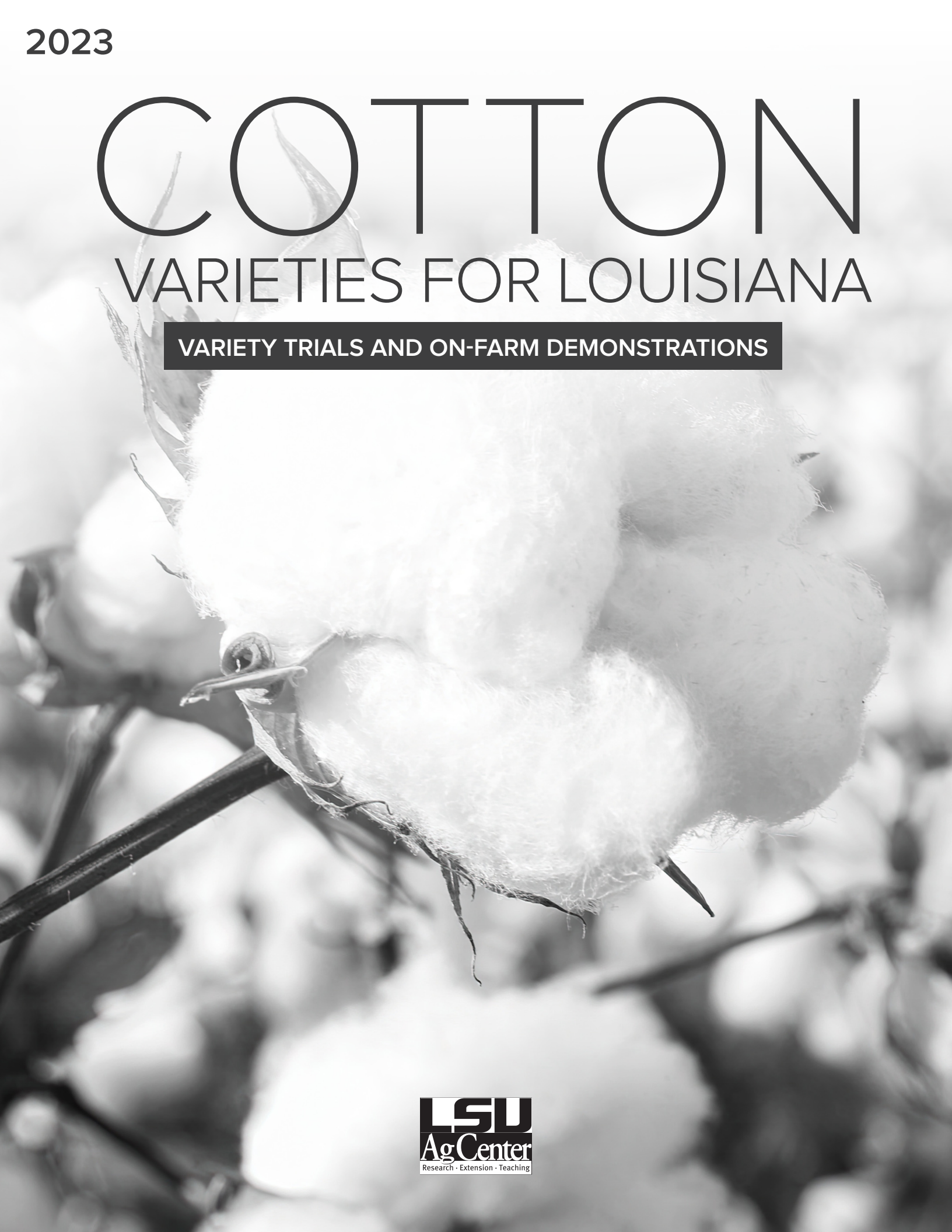
2023

COTTON VARIETIES FOR LOUISIANA

VARIETY TRIALS AND ON-FARM DEMONSTRATIONS



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Notes

Introduction

Scientists with the LSU AgCenter annually evaluate cotton varieties in official variety trials (OVTs) at several locations across the state. Cotton varieties are managed using practices that follow LSU AgCenter recommendations and demonstrate commercial operations as closely as possible. All entries in the trials are replicated four times, and results are compiled for average performance after one or two years of testing. In 2022, 41 varieties were entered by commercial seed companies in the OVTs (Table 3). Locations of these trials included the LSU AgCenter Dean Lee Research and Extension Center, Alexandria; LSU AgCenter Red River Research Station, Bossier City; and LSU AgCenter Northeast Research Station, St. Joseph (Table 5). Yield data for 2022 across locations as well as 2021 data for repeated varieties is summarized in Table 6. Individual location summaries are located in Tables 7 through 10. Descriptions of abbreviations used in data tables are defined in Table 4. In addition to the OVTs, nine on-farm core block demonstrations were conducted throughout the cotton-growing areas of Louisiana by LSU AgCenter extension agents (Tables 11-20). This information should be used to supplement but not replace OVT results.

Choosing Varieties

Variety selection is one of the most important decisions a cotton producer will make. The variety and its associated traits set the stage for harvest at the time of planting. All other input decisions affect the performance of the variety selected. Since the introduction of transgenic cottons and the accompanying increases in seed costs and associated technology fees, variety selection has become increasingly important. Seed selection is the one decision that is not influenced by environmental factors. Therefore, choosing a high-yielding variety with acceptable fiber quality that is adapted to local growing conditions should be considered carefully because of the tremendous importance the decision plays for the entire season.

Choosing a cotton variety can be difficult, and the availability of different transgenic traits often complicates the process. The more informed the decision, the better. Therefore, the LSU AgCenter strives to provide growers with as much information as possible concerning cotton variety performance over a range of soil textures and conditions. The observations and data concerning the measured performance of cotton varieties in Louisiana should be useful as a primary source of information for choosing varieties.

Producers should be mindful that LSU AgCenter OVTs cannot identify the single best variety for given soils and conditions. Therefore, producers should plant multiple varieties selected from the top performers in the variety trials closest to their production region. This strategy will help mitigate risks from adverse environmental conditions.

Individual varieties may differ in performance from one year to the next. In most years, however, those among the top 10% of the highest-yielding varieties generally remain there for several seasons. The best variety for a particular farm likely resides among the top yielders in the OVTs, but no one can be certain which of those top-yielding varieties will be the highest yielder for the upcoming year. This actually is a good thing because it gives producers the option to select from as many as five to 10 varieties with different traits, knowing that one of those may be the best for next year. The majority of acreage should be devoted to proven varieties. Newer varieties should be evaluated on limited acreage until further testing is completed.

Fiber Properties

Fiber quality has become a more important consideration in choosing varieties and marketing cotton. Because the domestic textile industry has become very limited, most U.S. cotton is exported to foreign mills that generally demand cotton with the most consistent and highest fiber-quality properties. Louisiana cotton quality has been a concern in recent years, particularly regarding high micronaire values. While premiums are small, discounts for high micronaire and other factors can be significant. Variety has the largest impact on fiber properties, and high quality is increasingly important for U.S. cotton to maintain and increase presence in the world market.

Fiber parameters in the LSU AgCenter cotton OVTs were determined with the same high-volume instrumentation classing system used by the U.S. Department of Agriculture classing offices. Physical properties, including staple length (reported as the upper half mean length), fiber strength, uniformity index and micronaire were evaluated and reported for each variety. Seed cotton samples were ginned with small plot research gins that do not have lint cleaners. This method may produce higher lint percentages than would normally be received from a commercial gin. A 41-4 color and leaf grade was used on all fiber samples to determine loan values..

Using the Data

Yield should be the primary factor when selecting a variety, followed by fiber quality and maturity. Top-yielding varieties often have no statistical differences between them in a given trial. The least significant difference reported below each table is the smallest difference in yield that can be considered a “true” difference.

The most important factor is not the absolute number reported for yield or fiber quality. The most important consideration is how a given variety performed compared to the others in the same trial. Another important factor is the average yield across variety trials. Varietal performance compared to the average for the entire trial will help identify varieties that are above average for a given location.

Cotton varieties should be chosen by considering their performances across several locations and multiple years of testing. Superior performance in one year often can indicate a good variety, but superior performance over multiple years indicates consistency and reliability. Varieties currently are introduced at a rapid pace and have shorter market runs than in the past, so information about some of the newest varieties often is not available for multiple years. For those new varieties that do not have multiyear performance records, it is best to consider performance averaged across several locations during the first year of testing.

Grower experience with a variety is important for several reasons. Cotton varieties have different growth habits and can be locally adapted to a small area. Personal experience with a variety should be considered along with newer varieties that perform well.

The LSU AgCenter identifies the top tier of high-yielding varieties at each location using a statistical test called the "least significant difference." A probability level of 10% is used, which means the test correctly identifies variety performance for that location with 90% certainty.

The group of varieties that is statistically the highest yielding is shaded in each table. To identify promising varieties that are new to the market and have only one year of testing in the LSU AgCenter OVTs, a multilocation analysis should be performed. Producers should review the data tables for variety performance at the closest location that most represents their individual farms and also review statewide multilocation yield averages for consistency of performance over a range of environments.

Transgenic Traits

Roundup Ready: Transgenic traits are available for glyphosate tolerance, usually indicated by Roundup Ready Flex (sometimes shown simply as "RF" or "F"). The Flex varieties have been available commercially since 2006 and completely replaced the older Roundup Ready ("R" or "RR") varieties. Roundup Ready Flex varieties exhibit increased tolerance, particularly in the fruiting stage, to glyphosate applications. Roundup Ready Flex labeling allows over-the-top applications of glyphosate to Flex varieties into the bloom stage and does not restrict contact with the stem for applications. Read and follow the label closely for specific restrictions and glyphosate formulations permitted for use on Roundup Ready Flex varieties. Weed control is a major factor in producing high-yielding, high-quality cotton. Because of the increased flexibility of applying glyphosate over the top to Roundup Ready Flex varieties, some growers may opt to wait until weeds emerge and gain some size before making applications. This is not recommended for early season weed control as early weed competition can severely reduce yields. Glyphosate is very effective on a wide range of species, particularly when they are small. Applications should be timed to weed size and not to other factors. Reliance on one mode of action for weed control is not recommended and has led to multiple glyphosate-resistant weeds; therefore, the use of other herbicides in addition to glyphosate is strongly encouraged. Consult the LSU AgCenter 2023 Louisiana Suggested Chemical Weed Management Guide, publication No. 1565, for more information.

LibertyLink: Varieties with the designation "LL" in their brand names are transgenic varieties tolerant to over-the-top applications of glufosinate. These varieties can be managed in a LibertyLink weed control program, which is covered in more detail in the LSU AgCenter 2023 Louisiana Suggested Chemical Weed Management Guide publication. LibertyLink cotton will be injured by applications or drift from glyphosate. On farms or in areas where LibertyLink cotton is grown near Roundup Ready crops, care should be taken to avoid confusion of the herbicide systems and to reduce the potential for mistaken applications or drift.

GlyTol + LibertyLink: Varieties with the designation "GL" in their brand names are transgenic varieties tolerant to over-the-top applications of both glyphosate and glufosinate. These varieties offer potential to alternate from one class of chemistry to another, particularly where producers are concerned about herbicide-resistant weed populations. In any case, weeds still should be controlled early, when small and actively growing. Producers are cautioned to avoid late, low-dose applications of these nonselective herbicides when existing weeds are large and well-developed.

XtendFlex: In 2015, Delta Pine varieties with the designation "XF" became available, and they are transgenic cotton lines that are tolerant to over-the-top applications of dicamba, glyphosate and glufosinate. This was the first cotton technology with tolerance to three herbicides. These varieties offer the potential of alternating from one class of chemistry to another, particularly where producers are concerned about herbicide-resistant weed populations. In any case, weeds still should be controlled early, when weeds are small and actively growing. Producers are cautioned to avoid late, low-dose applications of these herbicides when these weeds are large and well-developed.

Enlist: In 2016, Phytogen varieties with the designation "FE" became available, and they are transgenic cotton lines tolerant to over-the-top applications of 2,4-D; glyphosate; and glufosinate. This is the second cotton technology that now offers tolerance to three herbicides. Weeds still should be controlled early when they are small and actively growing. Producers are cautioned to avoid late, low-dose applications of these herbicides when these weeds are large and well-developed.

Bollgard 2: Varieties with the designation "B2" or "BG2" in their brand names are cotton lines that express insecticidal proteins for the control of the Lepidopteran pest known as the tobacco budworm. After the successful introduction of Bollgard II technology to the market, the U.S. Environmental Protection Agency in 2010 required that all Bollgard-only technology be prohibited from future planting due to its single-gene activity. Varieties that include Bollgard II technology should not need any supplemental

insecticide sprays for control of tobacco budworms. They also provide control of the cotton bollworm, soybean looper, fall armyworm and beet armyworm. For cotton bollworm, note that supplemental chemical control strategies may be necessary to provide satisfactory management depending on prevailing populations. In addition, the insecticidal traits in Bollgard II varieties have no activity against noncaterpillar pests, such as thrips, aphids, plant bugs, stink bugs and spider mites, that must be managed with conventional integrated pest management practices.

Bollgard 3: In 2017, varieties with the designation "B3" in their brand names became available. This technology offers three Bt proteins for greater stability, longevity and improved resistance management. The addition of the third protein reinforces the Bt proteins found in Bollgard II. Each gene codes for a unique protein that kills larvae in a different way. There is currently a low likelihood of supplemental applications to control worm pests as a result of enhanced three-gene activity.

WideStrike 3: Phytogen varieties with designation "W3" in their brand names are cotton lines that express insecticidal proteins for the control of tobacco budworms and fall armyworms. These varieties should not need any supplemental insecticidal sprays for controlling those pests. The characteristics and insect management recommendations previously mentioned for Bollgard 3 traits remain the same for the Widestrike 3 traits in Phytogen varieties.

TwinLink Plus: In 2017, Stoneville varieties with the designation "TP" in their brand names became available. Twinlink Plus offers three Bt proteins for greater technology durability and improved resistance management. There is a decreased likelihood of supplemental applications to control caterpillar pests as a result of the enhanced three-gene activity.

ThryvON: Varieties with the designation "T" in their brand names are cotton lines that express an insecticidal protein for the control of tarnished plant bug and thrips species. This technology was fully commercialized in the U.S. in February 2023. Varieties with this technology will be evaluated in the 2023 OVTs.

Seeding Rate and Stand

Two to three cotton plants per foot of row is the ideal final plant population on 30-to-40-inch rows. To achieve this stand, seeding rates should be slightly higher based on the actual stated germination. Seed sizes vary, and the number of cotton seeds per pound ranges from 3,700 to 5,800. Therefore, seeding rates must be based on seed number per acre and not seed weight per acre. To ensure the best seedling emergence, planting should be scheduled during the most favorable conditions possible based on existing and forecast temperatures and soil moisture levels.

Most commercial cotton seed will have at least an 80% germination reported on the seed tag. This is the result of the warm germination test. Field conditions typically are more adverse than laboratory tests, and cool germination test results are a good indicator of seedling vigor. For example, a seed lot with 85% cool germination is more vigorous than one with 65% cool germination. However, if the 65% cool germination lot is planted under ideal conditions, overall germination is likely to be as high as the 85% lot. Conversely, under adverse conditions the 85% cool germination lot is likely to germinate at a much higher rate than the 65% cool germination lot. A somewhat arbitrary division of the cool germination test results is shown in Table 1. Growers are encouraged to request cool germination test results from seed companies. Remember, a cotton seed is a living organism that is used as a delivery mechanism for genetic traits, transgenic technology and even pesticide seed treatments. Care should be taken to preserve and plant high-quality seed to ensure adequate plant stands.

Table 1. Arbitrary divisions of cool germination results and planting recommendations.

Cool Germination %	Vigor
>80	Excellent
65-80	Good
50-65	Acceptable – plant under good conditions
<50	Poor – do not plant

Most planting date studies indicate the ideal planting window is Louisiana for cotton is between April 15 and May 15. Earlier planting is possible without causing significant yield loss, but there is the risk of cold damage or reduced ability of the plants to recover from thrips pressure. Some field research has shown that planting during June may reduce yield potential.

Nitrogen Management

Once the cotton stand has been established, nitrogen applications will be made for the upcoming season. Recommended nitrogen rates are 60-90 pounds per acre for coarse-textured soils and 90-120 pounds per acre for finer-textured soils (Table 2). The lower recommended rates should be used on fields that are following soybeans, corn, legume cover crops or fields with a history of excessive stalk growth. Caution should be used to not apply excess nitrogen that can produce very tall and rank cotton. This increased vegetative growth will hinder reproductive growth and yield. Increased use of mepiquat chloride to control plant height may hinder defoliation prior to harvest. Excessive nitrogen in combination with late-season rainfall can delay maturity, reduce harvesting and ginning percentages, and promote boll shedding and boll rot. Best management practices are to split applications of nitrogen on sandy soils with high leaching potential or soils with a high saturation potential because of denitrification losses. For split nitrogen applications, a third to half should be applied at planting with the remainder applied by early bloom at the latest.

Table 2. Nitrogen rates for cotton in Louisiana.

Soil Type	Dryland	Irrigated
Clay	90-120	100-120
Clay Loam	90-120	100-120
Fine Sandy Loam	60-90	60-90
Loamy Sand	60-90	60-90
Silt Clay	90-120	100-120
Silt Clay Loam	90-120	100-120
Silt Loam	60-90	60-90
Very Fine Sandy Loam	60-90	60-90

Table 3. Brands and varieties included in cotton official variety trials, 2022.

Brand	Variety	Brand	Variety
Armor	9371 B3XF	PhytoGen	PX1150B435-04 W3FE
Armor	9831 B3XF	PhytoGen	PX1150B434-04 W3FE
BASF	BX 2396 B3XF	PhytoGen	PHY 411 W3FE
BASF	BX 2394 B3XF	PhytoGen	PHY 400 W3FE
BASF	BX 2398 B3XF	PhytoGen	PX1140B373-04 W3FE
BASF	BX 2392 B3XF	PhytoGen	PX1150B437-04 W3FE
Deltapine	DP 2127 B3XF	PhytoGen	PHY 390 W3FE
Deltapine	DP 2239 B3XF	PhytoGen	PX1150B431-04 W3FE
Deltapine	DP 2115 B3XF	PhytoGen	PX1130B336-04 W3FE
Deltapine	DP 2038 B3XF	PhytoGen	PHY 415 W3FE
Deltapine	DP 2020 B3XF	PhytoGen	PX1130B333-04 W3FE
Deltapine	DP 2055 B3XF	PhytoGen	PHY 332 W3FE
Deltapine	DP 2012 B3XF	PhytoGen	PX1140A385-04 W3FE
Deltapine	DP 2141NR B3XF	PhytoGen	PHY 443 W3FE
Deltapine	DP 2333 B3XF	PhytoGen	PHY 360 W3FE
Deltapine	DP 1646 B2XF	Seed Source Genetics	UA 248
Deltapine	DP 2143NR B3XF	Seed Source Genetics	UA 222
Deltapine	20R745NR B3XF	Stoneville	ST 4595 B3XF
Dyna-Gro	3535 B3XF	Stoneville	ST 5091 B3XF
Dyna-Gro	3644 B3XF	Stoneville	ST 4990 B3XF
Dyna-Gro	3555 B3XF		

Table 4. Definitions of table abbreviations.

Abbreviation	Meaning
LY	Lint yield (lb/a)
TO	Turnout (% lint)
MIC	Micronaire
LGTH	Length (inches)
SGTH	Strength (g/tex)
UNIF	Uniformity (%)
LV	Loan value (cents per pound lint)
GR	Gross return (dollars per acre)
NS	Not significant

Table 5. Agronomic milestones for each variety trial location, 2022.

	DLREC-sl[1]	RRRS-sl	RRRS-c	NERS–sl
Planting date	5/12	5/19	5/20	5/16
Emergence date	5/17	5/26	5/26	5/22
Row spacing	38”	40”	40”	38”
Seeding rate	45,850	33,250	33,250	45,850
Previous crop	Soybean	Soybean	Soybean	Corn
Irrigated	No	Yes	Yes	Yes
N-P-K-S (lbs/a)	60-32-63-4	60-0-0-0	60-0-0-0	75-0-0-14
Defoliation dates	9/26; 10/3	9/26	9/26	9/19; 9/26
Harvest date	10/21	10/18	10/13	10/7
Harvested plot size	2 rows by 35 feet	2 rows by 50 feet	2 rows by 50 feet	2 rows by 35 feet

[1]DLREC=Dean Lee Research and Extension Center, Alexandria; RRRS=Red River Research Station, Bossier City; NERS=Northeast Research Station, St. Joseph; sl=silt loam; c=clay.

Table 6. Summary of lint yield (lb/a) performance of cotton varieties in the 2022 official variety trials.

Variety	DLREC-sl[1]	RRRS-sl	RRRS-c	NERS-sl	2022 Average	2021 Average	2-year Average
DP 2127 B3XF	1,355	1,098	1,450	1,393	1,324	1,213	1,268
DP 2239 B3XF	1,330	948	1,463	1,423	1,291	1,186	1,238
9831 B3XF	1,083	1,298	1,436	1,314	1,283	1,087	1,185
9371 B3XF	1,194	1,090	1,473	1,295	1,263	1,332	1,297
ST 4595 B3XF	1,204	1,088	1,304	1,438	1,258	1,176	1,217
PX1150B435-04 W3FE	1,002	1,335	1,306	1,322	1,241		
DP 2115 B3XF	1,308	1,021	1,281	1,337	1,237	1,095	1,166
DP 2038 B3XF	1,152	1,112	1,286	1,344	1,223	1,071	1,147
PX1150B434-04 W3FE	1,034	1,291	1,210	1,298	1,208		
DP 2020 B3XF	1,038	1,068	1,358	1,365	1,207	1,071	1,139
PHY 411 W3FE	1,150	1,087	1,149	1,435	1,205	1,418	1,312
ST 5091 B3XF	1,116	1,026	1,354	1,306	1,201	1,003	1,102
DP 2055 B3XF	1,315	975	1,221	1,286	1,199	1,043	1,121
3535 B3XF	1,045	1,100	1,334	1,317	1,199	1,083	1,141
DP 2012 B3XF	1,295	938	1,249	1,313	1,198	1,121	1,160
PHY 400 W3FE	1,051	1,134	1,310	1,298	1,198	1,194	1,196
DP 2141NR B3XF	1,228	1,017	1,303	1,211	1,190	1,239	1,214
DP 2333 B3XF	1,146	1,019	1,245	1,330	1,185		
DP 1646 B2XF	1,369	820	1,202	1,316	1,177	1,062	1,119
PX1140B373-04 W3FE	1,194	1,096	1,236	1,163	1,172		
BX 2396 B3XF	1,165	1,301	1,074	1,145	1,171		
PX1150B437-04 W3FE	1,040	973	1,376	1,279	1,167		
ST 4990 B3XF	936	1,077	1,382	1,199	1,148	981	1,065
PHY 390 W3FE	856	1,292	1,119	1,324	1,148	1,150	1,149
PX1150B431-04 W3FE	1,092	1,047	1,270	1,159	1,142		
PX1130B336-04 W3FE	1,297	961	1,209	1,068	1,134		
3644 B3XF	1,082	1,084	1,105	1,251	1,130	1,242	1,186
PHY 415 W3FE	1,120	1,142	1,228	1,010	1,125	1,200	1,162
BX 2394 B3XF	1,100	894	1,207	1,284	1,121		
PX1130B333-04 W3FE	1,152	991	1,146	1,132	1,105		
PHY 332 W3FE	1,001	1,256	1,023	1,132	1,103	1,238	1,170
PX1140A385-04 W3FE	1,084	1,116	1,229	983	1,103	1,048	1,075
BX 2398 B3XF	1,265	1,043	984	1,070	1,090		
3555 B3XF	1,039	1,033	1,029	1,209	1,077	1,082	1,080
PHY 443 W3FE	1,161	1,017	989	1,139	1,076	1,205	1,141
PHY 360 W3FE	1,161	844	1,053	1,245	1,076	1,137	1,106
DP 2143NR B3XF	1,125	933	1,002	1,219	1,070		
BX 2392 B3XF	1,036	852	1,028	1,283	1,049		
UA 248	1,093	990	990	1,037	1,027		
UA 222	1,037	840	882	1,177	984	928	956
20R745NR B3XF	1,006	813	1,068	1,049	984		
LSD (0.10)	203	174	183	215			
CV (%)	15.3	14.2	12.9	14.8			
Grand Mean	1,133	1,050	1,209	1,241			

[1]*DLREC=Dean Lee Research and Extension Center, Alexandria; RRRS=Red River Research Station, Bossier City; NERS=Northeast Research Station, St. Joseph; sl=silt loam; c=clay; and AVG=average.*

Table 7. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre of cotton varieties grown on a Coushatta silt loam at the Dean Lee Research and Extension Center, Alexandria, 2022.

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 1646 B2XF	1,369[2]	46.9	4.5	1.26	29.3	84.3	53.75	$897.59
DP 2127 B3XF	1,355	46.9	5.1	1.17	30.3	85.4	52.00	$865.45
DP 2239 B3XF	1,330	46.8	4.9	1.27	29.9	85.8	53.30	$867.16
DP 2055 B3XF	1,315	47.5	4.9	1.26	31.4	85.0	52.78	$849.13
DP 2115 B3XF	1,308	46.5	5.0	1.19	29.9	84.9	52.18	$870.33
PX1130B336-04 W3FE	1,297	44.4	4.9	1.21	34.2	86.2	53.56	$848.50
DP 2012 B3XF	1,295	43.3	4.6	1.23	29.7	84.8	53.84	$850.45
BX 2398 B3XF	1,265	43.2	4.6	1.24	29.8	85.3	53.80	$830.10
DP 2141NR B3XF	1,228	45.2	5.1	1.25	35.0	85.4	52.36	$789.78
ST 4595 B3XF	1,204	46.3	4.9	1.21	29.7	83.8	53.14	$780.69
PX1140B373-04 W3FE	1,194	44.0	4.9	1.18	34.5	85.5	52.48	$767.06
9371 B3XF	1,194	47.5	4.8	1.17	29.4	85.4	53.13	$776.03
BX 2396 B3XF	1,165	45.2	4.8	1.21	28.3	84.6	53.75	$764.30
PHY 443 W3FE	1,161	44.5	4.8	1.19	34.4	85.8	53.54	$758.71
PHY 360 W3FE	1,161	44.2	4.8	1.17	28.3	83.4	53.04	$754.04
PX1130B333-04 W3FE	1,152	44.1	4.7	1.20	33.6	85.8	53.51	$752.40
DP 2038 B3XF	1,152	49.7	4.9	1.15	28.5	82.0	52.29	$740.11
PHY 411 W3FE	1,150	47.2	4.9	1.14	32.1	83.0	53.16	$748.19
DP 2333 B3XF	1,146	45.9	5.2	1.19	29.6	84.5	51.03	$720.26
DP 2143NR B3XF	1,125	45.1	5.4	1.22	34.1	84.9	50.19	$697.52
PHY 415 W3FE	1,120	45.2	4.6	1.25	32.9	86.3	54.10	$738.52
ST 5091 B3XF	1,116	45.2	4.4	1.17	27.9	82.9	53.54	$729.87
BX 2394 B3XF	1,100	44.0	4.6	1.20	29.9	83.6	53.71	$720.75
UA 248	1,093	40.3	4.9	1.23	30.5	84.0	53.04	$715.05
PX1150B431-04 W3FE	1,092	42.8	5.0	1.12	33.0	83.1	52.19	$699.57
PX1140A385-04 W3FE	1,084	46.1	5.3	1.18	34.8	85.7	51.53	$686.79
9831 B3XF	1,083	47.3	5.0	1.19	31.4	83.8	52.11	$692.18
3644 B3XF	1,082	44.2	5.2	1.25	33.8	85.2	51.55	$683.49
PHY 400 W3FE	1,051	45.2	4.7	1.24	33.2	86.2	54.03	$692.16
3535 B3XF	1,045	44.8	4.8	1.20	29.5	83.6	53.74	$685.28
PX1150B437-04 W3FE	1,040	44.3	4.7	1.16	32.9	83.3	53.85	$683.13
3555 B3XF	1,039	44.3	4.1	1.26	32.0	85.0	54.05	$684.28
DP 2020 B3XF	1,038	43.7	4.7	1.26	29.6	85.5	53.85	$681.93
UA 222	1,037	42.9	4.6	1.20	31.6	83.7	53.83	$683.54
BX 2392 B3XF	1,036	45.8	4.8	1.19	28.5	84.8	53.13	$673.20
PX1150B434-04 W3FE	1,034	42.5	4.9	1.16	34.0	84.0	53.36	$674.30
20R745NR B3XF	1,006	45.7	5.0	1.25	33.3	84.2	52.85	$651.47
PX1150B435-04 W3FE	1,002	43.2	4.8	1.14	32.2	82.6	53.00	$649.71
PHY 332 W3FE	1,001	42.3	4.6	1.26	32.2	85.2	54.03	$659.45
ST 4990 B3XF	936	40.8	4.8	1.22	29.4	85.1	53.80	$614.18
PHY 390 W3FE	856	44.0	4.6	1.20	31.2	83.3	53.86	$562.52
LSD (0.10)	203	1.2	0.2	0.03	1.8	1.3	1.20	$134.48
CV (%)	15.3	2.3	4.0	2.2	4.8	1.3	1.9	15.6
Grand Mean	1,133	44.9	4.8	1.21	31.4	84.6	53.07	$736.32

[1]Please refer to Table 4 for abbreviation definitions.
[2]Shaded values are not statistically different than the highest value in each column.

Table 8. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre of cotton varieties grown on a Coushatta silt loam at the Red River Research Station, Bossier City, 2022.

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
PX1150B435-04 W3FE	1,335[2]	39.7	4.2	1.14	34.3	82.7	53.64	$874.22
BX 2396 B3XF	1,301	44.5	4.7	1.19	30.5	84.3	53.83	$854.38
9831 B3XF	1,298	41.8	4.7	1.16	34.0	83.8	53.39	$847.83
PHY 390 W3FE	1,292	43.9	4.0	1.19	31.5	83.5	53.90	$849.72
PX1150B434-04 W3FE	1,291	39.6	4.3	1.21	35.9	84.4	54.13	$851.45
PHY 332 W3FE	1,256	41.6	4.1	1.23	34.5	84.9	54.16	$828.78
PHY 415 W3FE	1,142	42.7	4.1	1.24	35.0	85.3	54.13	$753.60
PHY 400 W3FE	1,134	43.0	4.3	1.20	34.9	84.5	54.13	$747.96
PX1140A385-04 W3FE	1,116	44.5	4.3	1.14	36.7	84.8	53.75	$732.02
DP 2038 B3XF	1,112	43.3	4.4	1.15	32.6	84.1	53.86	$730.82
3535 B3XF	1,100	43.6	4.1	1.18	30.8	83.9	53.88	$722.77
DP 2127 B3XF	1,098	43.6	4.6	1.15	31.4	83.9	53.01	$711.71
PX1140B373-04 W3FE	1,096	42.6	4.0	1.16	35.1	84.8	54.05	$722.50
9371 B3XF	1,090	42.6	4.2	1.16	30.7	83.6	53.60	$713.39
ST 4595 B3XF	1,088	43.7	4.3	1.17	30.8	83.1	53.25	$708.35
PHY 411 W3FE	1,087	44.9	4.1	1.15	35.0	84.1	54.00	$716.12
3644 B3XF	1,084	38.0	4.6	1.21	34.7	83.6	53.48	$708.72
ST 4990 B3XF	1,077	41.9	4.3	1.16	30.7	83.6	53.73	$705.94
DP 2020 B3XF	1,068	41.0	4.2	1.21	31.0	84.4	53.88	$701.46
PX1150B431-04 W3FE	1,047	39.2	4.3	1.13	35.3	83.3	53.88	$688.17
BX 2398 B3XF	1,043	41.3	4.3	1.21	31.7	84.0	53.98	$686.45
3555 B3XF	1,033	42.6	4.0	1.17	33.0	84.2	54.04	$680.35
ST 5091 B3XF	1,026	44.4	4.2	1.16	30.7	82.9	53.75	$672.51
DP 2115 B3XF	1,021	43.1	4.9	1.19	32.5	84.4	52.79	$660.96
DP 2333 B3XF	1,019	44.2	4.5	1.19	31.8	84.0	53.95	$670.04
DP 2141NR B3XF	1,017	43.2	4.6	1.18	35.3	83.9	54.04	$670.37
PHY 443 W3FE	1,017	44.1	4.2	1.17	35.1	84.2	54.08	$670.65
PX1130B333-04 W3FE	991	40.8	4.1	1.16	34.0	84.7	53.98	$652.38
UA 248	990	37.3	4.5	1.23	33.0	84.6	54.08	$652.24
DP 2055 B3XF	975	43.9	4.4	1.23	32.4	83.7	54.01	$642.06
PX1150B437-04 W3FE	973	39.9	4.5	1.14	35.7	83.3	53.10	$632.29
PX1130B336-04 W3FE	961	41.9	4.1	1.17	36.5	85.6	54.11	$633.89
DP 2239 B3XF	948	42.3	4.5	1.21	31.6	83.5	53.91	$623.08
DP 2012 B3XF	938	41.0	4.2	1.21	33.0	85.1	54.09	$618.14
DP 2143NR B3XF	933	41.3	4.6	1.18	33.5	83.7	52.78	$602.75
BX 2394 B3XF	894	41.2	4.1	1.18	30.9	83.5	52.61	$577.05
BX 2392 B3XF	852	41.1	4.4	1.17	31.9	84.2	53.91	$560.38
PHY 360 W3FE	844	40.7	4.3	1.15	30.9	83.3	53.70	$553.02
UA 222	840	39.1	4.2	1.20	33.8	83.8	54.01	$553.22
DP 1646 B2XF	820	43.1	4.6	1.25	31.9	84.9	54.01	$539.59
20R745NR B3XF	813	42.9	4.0	1.17	31.5	81.1	53.71	$532.69
LSD (0.10)	174	2.4	0.4	0.04	1.8	1.3	NS	$115.48
CV (%)	14.2	4.9	7.6	2.7	4.7	1.3	1.3	14.3
Grand Mean	1,050	42.1	4.3	1.18	33.1	84.0	53.76	$689.12

[1]Please refer to Table 4 for abbreviation definitions.
[2]Shaded values are not statistically different than the highest value in each column.

Table 9. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre of cotton varieties grown on a Moreland clay at the Red River Research Station, Bossier City, 2022.

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
9371 B3XF	1,473[2]	45.2	4.5	1.16	31.0	84.7	53.89	$968.01
DP 2239 B3XF	1,463	45.9	4.6	1.21	30.2	83.5	53.76	$959.59
DP 2127 B3XF	1,450	44.9	4.6	1.13	31.5	83.6	53.70	$950.34
9831 B3XF	1,436	44.5	4.6	1.14	32.9	83.0	53.84	$943.20
ST 4990 B3XF	1,382	43.6	4.6	1.21	32.2	85.6	54.06	$910.49
PX1150B437-04 W3FE	1,376	45.2	4.6	1.13	33.4	82.7	53.78	$902.81
DP 2020 B3XF	1,358	43.8	4.3	1.21	31.1	84.2	53.91	$893.56
ST 5091 B3XF	1,354	45.7	4.4	1.16	28.7	82.9	53.55	$885.47
3535 B3XF	1,334	43.5	4.4	1.18	30.2	83.9	53.74	$874.88
PHY 400 W3FE	1,310	42.9	4.3	1.19	31.9	84.2	53.94	$861.82
PX1150B435-04 W3FE	1,306	40.3	4.7	1.13	33.8	83.7	53.66	$856.03
ST 4595 B3XF	1,304	43.2	4.5	1.19	31.0	83.8	53.89	$856.77
DP 2141NR B3XF	1,303	45.3	4.9	1.20	35.1	83.9	53.99	$857.57
DP 2038 B3XF	1,286	47.9	4.5	1.13	31.3	82.8	53.68	$843.02
DP 2115 B3XF	1,281	44.2	4.8	1.17	31.7	83.7	53.12	$831.76
PX1150B431-04 W3FE	1,270	40.9	4.6	1.14	34.3	83.4	53.60	$831.44
DP 2012 B3XF	1,249	41.6	4.3	1.20	32.0	83.6	53.99	$822.17
DP 2333 B3XF	1,245	43.4	4.6	1.19	30.8	83.1	53.20	$810.20
PX1140B373-04 W3FE	1,236	42.0	4.6	1.15	34.3	83.6	53.89	$812.50
PX1140A385-04 W3FE	1,229	44.7	4.7	1.15	35.1	84.5	53.76	$806.34
PHY 415 W3FE	1,228	42.6	4.3	1.19	34.8	84.4	54.05	$808.78
DP 2055 B3XF	1,221	41.8	4.4	1.22	32.8	83.8	54.01	$803.82
PX1150B434-04 W3FE	1,210	41.2	4.7	1.12	34.6	82.9	53.75	$793.84
PX1130B336-04 W3FE	1,209	42.6	4.5	1.18	35.3	86.1	53.55	$792.61
BX 2394 B3XF	1,207	42.7	4.3	1.18	31.4	82.7	53.81	$792.75
DP 1646 B2XF	1,202	43.7	4.3	1.24	30.3	84.2	53.86	$789.61
PHY 411 W3FE	1,149	43.8	4.4	1.13	33.6	83.7	53.63	$752.01
PX1130B333-04 W3FE	1,146	42.0	4.7	1.16	33.5	85.1	53.96	$754.23
PHY 390 W3FE	1,119	41.6	4.2	1.18	32.1	83.1	53.91	$735.82
3644 B3XF	1,105	45.1	4.6	1.21	35.5	84.2	53.49	$720.76
BX 2396 B3XF	1,074	42.3	4.1	1.18	30.0	84.0	53.78	$704.59
20R745NR B3XF	1,068	43.3	4.2	1.16	32.4	82.2	53.84	$701.34
PHY 360 W3FE	1,053	41.5	4.4	1.15	29.4	82.3	53.59	$688.97
3555 B3XF	1,029	41.1	4.0	1.21	33.9	84.9	54.18	$679.29
BX 2392 B3XF	1,028	41.8	4.5	1.19	31.2	83.9	53.89	$675.34
PHY 332 W3FE	1,023	42.4	4.5	1.20	33.4	83.8	54.00	$673.33
DP 2143NR B3XF	1,002	41.3	4.8	1.19	35.2	84.4	53.49	$654.66
UA 248	990	37.5	4.4	1.19	34.1	83.7	54.03	$651.88
PHY 443 W3FE	989	42.0	4.5	1.13	34.5	83.9	53.86	$649.70
BX 2398 B3XF	984	41.3	4.4	1.18	30.7	83.9	53.79	$645.52
UA 222	882	39.0	4.5	1.22	33.2	84.8	54.01	$580.87
LSD (0.10)	183	2.9	0.3	0.03	1.5	1.2	NS	$120.78
CV (%)	12.9	5.7	5.2	2.5	4.0	1.2	0.8	13.0
Grand Mean	1,209	42.9	4.5	1.17	32.5	83.8	53.79	$793.36

[1]Please refer to Table 4 for abbreviation definitions.
[2]Shaded values are not statistically different than the highest value in each column.

Table 10. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre of cotton varieties grown on a Commerce silt loam at the Northeast Research Station, St. Joseph, 2022.

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
ST 4595 B3XF	1,438[2]	44.9	4.2	1.28	32.1	85.2	54.06	$947.78
PHY 411 W3FE	1,435	46.0	4.1	1.20	32.7	84.2	54.00	$944.74
DP 2239 B3XF	1,423	45.2	4.2	1.24	32.4	84.5	54.05	$937.58
DP 2127 B3XF	1,393	44.3	4.5	1.20	32.1	85.0	54.00	$917.18
DP 2020 B3XF	1,365	42.5	4.2	1.24	32.3	85.0	54.08	$899.89
DP 2038 B3XF	1,344	45.5	4.2	1.21	32.3	84.3	54.01	$885.23
DP 2115 B3XF	1,337	44.7	4.3	1.26	32.2	85.4	53.98	$879.69
DP 2333 B3XF	1,330	44.0	4.3	1.22	32.2	84.8	54.00	$875.97
PHY 390 W3FE	1,324	43.5	3.8	1.22	33.8	84.9	54.10	$873.13
PX1150B435-04 W3FE	1,322	43.2	4.1	1.24	33.1	84.8	54.13	$872.06
3535 B3XF	1,317	43.0	4.2	1.23	32.8	85.5	54.04	$868.09
DP 1646 B2XF	1,316	43.4	4.1	1.26	32.1	85.2	54.09	$867.90
9831 B3XF	1,314	43.4	4.1	1.23	33.3	84.7	54.09	$866.03
DP 2012 B3XF	1,313	43.6	4.1	1.26	32.9	85.5	54.09	$865.52
ST 5091 B3XF	1,306	43.4	4.3	1.23	32.9	85.3	54.06	$860.67
PHY 400 W3FE	1,298	44.1	3.9	1.24	32.4	84.7	54.05	$855.24
PX1150B434-04 W3FE	1,298	42.4	4.0	1.22	34.9	85.0	54.18	$856.77
9371 B3XF	1,295	43.7	4.1	1.21	30.7	84.2	53.83	$850.29
DP 2055 B3XF	1,286	44.6	4.4	1.22	32.7	84.5	54.05	$847.49
BX 2394 B3XF	1,284	43.4	4.2	1.21	30.3	83.0	53.74	$841.70
BX 2392 B3XF	1,283	44.1	4.0	1.20	32.5	84.2	54.05	$845.26
PX1150B437-04 W3FE	1,279	43.3	4.0	1.22	34.3	84.7	54.15	$843.87
3644 B3XF	1,251	42.8	4.0	1.26	32.6	84.9	54.00	$823.67
PHY 360 W3FE	1,245	43.6	4.2	1.23	32.1	85.6	54.06	$820.57
DP 2143NR B3XF	1,219	43.7	4.1	1.23	34.3	84.8	54.10	$803.73
DP 2141NR B3XF	1,211	43.4	4.3	1.22	32.7	84.2	54.06	$797.76
3555 B3XF	1,209	43.1	4.2	1.23	34.3	84.9	52.88	$786.16
ST 4990 B3XF	1,199	43.1	4.1	1.19	33.6	84.2	54.08	$790.53
UA 222	1,177	42.2	4.4	1.21	32.8	84.1	54.05	$775.83
PX1140B373-04 W3FE	1,163	44.5	3.7	1.22	35.0	85.2	52.96	$753.38
PX1150B431-04 W3FE	1,159	42.5	4.0	1.23	34.2	84.3	54.11	$764.70
BX 2396 B3XF	1,145	43.6	4.1	1.23	30.0	84.8	53.88	$752.44
PHY 443 W3FE	1,139	43.5	3.8	1.20	32.5	84.3	54.03	$750.12
PHY 332 W3FE	1,132	43.7	4.0	1.21	34.1	83.2	54.01	$745.44
PX1130B333-04 W3FE	1,132	42.6	3.9	1.24	34.2	85.0	54.13	$746.75
BX 2398 B3XF	1,070	41.3	4.0	1.23	31.7	84.4	54.01	$704.33
PX1130B336-04 W3FE	1,068	44.8	3.8	1.20	33.9	85.2	52.93	$693.64
20R745NR B3XF	1,049	44.2	4.2	1.22	33.0	84.9	54.06	$691.46
UA 248	1,037	40.8	4.1	1.21	32.2	84.2	54.03	$682.72
PHY 415 W3FE	1,010	42.7	4.0	1.25	33.5	84.9	52.90	$653.52
PX1140A385-04 W3FE	983	43.7	3.9	1.19	33.3	84.1	54.03	$647.62
LSD (0.10)	215	1.9	0.3	0.04	1.9	NS	NS	$142.97
CV (%)	14.8	3.8	7.0	2.6	4.9	1.2	1.4	14.9
Grand Mean	1,241	43.5	4.1	1.23	32.8	84.7	53.93	$816.74

[1]Please refer to Table 4 for abbreviation definitions.
[2]Shaded values are not statistically different than the highest value in each column.

Table 11. Lint yield (lb/a) summary of the 2022 cotton on-farm core block demonstrations at nine locations identified by parish.

Brand	Variety	Avoyelles	Caddo	Catahoula	Franklin	Madison	Morehouse	Ouachita	Richland	Tensas	Average[1]
Deltapine	**DP 2127 B3XF**	1,314	1,492	1,573	686	1,236	1,074	1,262	655	1,222	1,114
Deltapine	**DP 2115 B3XF**	1,158	1,194	1,614	794	1,047	1,074	1,398	870	1,065	1,091
Stoneville	**ST 4595 B3XF**	1,242	1,222	1,535	724	1,099	1,079	1,294	737	1,149	1,081
PhytoGen	**PHY 411 W3FE**	1,240		1,365	854	1,070			707	1,148	1,064
Stoneville	**ST 5091 B3XF**	1,023	1,295	1,534	601	1,179	1,110	1,320	821	1,207	1,061
Dyna-Gro	**3535 B3XF**	1,101	1,088	1,387	724	1,089	895	1,009	740	1,187	1,038
PhytoGen	**PHY 415 W3FE**	1,156		1,311	716	1,189			514	1,077	994
Dyna-Gro	**3644 B3XF**	1,018	914	1,128	747	1,012	1,025	1,042	663	880	908
	Location average	1,156	1,201	1,431	731	1,115	1,043	1,221	714	1,117	

[1]Balanced average that represents the six locations in which all varieties were present.

Table 12. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Avoyelles core block demonstration, 2022.

Parish: Avoyelles
Community: Bay Hills
Cooperator: Trent Clark
Agent: Justin Dufour
Seeding rate: 35,000
Previous crop: Soybean
Soil type: Loring/Coteau silt loam
Tillage: Conventional
N rate (lbs/acre): 115
Harvest date: 10/29/22
Irrigation: No
GPS: 30.986549, -92.141886
Plot size: 12 rows
Planting date: 5/11/22
Row spacing: 38”

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 2127 B3XF	1,314	47.6	4.9	1.15	30.7	85.4	53.80	$862.69
ST 4595 B3XF	1,242	47.7	4.4	1.15	30.0	83.8	53.70	$814.09
PHY 411 W3FE	1,240	49.7	4.7	1.14	31.8	81.7	53.75	$813.34
PHY 400 W3FE	1,159	46.9	4.3	1.15	30.4	82.0	53.65	$759.08
DP 2115 B3XF	1,158	46.4	4.3	1.21	32.0	84.8	54.00	$762.39
PHY 415 W3FE	1,156	45.2	4.5	1.22	34.3	86.5	54.15	$763.22
3535 B3XF	1,101	45.9	4.6	1.14	29.2	82.1	53.55	$719.96
PHY 443 W3FE	1,043	45.4	4.3	1.20	36.0	84.7	54.10	$687.60
Armor 9608 B3XF	1,028	48.5	4.3	1.21	28.5	83.1	53.65	$673.50
ST 5091 B3XF	1,023	46.0	4.1	1.19	28.9	82.6	53.65	$669.82
3644 B3XF	1,018	44.3	5.1	1.24	33.6	84.4	51.75	$647.13

[1]Please refer to Table 4 for abbreviation definitions.
Varieties in bold letters are the grower’s standards.

Table 13. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Caddo core block demonstration, 2022.

Parish: Caddo
Community: Belcher
Cooperator: Ryan Kirby
Agent: John Terrell
Seeding rate: 38,000
Previous crop: Corn
Soil type: Coushatta silt loam
Tillage: Minimum
N rate (lbs/acre): 85
Harvest date: 10/11/22
Irrigation: Yes
GPS: 32.710737, -93.843905
Plot size: 6 rows
Planting date: 5/12/22
Row spacing: 30" (2:1 skip)

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 2127 B3XF	1,492	45.3	5.0	1.15	30.7	83.4	53.70	$978.00
ST 5091 B3XF	1,295	44.0	4.5	1.20	30.1	85.8	53.90	$851.70
ST 4595 B3XF	1,222	43.1	4.7	1.22	31.5	83.9	53.95	$804.07
DP 2115 B3XF	1,194	44.0	4.9	1.18	29.9	84.2	53.75	$783.45
3535 B3XF	1,088	43.2	4.8	1.18	30.2	83.3	53.80	$714.08
3644 B3XF	914	41.4	4.9	1.25	36.2	85.8	54.15	$603.48

[1]Please refer to Table 4 for abbreviation definitions.

Table 14. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Catahoula core block demonstration, 2022.

Parish: Catahoula
Community: Jonesville
Cooperator: Ethan House
Agent: Kylie Miller
Seeding rate: 41,268
Previous crop: Grain sorghum
Soil type: Bursley silty clay loam
Tillage: Conventional
N rate (lbs/acre): 100
Harvest date: 10/10/22
Irrigation: No
GPS: 31.642733, -91.863161
Plot size: 24 rows
Planting date: 5/12/22
Row spacing: 38"

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 2115 B3XF	1,614	47.6	4.6	1.20	35.2	84.4	54.10	$1,064.59
DP 2127 B3XF	1,573	46.5	5.3	1.18	32.3	86.6	50.15	$975.12
ST 4595 B3XF	1,535	46.9	4.5	1.20	32.8	85.1	54.05	$1,011.41
ST 5091 B3XF	1,534	44.9	4.3	1.18	32.0	85.1	54.05	$1,010.81
3535 B3XF	1,387	45.6	4.3	1.20	34.2	84.4	54.10	$914.94
PHY 411 W3FE	1,365	47.8	4.7	1.11	33.9	84.6	53.85	$896.96
PHY 415 W3FE	1,311	45.9	4.5	1.21	35.5	84.9	54.10	$864.83
3644 B3XF	1,128	43.4	4.5	1.24	33.5	85.1	54.15	$744.29

[1]Please refer to Table 4 for abbreviation definitions.

Table 15. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Franklin core block demonstration, 2022.

Parish: Franklin
Community: Gilbert
Cooperator: Kody Beavers
Agent: Carol Pinnell-Alison
Seeding rate: 39,000
Previous crop: Corn
Soil type: Gigger silt loam
Tillage: Minimum
N rate (lbs/acre): 100
Harvest date: 10/13/22
Irrigation: Yes
GPS: 32.057508, -91.698628
Plot size: 6 rows
Planting date: 4/30/22
Row spacing: 38"

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
PHY 411 W3FE	854	46.6	4.5	1.13	30.7	82.9	53.50	$557.86
DP 2115 B3XF	794	46.1	4.8	1.17	30.5	83.2	53.70	$520.77
3644 B3XF	747	44.1	4.9	1.26	32.7	85.2	54.05	$492.19
3535 B3XF	724	44.9	4.5	1.21	29.8	84.3	53.75	$475.08
ST 4595 B3XF	724	46.1	4.9	1.21	29.4	84.1	53.75	$474.66
PHY 415 W3FE	716	44.6	4.6	1.23	32.5	85.1	54.05	$472.11
DP 2127 B3XF	686	45.8	4.8	1.19	29.8	85.2	53.80	$450.28
ST 5091 B3XF	601	44.5	4.3	1.19	30.9	84.2	53.85	$395.11

[1]Please refer to Table 4 for abbreviation definitions.

Table 16. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Madison core block demonstration, 2022.

Parish: Madison
Community: Tallulah
Cooperators: Curt and Dave Collins
Agent: R.L. Frazier
Seeding rate: 34,000
Previous crop: Cotton
Soil type: Sharkey clay
Tillage: Reduced
N rate (lbs/acre): 140
Harvest date: 10/4/22
Irrigation: Yes
GPS: 32.438973, -91.170360
Plot size: 36 rows
Planting date: 5/2/22
Row spacing: 38"

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 2127 B3XF	1,236	48.5	5.6	1.14	27.9	82.8	49.60	$759.69
PHY 415 W3FE	1,189	46.5	5.1	1.16	34.7	84.9	51.65	$754.81
ST 5091 B3XF	1,179	47.8	4.8	1.15	27.2	82.4	53.50	$770.57
ST 4595 B3XF	1,099	49.3	5.2	1.18	30.3	84.7	51.50	$696.43
3535 B3XF	1,089	47.9	5.2	1.17	30.5	85.9	51.45	$689.09
PHY 411 W3FE	1,070	48.4	5.0	1.13	32.1	83.8	51.35	$676.04
DP 2115 B3XF	1,047	48.3	5.3	1.12	29.2	83.7	49.55	$642.73
3644 B3XF	1,012	47.2	5.4	1.22	31.4	86.1	50.15	$627.72

[1]Please refer to Table 4 for abbreviation definitions.

Table 17. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Morehouse core block demonstration, 2022.

Parish: Morehouse
Community: Bonne Idee
Cooperator: Dan and Matt Turner
Agent: Bruce Garner
Seeding rate: 36,000
Previous crop: Rice
Soil type: Rilla-Hebert complex
Tillage: Conventional
N rate (lbs/acre): 120
Harvest date: 10/5/22
Irrigation: Yes
GPS: 32.778690, -91.683260
Plot size: 24 rows
Planting date: 5/11/22
Row spacing: 38"

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
ST 5091 B3XF	1,110	44.9	4.1	1.19	30.8	83.6	53.85	$729.45
ST 4595 B3XF	1,079	45.4	4.1	1.24	32.3	85.6	54.10	$711.26
DP 2127 B3XF	1,074	45.3	4.2	1.21	29.2	85.3	53.85	$705.75
DP 2115 B3XF	1,074	47.1	4.1	1.19	32.8	84.9	54.05	$707.74
3644 B3XF	1,025	43.3	4.8	1.21	36.9	85.3	54.15	$676.76
3535 B3XF	895	42.4	4.0	1.20	32.6	85.2	54.10	$590.34

[1]Please refer to Table 4 for abbreviation definitions.

Table 18. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Ouachita core block demonstration, 2022.

Parish: Ouachita
Community: Logtown
Cooperator: Tripp Faulk
Agent: Jim McCann
Seeding rate: 40,000
Previous crop: Corn
Soil type: Rilla silt loam
Tillage: Reduced
N rate (lbs/acre): 70
Harvest date: 10/24/22
Irrigation: No
GPS: 32.343817, -92.098676
Plot size: 8 rows
Planting date: 5/20/22
Row spacing: 38"

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 2115 B3XF	1,398	47.9	5.4	1.18	31.6	84.7	50.10	$866.11
ST 5091 B3XF	1,320	45.3	5.0	1.16	29.3	85.0	51.35	$834.53
ST 4595 B3XF	1,294	47.1	5.3	1.19	32.1	85.2	50.15	$802.32
DP 2127 B3XF	1,262	45.9	5.6	1.14	31.2	84.9	50.00	$780.80
3644 B3XF	1,042	43.7	5.4	1.27	35.3	86.0	50.25	$647.33
3535 B3XF	1,009	43.6	5.1	1.20	31.4	85.9	51.70	$641.30

[1]Please refer to Table 4 for abbreviation definitions.

Table 19. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Richland core block demonstration, 2022.

Parish: Richland
Community: Rayville
Cooperator: Eddie Conley
Agent: Carol Pinnell-Alison
Seeding rate: 39,000
Previous crop: Cotton
Soil type: Gigger-Gilbert complex
Tillage: Minimum
N rate (lbs/acre): 100
Harvest date: 10/17/22
Irrigation: Yes
GPS: 32.380045, -91.723001
Plot size: 32 rows
Planting date: 5/11/22
Row spacing: 38"

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 2115 B3XF	870	46.8	4.9	1.23	33.3	85.0	54.15	$574.39
ST 5091 B3XF	821	44.7	4.3	1.24	31.5	85.2	54.05	$541.20
3535 B3XF	740	44.7	5.0	1.25	33.1	86.7	51.80	$471.11
ST 4595 B3XF	737	46.2	4.7	1.24	30.6	86.3	53.90	$484.87
PHY 411 W3FE	707	47.6	4.3	1.15	34.8	83.0	53.95	$465.20
3644 B3XF	663	44.1	4.9	1.22	34.2	84.8	54.10	$437.46
DP 2127 B3XF	655	44.6	4.9	1.17	32.5	85.5	53.95	$431.03
PHY 415 W3FE	514	44.2	4.3	1.24	33.6	85.3	54.15	$338.98

[1]Please refer to Table 4 for abbreviation definitions.

Table 20. Lint yield, gin turnout, fiber characteristics, loan value and gross return per acre, Tensas core block demonstration, 2022.

Parish: Tensas
Community: St. Joseph
Cooperators: Scott and Thomas Crigler
Agent: Dennis Burns
Seeding rate: 40,000
Previous crop: Cotton
Soil type: Mixed
Tillage: Conventional
N rate (lbs/acre): 100
Harvest date: 9/23/22
Irrigation: No
GPS: 31.965280, -91.215308
Plot size: 12 rows
Planting date: 5/5/22
Row spacing: 38"

Variety	LY (lb/a)[1]	TO (%)	MIC	LGTH (in)	SGTH (g/tex)	UNIF (%)	LV (¢/lb)	GR ($/a)
DP 2127 B3XF	1,222	48.4	5.4	1.10	28.6	83.9	48.70	$739.76
ST 5091 B3XF	1,207	47.6	4.9	1.17	27.6	83.2	53.55	$789.45
3535 B3XF	1,187	46.2	5.0	1.22	30.5	85.6	51.55	$752.74
ST 4595 B3XF	1,149	47.1	5.2	1.20	28.3	85.7	51.40	$726.91
PHY 411 W3FE	1,148	49.2	4.9	1.11	31.2	83.2	53.70	$752.26
PHY 415 W3FE	1,077	47.0	4.9	1.18	32.0	84.2	54.00	$708.89
DP 2115 B3XF	1,065	47.9	5.2	1.13	30.7	85.9	51.30	$672.68
3644 B3XF	880	44.2	5.3	1.23	34.0	85.0	50.25	$546.46

[1]*Please refer to Table 4 for abbreviation definitions.*

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