

2025 Mississippi On-Farm Cotton Variety Trials

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Mississippi State University Extension



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2025 County Trial Locations and Cooperators

Trials arranged and conducted by: Dr. Brian Pieralisi

Assistance provided by: Extension Technician Ty Dickson, Graduate Student Grace Gough, and student workers/interns Mauricio Silveira, Amy Nowicki, Reece Oliver, Cole Bailey, Andrew Finell, Blain Vencent, and Aiden Noah.

Special thanks to: Dr. Tyson Raper – University of Tennessee – West Tennessee Research and Education Center

Table 1. Locations, growers, and cooperating agronomists for the 2025 Mississippi State University County Variety Trial Program.

<i>Location</i>	<i>Grower</i>	<i>Region</i>	<i>Irrigation</i>
<i>Brooksville</i>	<i>Dr. Brian Pieralisi</i>	<i>Hills</i>	<i>Dry-Land</i>
<i>Clarksdale</i>	<i>Mr. Brian Fyfe</i>	<i>Delta</i>	<i>Irrigated</i>
<i>Coffeeville</i>	<i>Mr. Coley Bailey</i>	<i>Hills</i>	<i>Irrigated</i>
<i>Edwards</i>	<i>Mr. Kendall Garraway</i>	<i>Hills</i>	<i>Dry-Land</i>
<i>Ellistown</i>	<i>Mr. Kerry Coker</i>	<i>Hills</i>	<i>Dry-Land</i>
<i>Leland</i>	<i>Mr. Tyler Horn</i>	<i>Delta</i>	<i>Irrigated</i>
<i>Natchez</i>	<i>Mr. Matthew Guedon</i>	<i>Hills</i>	<i>Dry-Land</i>
<i>Raymond</i>	<i>Dr. Tyler Soignier</i>	<i>Hills</i>	<i>Dry-Land</i>
<i>Richton</i>	<i>Mr. Van Hensarling</i>	<i>Hills</i>	<i>Irrigated</i>
<i>Sledge</i>	<i>Mr. Sledge Taylor</i>	<i>Delta</i>	<i>Irrigated</i>
<i>Somerville</i>	<i>Mr. Mike Sturdivant</i>	<i>Delta</i>	<i>Irrigated</i>
<i>Starkville</i>	<i>Dr. Brian Pieralisi</i>	<i>Hills</i>	<i>Irrigated</i>
<i>Verona</i>	<i>Dr. Ameer Bumgardner</i>	<i>Hills</i>	<i>Irrigated</i>

Mississippi State University Extension sincerely appreciates the time and effort of the cooperating growers and Mississippi State University Agronomists. In addition, several Independent Consultants provided significant assistance with these trials, including Mr. Ty Edwards, Mr. Jason Grafton, Mr. Bert Falkner, Mr. Tucker Miller, Mr. Andy Graves, and Mr. Trey Bullock. Sincere gratitude is also extended to the following seed companies and representatives for providing seed for these trials: Stoneville Cottonseed – Dr. Andy White and Bill Long, Nutrien Ag Solutions/Dyna-Gro – Mr. Scott Cummings, Phytogen Cottonseed – Mr. Ben Maddox, Americot/NexGen – Dr. Chase Samples, and Deltapine – Mr. Greg Ferguson. Cooperation from all aforementioned parties is essential for the success of the Mississippi State University County Research and Demonstration Yield Trial Program. In addition, partial financial support for this project was provided by each participating company and Cotton Incorporated.

Introduction

The cotton variety selection process is often difficult and, in many cases, leaves growers wondering for the remainder of the growing season whether they made the right variety selection decisions. Furthermore, the rapid introduction of new varieties and the discontinuation of “older” varieties have become commonplace over the past several years. Historically, a premier variety would remain in the marketplace for a long period of time. However, a variety that performs well today typically has a life span of four to six years. One that does not perform well will likely remain on the market for less than three years. In addition, the historical standard for variety testing information was to have two to three years of data prior to the release of any given variety. Today, one to two years of “broad scale” variety testing is common prior to the release of a new variety. Therefore, greater demand has been placed upon testing a variety in as many environments as possible as a substitute for multiple years of data. In most cases, variety testing prior to release is conducted by private industry through a series of testing methods and through University Official Variety Trial (OVT) programs. Official Variety Trial data is typically available for one year prior to the release of a given variety.

Our on-farm testing program is not designed to replace or compete with small-plot OVT testing programs, rather, it is designed to complement the data that is provided by OVT programs. The use of large plot variety trial data in conjunction with small plot OVT data provides a tremendous resource with respect to variety performance to the growers of Mississippi.

Methodology

The on-farm testing program at Mississippi State University is designed to test varieties in as many environments as possible. Limiting the number of entries allows for efficient planting and harvest operations and requires a minimum amount of time from cooperating growers. The number of variety entries each company is given is dependent upon market share. In addition, one to two at-large entries are given to smaller companies to provide equal opportunity to as many seed providers as possible. Our on-farm variety tests are usually planted in six- or twelve-row sets utilizing planting equipment provided by each respective grower. In some cases, eight- or four-row sets are used depending on site characteristics and grower preference. In addition, two replications of each variety are planted and harvested at all locations. Plot lengths ranged from 500 to 2600 feet in 2025, depending on the characteristics of the field the trial was conducted. Seed treatments are at the discretion of the company providing the seed. A premium seed treatment package including an insecticide, fungicide, and nematicide was provided for each variety. In-season management is at the discretion of the grower, and each is encouraged to manage the plot area as he/she would manage any given field on their farm.

Each replication for each variety was individually harvested using standard harvest equipment. Harvest weights were collected using a boll buggy or trailer modified to display the weight of seed cotton contained therein. Before all harvest operations, each boll buggy or trailer was calibrated by the Mississippi Department of Agriculture to ensure that accurate harvest weights were collected. An 8- to 10-pound seed cotton sample was collected for each variety tested. To reduce ginning time, subsamples from replications number one and two were composited into a single sample. Seed cotton was ginned at the University of Tennessee – West Tennessee Research and Education Center. Ginning equipment at the WTREC consists of a 20-saw Continental Eagle gin equipped with a stick machine, incline cleaners, two lint cleaners, and a condenser. Fiber quality for each ginned sample was determined using a High-Volume Instrument (HVI) located at the United States Department of Agriculture Classing Office in Memphis, TN.

Entries

A maximum of 10 core variety entries per year are allowed in the Mississippi State University on-farm variety trial program. Entries are allotted by market share from respective companies. One entry per year is automatically given to the variety planted on the highest acreage in the previous year based on the annual Varieties Planted Report from USDA-AMS. In 2025, Deltapine was allotted three spots; Stoneville, Americot, and Phytogen Cottonseed were allotted two spots. The “at-large” entry was given to Dyna-Gro to provide parody between smaller companies with fewer resources than larger companies. Entries in the 2025 Mississippi State University County Trial Program were as follows:

Table 2. 2025 Mississippi State University County Variety Trial Program entry list.

Slot #	Criteria/Company	Variety
1	Delta and Pine Land	DP 2127 B3XF
2	Delta and Pine Land	DP 2328 B3TXF
3	Delta and Pine Land	DP 2333 B3XF
4	BASF-Stoneville	ST 4215AXTP
5	BASF-Stoneville	ST 5931AXTP
6	Americot	NG 4507 B3TXF
7	Americot	NG 4626 B3XF
8	Phytogen Cottonseed	PHY 357 W3FE
9	Phytogen Cottonseed	PHY 433 W3FE
10	At-Large Entry – Crop Production Services/Dyna-Gro	DG 4434 B3TXF

Site Characteristics

Locations for the 2025 Mississippi State University County Yield Trial Program are listed on page 3. Yield trials were conducted at a total of thirteen locations. Four locations were located in the Delta, and nine were in the Hills. Seven locations were irrigated, and six locations were dryland. Field sites were chosen based on grower preference and required elements to conduct a reliable yield trial.

Reported Data & Analysis

Each data table includes the following: variety, lint yield, lint percent, micronaire, staple length (in inches) fiber strength, fiber uniformity, and leaf grade. Data analysis using SAS v. 9.4 was conducted on all replicated trials. Grand means (averages) are presented as well as Least Significant Differences (LSD). Least Significant Differences are the smallest value with which we can confidently say there is a difference between two means. Differences in means less than the given LSD value are likely due to variability within a given field or environment. For non-replicated trials and fiber data at individual locations, LSD’s are not applicable. For locations that were replicated and data from one replication of a given variety were lost, SAS will interpret these data as missing and provide data analysis based on estimates. Therefore, average data for a given location may be slightly different than data reported.

2025 Mississippi State University On-Farm Variety Trial Program

Yield and Fiber Quality Data Pooled Across All 13 Locations

Table 3. Yield and fiber quality data pooled across all 13 locations.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DP 2333 B3XF	1321	41.4	4.5	1.17	31.4	83.2	4
PHY 357 W3FE	1301	39.9	4.4	1.20	33.5	84.4	6
PHY 433 W3FE	1283	40.5	4.4	1.24	33.5	85.0	5
ST 5931 AXTP	1278	39.3	4.0	1.21	32.2	83.9	4
NG 4626 B3XF	1275	39.8	4.5	1.93	31.8	84.5	5
DP 2127 B3XF	1273	40.5	4.7	1.15	31.4	84.2	4
DP 2328 B3TXF	1231	41.3	4.3	1.17	30.9	83.4	4
DG 4434 B3TXF	1212	41.0	4.0	1.21	31.7	83.0	5
ST 4215 AXTP	1186	40.8	4.3	1.21	32.3	83.1	5
NG 4507 B3TXF	1176	39.0	4.2	1.20	31.9	84.0	4
Grand Mean	1254	40.4	4.3	1.27	32.1	83.9	4.6
LSD (0.05)	83	0.7	0.2	0.02	0.6	0.5	0.4

*Yield in bold type are not significantly different from the highest yielding variety.

Delta Region Locations Included: Clarksdale, Leland, Sledge, and Somerville

Table 4. Yield and fiber quality data pooled over 4 Delta locations.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
PHY 357 W3FE	1823	38.5	4.8	1.20	31.6	84.9	4
DP 2127 B3XF	1716	39.6	4.3	1.20	30.7	83.7	5
PHY 433 W3FE	1693	38.7	4.5	1.20	31.3	83.7	5
DP 2333 B3XF	1682	40.0	4.0	1.26	32.4	84.8	5
ST 5931 AXTP	1664	39.2	4.2	1.23	31.6	83.1	5
NG 4626 B3XF	1652	40.1	4.2	1.24	31.6	84.5	5
ST 4215 AXTP	1640	40.1	4.5	1.21	31.7	84.6	5
DP 2328 B3TXF	1587	40.7	4.3	1.26	31.4	84.5	5
DG 4434 B3TXF	1577	39.6	4.5	1.24	32.9	85.1	6
NG 4507 B3TXF	1538	38.0	4.3	1.26	31.2	84.9	5
Grand Mean	1657	39.4	4.4	1.23	31.6	84.4	5.0
LSD (0.05)	140	1.2	0.3	0.03	0.9	0.8	0.7

*Yield in bold type are not significantly different from the highest yielding variety.

2025 Mississippi State University On-Farm Variety Trial Program

Hill Region Locations Included: Brooksville, Coffeeville, Edwards, Ellistown, Natchez, Raymond, Richton, Starkville, and Verona

Table 5. Yield and fiber quality data pooled over nine Hill region locations.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DP 2333 B3XF	1179	40.8	4.6	1.13	31.3	83.9	4
NG 4626 B3XF	1125	41.4	4.3	1.16	31.0	83.3	4
ST 5931 AXTP	1125	0.6	4.5	1.16	31.4	83.0	4
PHY 433 W3FE	1123	40.0	4.0	1.20	32.1	83.5	4
PHY 357 W3FE	1111	40.8	4.4	1.20	32.6	83.1	4
DP 2328 B3TXF	1093	40.5	4.2	1.19	32.1	83.7	4
DP 2127 B3XF	1091	39.4	4.4	1.19	31.7	84.4	5
DG 4434 B3TXF	1065	41.5	3.9	1.19	31.7	82.5	5
NG 4507 B3TXF	1034	40.7	4.4	1.19	33.7	84.1	5
ST 4215 AXTP	1001	39.9	4.4	1.23	34.2	84.9	5
Grand Mean	1095	36.6	4.3	1.19	32.2	83.6	4.4
LSD (0.05)	106	0.9	0.2	0.02	0.7	0.7	0.5

*Yield in bold type are not significantly different from the highest yielding variety.

Irrigated Locations Included: Clarksdale, Coffeeville, Leland, Richton, Sledge, Somerville, Starkville, and Verona

Table 6. Yield and fiber quality data pooled over eight irrigated locations.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
PHY 357 W3FE	1525	40.0	4.5	1.22	33.5	84.9	5
DP 2333 B3XF	1506	41.5	4.5	1.19	31.1	83.2	4
ST 5931 AXTP	1470	40.0	4.0	1.21	32.4	84.2	4
PHY 433 W3FE	1458	38.9	4.3	1.25	32.7	85.2	5
DP 2127 B3XF	1443	40.1	4.8	1.17	31.5	84.0	4
NG 4626 B3XF	1409	40.8	4.6	1.19	31.8	84.3	5
DP 2328 B3TXF	1367	41.4	4.3	1.19	30.9	83.5	5
DG 4434 B3TXF	1363	41.3	4.1	1.22	31.4	82.9	5
ST 4215 AXTP	1356	41.1	4.4	1.21	32.2	83.2	4
NG 4507 B3TXF	1324	38.8	4.3	1.22	31.8	84.0	5
Grand Mean	1422	40.4	4.4	1.21	31.9	83.9	4.6
LSD (0.05)	135	0.9	0.2	0.02	0.8	0.7	0.5

*Yield in bold type are not significantly different from the highest yielding variety.

2025 Mississippi State University On-Farm Variety Trial Program

Dryland Locations Included: Brooksville, Edwards, Ellistown, Natchez, and Raymond

Table 7. Yield and fiber quality data pooled over five dryland locations.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
NG 4626 B3XF	1106	40.0	4.3	1.19	31.7	84.7	5
DP 2333 B3XF	1091	41.3	4.5	1.15	31.7	83.2	4
PHY 433 W3FE	1071	40.2	4.4	1.22	34.5	84.7	5
DP 2127 B3XF	1061	40.9	4.6	1.14	31.3	84.5	4
DP 2328 B3TXF	1057	41.1	4.2	1.15	30.8	83.1	4
PHY 357 W3FE	1043	40.3	4.3	1.18	33.5	83.7	6
ST 5931 AXTP	1041	39.6	3.9	1.20	31.9	83.5	4
DG 4434 B3TXF	1022	40.8	3.9	1.19	32.0	83.1	5
NG 4507 B3TXF	991	39.4	4.1	1.19	32.1	83.9	4
ST 4215 AXTP	974	40.1	4.2	1.22	32.5	82.9	5
Grand Mean	1046	40.4	4.2	1.18	32.2	83.7	4.6
LSD (0.05)	104	0.9	0.3	0.02	0.8	0.8	0.7

*Yield in bold type are not significantly different from the highest yielding variety.

Individual Trial Location Data

Location: Brooksville
Grower: Dr. Brian Pieralisi
Region: Hills

Irrigation: Dry-Land
Row Width: 38”
Plant: June 6, 2025

Harvest: November 3, 2025
Soil Series: Brooksville silty clay

Table 8. Yield and fiber quality data at Brooksville.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
PHY 433 W3FE	1177	43.3	4.4	1.24	32.8	82.6	7
ST 4215 AXTP	931	41.7	3.9	1.17	31.4	82.4	5
DG 4434 B3TXF	897	42.0	4.6	1.15	32.0	84.0	4
DP 2328 B3TXF	875	41.9	4.6	1.14	31.7	84.3	3
NG 4507 B3TXF	789	37.8	4.1	1.20	30.9	83.5	3
PHY 357 W3FE	765	41.4	4.9	1.17	34.1	83.6	6
DP 2127 B3XF	695	43.4	4.3	1.12	29.7	82.9	4
DP 2333 B3XF	686	40.4	4.0	1.18	33.5	84.5	5
ST 5931 AXTP	642	38.9	4.0	1.20	32.9	84.6	5
NG 4626 B3XF	617	38.5	3.7	1.22	33.0	84.9	6
Grand Mean	807	40.9	4.3	1.18	32.2	83.7	4.8
LSD (0.05)	●	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

2025 Mississippi State University On-Farm Variety Trial Program

Location: Clarksdale
Grower: Mr. Brian Fyfe
Region: Delta

Irrigation: Furrow
Row Width: 38”
Plant: May 16, 2025

Harvest: October 16, 2025
Soil Series: Dubbs very fine sandy loam

Table 9. Yield and fiber quality data at Clarksdale.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
PHY 357 W3FE	1825	39.7	4.9	1.19	32.7	85.1	6
DP 2127 B3XF	1823	41.4	5.1	1.15	30.5	83.9	3
ST 5931 AXTP	1770	41.9	4.7	1.22	32.2	83.1	4
DP 2328 B3TXF	1760	42.2	4.4	1.18	31.5	82.6	6
DG 4434 B3TXF	1756	40.2	4.3	1.25	31.6	84.5	5
ST 4215 AXTP	1735	41.7	4.7	1.15	29.6	81.6	4
DP 2333 B3XF	1729	39.7	4.2	1.21	32.0	82.6	4
NG 4626 B3XF	1694	41.7	4.2	1.24	31.9	84.5	4
PHY 433 W3FE	1594	39.1	4.1	1.22	30.4	83.3	6
NG 4507 B3TXF	1558	39.0	4.7	1.17	32.0	83.3	4
Grand Mean	1724	40.7	4.5	1.20	31.4	83.5	4.6
LSD (0.05)	206	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Location: Coffeerville
Grower: Mr. Coley Bailey
Region: Hills

Irrigation: Pivot
Row Width: 38”
Plant: June 6, 2025

Harvest: November 3, 2025
Soil Series: Collins silt loam

Table 10. Yield and fiber quality data at Coffeerville.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
PHY 357 W3FE	1245	40.8	4.8	1.21	34.4	84.8	4
ST 5931 AXTP	1146	40.8	4.3	1.20	32.8	84.5	4
PHY 433 W3FE	1116	38.3	4.7	1.25	34.1	85.8	4
DP 2333 B3XF	1031	41.9	4.2	1.23	31.7	84.7	3
DG 4434 B3TXF	998	41.1	4.4	1.17	31.3	81.6	4
NG 4507 B3TXF	987	39.0	4.5	1.20	31.6	83.6	4
NG 4626 B3XF	972	38.3	4.4	1.21	31.9	84.2	4
DP 2328 B3TXF	947	41.3	4.3	1.21	32.3	84.5	4
DP 2127 B3XF	846	39.5	4.8	1.13	31.6	83.3	3
ST 4215 AXTP	833	40.4	4.6	1.23	32.4	84.5	4
Grand Mean	1012	40.1	4.5	1.20	32.4	84.2	3.8
LSD (0.05)	192	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

2025 Mississippi State University On-Farm Variety Trial Program

Location: Edwards
Grower: Mr. Kendall Garraway
Region: Hills

Irrigation: Dry-Land
Row Width: 38”
Plant: May 20, 2025

Harvest: October 14, 2025
Soil Series: Grenada silt loam

Table 11. Yield and fiber quality data at Edwards.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
PHY 433 W3FE	1252	41.3	4.9	1.22	35.0	85.3	4
PHY 357 W3FE	1180	42.4	4.6	1.20	31.4	81.8	5
DP 2127 B3XF	1108	42.7	5.2	1.10	30.2	83.0	4
NG 4626 B3XF	1103	42.7	4.7	1.17	33.0	83.1	4
ST 5931 AXTP	1091	42.1	4.4	1.20	32.3	83.4	4
DG 4434 B3TXF	1064	42.3	4.2	1.18	31.9	82.8	4
DP 2333 B3XF	1033	43.2	4.8	1.14	31.1	82.5	4
NG 4507 B3TXF	998	42.5	4.4	1.17	33.1	82.9	4
DP 2328 B3TXF	992	47.6	4.4	1.13	30.8	81.2	4
ST 4215 AXTP	953	42.7	4.7	1.21	33.5	83.7	4
Grand Mean	1077	43.0	4.6	1.17	32.2	83.0	4.1
LSD (0.05)	●	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Location: Ellistown
Grower: Mr. Kerry Coker
Region: Hills

Irrigation: Dry-Land
Row Width: 38”
Plant: June 5, 2025

Harvest: November 28, 2025
Soil Series: Providence silt loam

Table 12. Yield and fiber quality data at Ellistown.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
NG 4626 B3XF	832	39.1	4.2	1.22	32.3	84.8	4
PHY 357 W3FE	828	41.6	4.2	1.18	32.9	82.6	5
ST 5931 AXTP	811	39.9	4.1	1.20	31.8	84.5	4
DG 4434 B3TXF	792	41.1	4.3	1.18	33.4	84.3	4
DP 2333 B3XF	790	41.1	4.5	1.16	31.8	84.1	4
PHY 433 W3FE	788	41.2	4.4	1.22	32.0	82.7	6
NG 4507 B3TXF	756	39.4	4.1	1.21	32.0	84.0	4
ST 4215 AXTP	743	39.0	4.3	1.20	31.6	83.3	5
DP 2328 B3TXF	706	39.8	4.6	1.18	30.8	83.7	4
DP 2127 B3XF	590	39.8	4.8	1.16	30.5	83.6	4
Grand Mean	764	40	4.4	1.19	31.9	83.8	4.4
LSD (0.05)	193	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

2025 Mississippi State University On-Farm Variety Trial Program

Location: Leland
Grower: Mr. Tyler Horn
Region: Delta

Irrigation: Furrow
Row Width: 38”
Plant: May 23, 2025

Harvest: November 5, 2025
Soil Series: Bosket very fine sandy loam

Table 13. Yield and fiber quality data at Leland.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
PHY 357 W3FE	1708	37.3	3.8	1.26	33.1	84.6	7
PHY 433 W3FE	1680	38.2	4.3	1.28	32.0	85.9	5
NG 4626 B3XF	1568	39.9	3.9	1.22	31.1	84.0	6
ST 4215 AXTP	1529	37.6	3.5	1.26	32.1	84.9	6
DP 2127 B3XF	1475	38.3	4.4	1.22	32.8	85.5	5
ST 5931 AXTP	1472	37.2	4.2	1.24	31.7	85.7	6
NG 4507 B3TXF	1369	36.9	3.5	1.25	32.1	84.2	5
DP 2333 B3XF	1351	38.5	4.1	1.19	30.9	84.0	6
DP 2328 B3TXF	1305	39.0	4.0	1.22	29.3	84.2	6
DG 4434 B3TXF	1285	39.0	4.1	1.24	31.1	83.9	6
Grand Mean	1474	38.2	4.0	1.24	31.6	84.7	5.8
LSD (0.05)	90	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Location: Natchez
Grower: Mr. Matthew Guedon
Region: Hills

Irrigation: Dry-Land
Row Width: 38”
Planting Date: May 21, 2025

Harvest Date: October 7, 2025
Soil Series: Adler silt loam

Table 14. Yield and fiber quality data at Natchez.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DP 2127 B3XF	1268	39.3	4.5	1.15	31.8	85.0	4
NG 4626 B3XF	1244	38.1	4.2	1.24	32.6	85.9	5
DP 2333 B3XF	1244	38.4	4.3	1.18	32.7	84.4	4
PHY 357 W3FE	1181	38.0	3.5	1.20	35.0	83.3	6
ST 5931 AXTP	1130	36.7	3.5	1.26	32.5	84.2	4
DP 2328 B3TXF	1121	37.7	3.6	1.20	31.4	84.3	4
PHY 433 W3FE	1068	36.5	3.8	1.26	35.7	84.2	6
NG 4507 B3TXF	951	35.5	3.9	1.21	32.5	84.4	4
DG 4434 B3TXF	942	38.0	3.2	1.26	32.4	83.3	7
ST 4215 AXTP	903	37.6	4.1	1.25	32.5	83.2	4
Grand Mean	1105	37.6	3.9	1.22	32.9	84.2	4.8
LSD (0.05)	120	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

2025 Mississippi State University On-Farm Variety Trial Program

Location: Raymond
Grower: Dr. Tyler Soignier
Region: Hills

Irrigation: Dry-Land
Row Width: 38”
Plant: May 19, 2025

Harvest: October 14, 2025
Soil Series: Loring silt loam

Table 15. Yield and fiber quality data at Raymond.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
NG 4626 B3XF	1037	41.2	4.0	1.16	29.9	83.9	4
NG 4507 B3TXF	975	42.4	3.7	1.17	31.3	83.5	5
ST 5931 AXTP	972	41.2	3.7	1.14	30.2	82.0	4
DP 2333 B3XF	966	42.3	4.1	1.11	30.8	81.3	5
DP 2127 B3XF	951	41.6	4.0	1.12	31.4	84.1	5
ST 4215 AXTP	924	42.7	3.8	1.19	32.1	82.0	5
DP 2328 B3TXF	896	42.2	3.9	1.15	30.9	81.9	4
PHY 433 W3FE	875	41.3	4.3	1.16	34.4	84.9	4
PHY 357 W3FE	851	40.7	3.8	1.13	32.1	83.8	5
DG 4434 B3TXF	849	42.1	3.4	1.16	31.6	83.1	4
Grand Mean	930	41.8	3.9	1.15	31.5	83.1	4.5
LSD (0.05)	64	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Location: Richton
Grower: Mr. Van Hensarling
Region: Hills

Irrigation: Pivot
Row Width: 38”
Plant: June 6, 2025

Harvest: November 3, 2025
Soil Series: Lucedale fine sandy loam

Table 16. Yield and fiber quality data at Richton.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DP 2328 B3TXF	1715	39.6	4.7	1.15	29.8	83.9	4
DP 2333 B3XF	1679	41.4	4.8	1.15	31.3	83.9	4
DP 2127 B3XF	1677	39.5	4.9	1.17	32.1	86.2	4
NG 4626 B3XF	1642	39.5	4.6	1.17	31.3	85.3	5
DG 4434 B3TXF	1631	39.4	4.4	1.18	32.0	82.8	5
ST 5931 AXTP	1511	38.0	4.0	1.22	32.1	84.1	4
PHY 433 W3FE	1493	38.2	4.5	1.25	33.7	86.2	5
PHY 357 W3FE	1469	37.7	4.8	1.21	34.3	85.4	6
NG 4507 B3TXF	1465	38.0	4.2	1.22	32.7	84.9	4
ST 4215 AXTP	1443	37.7	4.3	1.24	32.8	83.7	5
Grand Mean	1573	38.9	4.5	1.20	32.2	84.6	4.6
LSD (0.05)	255	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

2025 Mississippi State University On-Farm Variety Trial Program

Location: Sledge
Grower: Mr. Sledge Taylor
Region: Delta

Irrigation: Furrow
Row Width: 38”
Plant: April 29, 2025

Harvest: October 15, 2025
Soil Series: Falaya silt loam

Table 17. Yield and fiber quality data at Sledge.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DP 2333 B3XF	1977	41.1	5.0	1.18	30.7	83.0	5
DP 2127 B3XF	1918	38.9	5.0	1.19	31.2	84.4	4
ST 5931 AXTP	1825	39.3	4.0	1.27	32.4	85.1	4
ST 4215 AXTP	1803	41.7	4.5	1.25	33.0	82.0	5
NG 4507 B3TXF	1765	38.9	4.7	1.24	31.8	84.4	5
DP 2328 B3TXF	1719	40.0	4.6	1.17	31.3	82.7	4
NG 4626 B3XF	1697	38.9	4.8	1.18	31.5	83.5	5
Grand Mean	1815	39.8	4.7	1.21	31.7	83.6	4.6
LSD (0.05)	265	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Three cotton varieties omitted per the growers request

Location: Somerville
Grower: Mr. Mike Sturdivant
Region: Delta

Irrigation: Furrow
Row Width: 38”
Plant: June 5, 2025

Harvest: November 7, 2025
Soil Series: Dubbs loam

Table 18. Yield and fiber quality data at Somerville.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DP 2333 B3XF	1717	41.5	4.8	1.21	31.8	85.5	4
NG 4626 B3XF	1702	40.0	4.3	1.27	31.8	86.2	4
DP 2127 B3XF	1636	39.8	4.9	1.23	32.1	85.4	4
DP 2328 B3TXF	1593	42.3	4.4	1.24	30.9	85.5	5
ST 5931 AXTP	1569	37.6	3.7	1.28	33.3	85.9	4
NG 4507 B3TXF	1436	36.5	3.9	1.28	31.5	84.5	5
ST 4215 AXTP	1399	39.1	4.2	1.29	31.8	84.9	5
Grand Mean	1579	39.5	4.3	1.26	31.9	85.4	4.4
LSD (0.05)	●	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Three cotton varieties omitted per the growers request

2025 Mississippi State University On-Farm Variety Trial Program

Location: Starkville
Grower: Dr. Brian Pieralisi
Region: Hills

Irrigation: Furrow
Row Width: 38”
Plant: May 22, 2025

Harvest: November 11, 2025
Soil Series: Leeper silty clay loam

Table 19. Yield and fiber quality data at Starkville.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DG 4434 B3TXF	1597	44.0	3.9	1.25	31.4	81.6	5
DP 2333 B3XF	1450	42.4	4.4	1.18	30.8	81.0	4
NG 4507 B3TXF	1445	39.0	4.3	1.21	32.9	83.8	5
PHY 357 W3FE	1442	40.6	4.6	1.25	33.9	85.1	6
PHY 433 W3FE	1438	38.4	4.2	1.27	33.3	85.4	5
DP 2328 B3TXF	1397	42.3	4.3	1.14	31.3	82.9	4
ST 5931 AXTP	1389	39.3	3.7	1.22	32.4	83.1	5
ST 4215 AXTP	1312	42.4	4.7	1.18	35.1	83.8	5
NG 4626 B3XF	1290	42.2	4.8	1.20	32.1	84.8	5
DP 2127 B3XF	1252	39.4	4.4	1.19	31.5	82.9	5
Grand Mean	1401	41.0	4.3	1.21	32.5	83.4	4.9
LSD (0.05)	144	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Location: Verona
Grower: Dr. Amee Bumguardner

Region: Hills
Irrigation: Furrow
Row Width: 38”

Plant: June 6, 2025
Harvest: November 13, 2025
Soil Series: Leeper silty clay loam

Table 20. Yield and fiber quality data at Verona.

Variety	Lint Yield	Lint Percent	Mic	Staple	Strength	Uniformity	Leaf
	Lbs/Acre	%		Inches	Grams/Tex	%	
DP 2333 B3XF	1796	46.0	4.6	1.09	30.1	82.4	4
ST 5931 AXTP	1381	43.1	4.6	1.13	29.1	82.9	3
DP 2127 B3XF	1356	43.9	5.1	1.13	29.7	82.4	3
NG 4626 B3XF	1277	44.4	4.5	1.17	32.2	83.4	3
DP 2328 B3TXF	1075	41.6	4.7	1.15	29.9	81.2	4
PHY 433 W3FE	1016	41.6	4.3	1.19	31.2	82.8	4
ST 4215 AXTP	966	43.4	4.8	1.13	31.6	82.7	4
PHY 357 W3FE	837	42.6	3.4	1.18	31.7	81.5	4
NG 4507 B3TXF	718	40.2	4.4	1.15	33.7	83.9	4
DG 4434 B3TXF	540	42.8	4.0	1.20	34.8	84.5	4
Grand Mean	1096	43.0	4.4	1.15	31.4	82.8	3.7
LSD (0.05)	●	●	●	●	●	●	●

*Yield in bold type are not significantly different from the highest yielding variety.

Notes

