porter Farms near Sidon, MS during 2023 (continued).

			Measurement					
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value	
	lb/acre	%	in.		g/tex		¢/lb	
AMX20T157 B3XF	955	40.87	1.17	4.4	35.0	84.4	51.82	
DP 1646 B2XF	946	42.23	1.18	4.4	33.4	84.4	53.16	
PX1140D328-04	945	43.50	1.18	4.4	36.0	83.4	51.48	
DP 2115 B3XF	939	41.37	1.16	4.4	32.2	84.2	52.10	
DG 3528 B3XF	927	42.93	1.13	4.5	32.8	83.7	52.79	
DP 2141NR B3XF	895	40.95	1.18	4.7	35.8	84.2	53.45	
PHY 475 W3FE	859	40.67	1.14	4.2	37.1	84.4	50.73	
DG 3503 B3XF	771	42.35	1.19	4.0	35.8	84.3	51.58	
DP 2038 B3XF	732	42.63	1.12	4.6	33.9	83.1	52.03	
PX1150D490-04	699	42.57	1.17	4.3	34.4	84.4	54.50	
AMX160030-B B3XF	640	42.00	1.20	4.3	35.4	84.3	51.85	
OVERALL MEAN	1026	42.09	1.16	4.4	34.0	84.2	52.29	
LSD (0.05)	272	1.98	0.05	NS	3.1	NS	NS	
C.V (%)	17.7	3.2	2.7	NS	6.1	NS	NS	
Yield in bold type are r	Yield in bold type are not significantly different from the highest yielding variety.							

# DELTA RESEARCH AND EXTENSION CENTER, STONEVILLE

Table 12. Mean yield performance and fiber characteristics for cotton varieties cultivated on a furrow irrigated Bosket very fine sandy loam soil at the Mississippi State University Delta Research and Extension Center near Stoneville, MS during 2023.

	1 ! 4 3/! - 1 -14	11			Measurement		
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	lb/acre	%	in.		g/tex		¢/lb
Armor 9371 B3XF	2996	46.30	1.17	5.4	32.1	85.5	53.73
DP 2127 B3XF	2993	46.35	1.14	5.7	31.9	84.7	52.54
NG 4190 B3XF	2884	45.37	1.19	5.1	33.1	85.6	54.76
DP 1646 B2XF	2784	44.75	1.23	5.0	31.5	84.4	54.25
ST 4595 B3XF	2767	45.75	1.18	5.6	32.6	84.3	53.49
DP 2239 B3XF	2747	46.38	1.23	5.3	32.3	86.0	54.06
PHY 415 W3FE	2736	44.85	1.18	5.5	34.6	85.4	53.70
PHY 411 W3FE	2731	45.23	1.14	5.8	34.1	84.9	52.99
PX1140A385-04	2712	46.85	1.14	5.5	35.0	85.1	52.41
DP 2131 B3TXF	2697	44.95	1.21	5.2	31.6	84.6	52.89
DG 3528 B3XF	2682	45.00	1.19	5.1	32.0	85.0	54.55
PHY 400 W3FE	2657	45.73	1.16	5.2	34.8	84.4	53.83
DP 2038 B3XF	2634	47.95	1.12	5.3	32.1	82.5	52.78
PX1140D328-04	2622	44.28	1.21	5.2	35.3	85.5	53.58
PX1130B333-04	2592	44.08	1.13	5.4	35.4	85.5	53.15
DP 2317 B3TXF	2579	43.60	1.18	5.0	32.7	84.3	55.73
NG 3195 B3XF	2577	44.13	1.16	5.2	33.7	84.7	54.68
DP 2211 B3TXF	2577	45.90	1.14	5.6	31.0	84.4	52.16
PHY 332 W3FE	2572	43.28	1.25	5.1	34.5	85.4	55.41
DP 2115 B3XF	2556	44.73	1.16	5.3	32.3	84.7	53.54
PHY 443 W3FE	2551	44.48	1.15	5.5	34.0	84.6	53.73
DG 4530 B3TXF	2519	44.33	1.19	5.3	32.6	85.0	54.13
ST 5091 B3XF	2509	44.75	1.15	5.2	31.3	83.3	54.18
PX1140B373-04	2493	43.93	1.14	5.4	36.1	85.1	53.06
DP 2141NR B3XF	2451	43.98	1.20	5.7	35.9	85.5	53.58
PX1130D303-04	2440	44.33	1.12	5.4	35.6	85.3	52.65
DP 2012 B3XF	2432	43.93	1.17	5.0	33.2	84.3	55.51
NG 4343 B3TXF	2424	43.13	1.21	4.6	33.7	85.0	52.21
PX1150D490-04	2402	45.00	1.17	5.1	32.3	84.4	54.65
ST 4990 B3XF	2396	42.30	1.19	5.2	32.0	84.9	54.00

Table 12. Mean yield performance and fiber characteristics for cotton varieties cultivated on a furrow irrigated Bosket very fine sandy loam soil at the Mississippi State University Delta Research and Extension Center near Stoneville, MS during 2023 (continued).

		11	Measurement					
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value	
	lb/acre	%	in.		g/tex		¢/lb	
AMX20T079 B3XF	2367	44.30	1.19	5.2	32.5	84.8	54.11	
PHY 360 W3FE	2309	43.00	1.15	5.4	30.9	83.3	52.23	
AMX21C005 B3TXF	2259	41.18	1.18	4.8	32.1	85.1	55.46	
DG 4484 B3TXF	2256	44.58	1.15	5.2	33.5	84.8	53.75	
AMX20T157 B3XF	2252	43.98	1.17	5.2	32.1	84.9	51.63	
AMX160030-B B3XF	2224	43.85	1.17	5.4	34.2	84.7	53.99	
DG 3503 B3XF	2220	44.23	1.23	4.8	35.9	85.3	56.50	
Armor 23X1424 B3TX	2195	42.25	1.15	5.3	34.5	84.6	53.60	
AMX160030-A B3XF	2134	45.43	1.20	5.2	32.6	85.1	54.53	
DP 2328 B3TXF	2123	45.58	1.15	5.4	32.1	83.7	52.25	
AMX20T114 B3XF	2122	44.08	1.16	5.6	30.5	85.0	51.95	
Armor 9383 B3TXF	2111	41.25	1.17	5.2	31.5	85.3	52.60	
NG 4335 B3TXF	2109	41.80	1.20	5.1	33.0	85.6	55.65	
PHY 475 W3FE	2091	42.60	1.13	5.4	35.3	83.4	52.35	
OVERALL MEAN	2488	44.40	1.17	5.3	33.2	84.8	53.69	
LSD (0.05)	297	1.08	0.03	1.9	0.4	1.3	2.30	
C.V (%)	8.4	1.7	1.8	4.8	3.8	1.0	3.0	

<sup>\*</sup>Yield in bold type are not significantly different from the highest yielding variety.

# MAFES BROWN LOAM EXPERIMENT STATION, RAYMOND

Table 13. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Loring silt loam soil at the Brown Loam Experiment Station near Raymond, MS during 2023.

	Link Wieldt	11	Measurement						
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value		
	lb/acre	%	in.		g/tex		¢/lb		
PHY 411 W3FE	1537	47.83	0.99	5.7	29.7	81.8	40.30		
PX1140A385-04	1446	45.93	1.01	5.8	31.0	83.9	45.13		
ST 4595B3XF	1424	46.70	1.04	5.2	29.6	82.1	47.78		
PHY 415 W3FE	1421	45.93	1.06	5.3	29.9	82.6	49.95		
PHY 400 W3FE	1414	45.08	1.08	5.0	33.1	82.7	51.38		
Armor 9371 B3XF	1399	46.28	1.07	5.3	29.1	83.8	48.65		
AMX20T079 B3XF	1388	44.08	1.08	5.3	27.7	82.5	49.08		
PHY 360 W3FE	1381	45.13	1.02	5.4	26.5	81.5	44.50		
DP 1646 B2XF	1380	45.50	1.12	5.0	31.6	82.5	53.93		
DP 2115 B3XF	1379	45.40	1.10	4.8	30.2	82.9	52.90		
AMX160030-A B3XF	1364	47.23	1.10	4.9	29.9	84.1	51.65		
DP 2328 B3TXF	1359	45.58	1.06	5.2	28.3	82.4	47.93		
PX1140B373-04	1359	44.13	0.99	5.4	30.7	81.8	44.45		
PX1150D490-04	1355	47.00	1.06	5.1	31.9	82.4	50.30		
ST 5091B3XF	1353	43.48	1.04	4.9	26.1	81.8	47.58		
Armor 23X1424 B3TX	1343	43.70	1.04	5.1	30.6	83.2	46.05		
PX1130D303-04	1333	44.13	0.99	5.4	31.3	83.1	43.28		
PHY 332 W3FE	1333	46.10	1.09	5.3	32.0	82.9	48.90		
NG 4190 B3XF	1331	45.23	1.05	5.3	29.7	82.5	47.00		
PHY 475 W3FE	1331	44.90	1.04	5.4	30.2	82.2	47.48		
DP 2127 B3XF	1327	45.90	0.99	5.4	26.1	81.8	45.10		
DP 2131 B3TXF	1327	44.88	1.12	4.9	29.3	81.7	55.95		
AMX160030-B B3XF	1324	42.90	1.07	5.1	31.5	83.0	50.80		
DP 2211 B3TXF	1321	46.03	1.00	5.4	29.0	81.2	44.35		
DP 2038 B3XF	1316	46.88	1.02	5.3	28.3	82.4	47.25		
DP 2239 B3XF	1306	47.20	1.11	5.2	30.7	82.5	51.30		
NG 4335 B3TXF	1304	41.83	1.05	5.3	30.4	83.3	46.15		
Armor 9383 B3TXF	1303	44.00	1.11	4.9	30.4	82.8	49.35		
DP 2012 B3XF	1302	43.10	1.02	5.1	29.6	82.1	47.93		
AMX20T157 B3XF	1284	45.58	1.08	5.0	30.2	82.3	49.75		
NG 3195 B3XF	1281	44.60	1.03	4.6	30.2	82.8	49.18		
AMX21C005 B3TXF	1278	40.00	1.08	4.5	29.7	83.5	53.08		
AMX20T114 B3XF	1277	43.60	1.06	5.3	27.7	83.0	49.80		

Table 13. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Loring silt loam soil at the Brown Loam Experiment Station near Raymond, MS during 2023 (continued).

		Lint	Measurement					
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value	
	lb/acre	%	in.		g/tex		¢/lb	
PX1140D328-04	1274	46.73	1.08	5.2	32.0	83.4	50.68	
PX1130B333-04	1252	45.08	1.04	5.5	30.0	83.9	48.45	
DG 4530 B3TXF	1249	45.93	1.07	5.1	29.4	82.9	49.10	
PHY 443 W3FE	1247	46.80	1.03	5.7	30.9	81.3	47.53	
DP 2317 B3TXF	1222	43.68	1.07	4.6	28.2	82.8	51.43	
DG 4484 B3TXF	1221	45.10	1.01	5.0	29.7	81.3	45.15	
ST 4990B3XF	1219	42.63	1.08	5.2	28.6	83.3	47.35	
DG 3528 B3XF	1188	44.70	1.04	5.4	30.1	82.8	47.58	
DP 2141NR B3XF	1175	43.28	1.10	5.3	31.5	82.6	51.68	
DG 3503 B3XF	1150	43.90	1.17	4.4	32.6	84.1	54.45	
NG 4343 B3TXF	1120	42.73	1.09	5.1	29.6	82.4	51.95	
OVERALL MEAN	1316	44.92	1.06	5.1	29.9	82.6	48.72	
LSD (0.05)	NS	0.95	0.07	0.6	NS	NS	6.33	
C.V (%)	NS	1.5	2.8	5.7	NS	NS	6.0	
*Yield in bold type are	not significantly	different from	the highest yield	ding variety.				

# MAFES BLACK BELT EXPERIMENT STATION, BROOKSVILLE

Table 14. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Brooksville silty clay at the Black Belt Experiment Station near Brooksville, MS during 2023.

		11			Measurement		
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value
	lb/acre	%	in.		g/tex		¢/lb
PX1150D490-04	809	44.78	1.11	4.3	30.2	81.7	50.13
DP 2328 B3TXF	753	44.70	1.16	4.0	29.7	82.1	50.58
DP 2131 B3TXF	722	43.40	1.20	3.8	30.4	82.4	51.54
PHY 360 W3FE	709	44.35	1.11	4.3	28.9	81.0	51.15
DP 2127 B3XF	689	44.23	1.15	4.1	30.3	84.0	53.23
PHY 415 W3FE	684	44.18	1.19	3.9	34.4	83.8	51.24
PX1130D303-04	669	43.53	1.12	4.3	32.7	83.5	50.52
PHY 400 W3FE	655	44.75	1.13	3.8	31.8	82.1	52.25
ST 4595 B3XF	655	45.35	1.18	4.2	30.9	83.4	50.36
DP 2038 B3XF	628	46.63	1.11	4.8	31.2	82.0	53.15
ST 4990 B3XF	628	40.23	1.13	4.6	29.8	83.5	52.57
NG 3195 B3XF	622	42.13	1.18	4.0	31.7	83.5	51.73
DP 2115 B3XF	608	43.53	1.16	4.4	32.2	83.2	53.81
DP 1646 B2XF	606	42.73	1.21	4.0	30.1	82.4	52.04
DP 2211 B3TXF	598	44.00	1.15	3.3	29.4	82.2	46.81
PHY 332 W3FE	598	43.28	1.18	3.8	32.2	82.5	50.23
ST 5091 B3XF	596	42.60	1.16	3.6	29.4	81.9	50.07
DP 2239 B3XF	589	44.93	1.20	4.0	30.4	82.8	52.82
PX1140D328-04	579	44.55	1.18	4.2	32.9	82.5	49.32
DG 3503 B3XF	574	44.25	1.16	3.7	33.0	83.3	48.40
NG 4190 B3XF	556	42.50	1.18	4.0	31.7	83.2	51.18
PX1130B333-04	549	43.95	1.15	3.9	32.7	83.5	52.83
DP 2012 B3XF	545	40.15	1.21	3.8	31.7	83.0	50.51
DG 4530 B3TXF	532	42.60	1.20	3.7	30.8	82.6	49.36
AMX21C005 B3TXF	522	41.48	1.18	3.6	30.4	83.2	48.13
Armor 23X1424 B3TX	514	41.23	1.19	3.8	35.2	84.1	51.35
Armor 9371 B3XF	508	44.33	1.18	4.0	30.6	83.8	52.80
DP 2317 B3TXF	505	40.53	1.15	3.4	31.1	83.4	48.51
PX1140A385-04	502	43.38	1.16	3.7	33.6	83.6	48.99
PHY 475 W3FE	500	42.03	1.14	4.2	34.3	82.8	50.61
DG 3528 B3XF	495	42.30	1.18	4.1	31.0	83.6	49.96
PHY 411 W3FE	495	42.90	1.11	3.8	32.8	81.9	49.95

Table 14. Mean yield performance and fiber characteristics for cotton varieties cultivated on a non-irrigated Brooksville silty clay at the Black Belt Experiment Station near Brooksville, MS during 2023. (continued)

		Link	Measurement					
Variety	Lint Yield†	Lint	Length	Mic.	Strength	Uniformity	Loan Value	
	lb/acre	%	in.		g/tex		¢/lb	
NG 4343 B3TXF	485	42.10	1.21	4.0	31.4	83.8	51.33	
AMX20T157 B3XF	466	41.83	1.19	3.8	33.1	83.7	51.35	
AMX20T079 B3XF	462	42.85	1.17	4.1	30.6	83.1	51.08	
Armor 9383 B3TXF	457	39.93	1.15	3.4	29.9	82.5	48.65	
NG 4335 B3TXF	454	41.68	1.13	3.7	32.6	83.9	51.11	
DP 2141NR B3XF	440	43.90	1.17	4.5	32.3	82.1	51.84	
AMX20T114 B3XF	415	41.53	1.18	4.1	31.6	84.5	50.55	
PHY 443 W3FE	373	41.68	1.20	3.8	34.2	84.0	52.67	
PX1140B373-04	368	42.25	1.14	3.9	33.6	83.8	51.51	
AMX160030-B B3XF	356	42.33	1.14	4.1	32.6	83.8	51.33	
DG 4484 B3TXF	336	43.23	1.16	3.8	32.3	83.9	50.31	
AMX160030-A B3XF	194	42.75	1.19	3.7	32.8	82.8	48.94	
Overall Mean	545	42.99	1.16	4.0	31.7	83.0	50.84	
LSD (0.05)	226	2.29	0.06	0.6	2.1	1.3	NS	
C.V (%)	29.5	3.8	3.8	10.6	4.4	1.0	NS	

Table 15. Response of the cotton varieties in the 2023 Mississippi State University Official Variety Trial to inoculation with the bacterial blight bacterium at Stoneville, MS.

Variety	Response	Variety	Response
AMX160030-A B3XF	S	DP 2317 B3TXF B3XF	R
AMX160030-B B3XF	MS	DP 2328 B3TXF B3XF	MS
AMX20T079 B3XF	R	NG 3195 B3XF	S
AMX20T114 B3XF	S	NG 4190 B3XF	S
AMX20T157 B3XF	R	NG 4335 B3TXF	R
AMX21C005 B3XF	R	NG 4343 B3TXF	S
Armor 23X1424 B3TXF	R	PHY332W3FE	R
Armor 9371 B3XF	S	PHY360W3FE	R
Armor 9383 B3TXF	R	PHY400W3FE	R
DG 3503 B3XF	S	PHY411W3FE	R
DG 3528 B3XF	R	PHY415W3FE	R
DG 4484 B3TXF	S	PHY443W3FE	R
DG 4530 B3TXF	S	PX1130B333-04	R
DP 1646 B2XF	R	PX1130D303-04	R
DP 2012 B3XF	R	PX1140A385-04	R
DP 2038 B3XF	R	PX1140B373-04	R
DP 2115 B3XF	S	PX1140D328-04	R
DP 2127 B3XF	S	PHY 475 W3FE	R
DP 2131 B3TXF B3XF	MR	PX1150D490-04	R
DP 2141NR B3XF	S	ST 4595B3XF	S
DP 2211 B3TXF B3XF	S	ST 4990B3XF	S
DP 2239 B3XF	S	ST 5091B3XF	S

Response is presented as a letter assessment based on the percentage of disease post-inoculation as observed throughout the entire plot of each variety. Variety responses listed above are based on disease incidence following inoculation with the bacterial blight causal organism and based on evaluations of observable disease incidence on a 0-100% scale. Responses were assessed as  $\bf S$  = susceptible;  $\bf MS$  = moderately susceptible;  $\bf MR$  = moderately resistance; and  $\bf R$  = resistant based on the observational response of each variety in a replicated variety trial planted in Stoneville, MS (n=4 replicate plots of each variety). Plants were inoculated with the bacterium that causes bacterial blight and evaluated for the incidence and severity that resulted from bacterial blight.



The mission of the Mississippi Agricultural And Forestry Experiment Station and the College Of Agriculture And Life Sciences is to advance agriculture and natural resources through teaching and learning, research and discovery, service and engagement which will enhance economic prosperity and environmental stewardship, to build stronger communities and improve the health and well-being of families, and to serve people of the state, the region and the world.

#### Scott Willard, Director

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