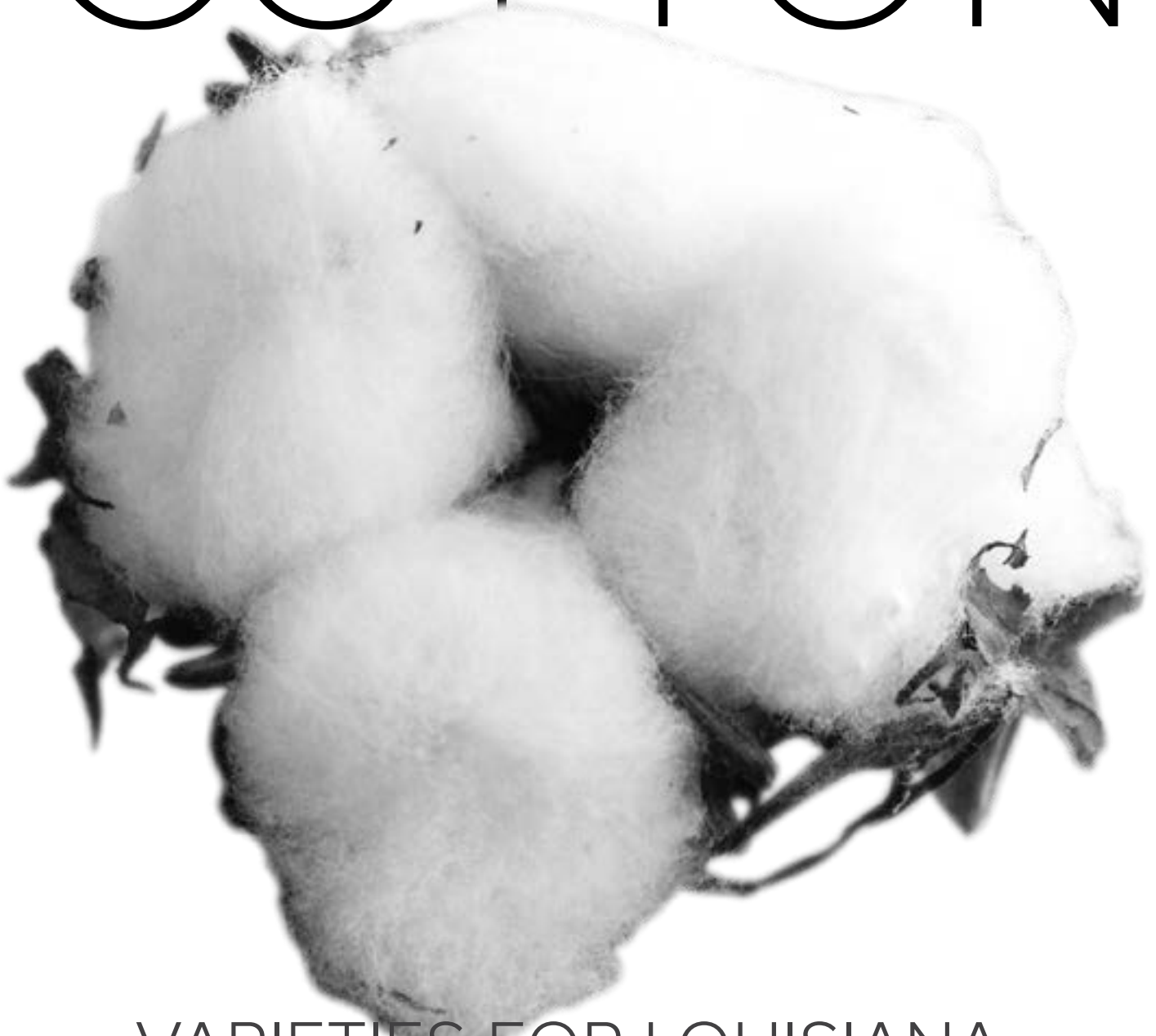


2021

COTTON



VARIETIES FOR LOUISIANA

VARIETY TRIALS AND ON-FARM DEMONSTRATIONS

Introduction

Scientists with the LSU AgCenter annually evaluate cotton varieties at four locations that represent Louisiana's cotton-producing regions. These AgCenter locations are the Red River Research Station at Bossier City, Dean Lee Research Station at Alexandria, Macon Ridge Research Station at Winnsboro, and Northeast Research Station at St. Joseph. 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.

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 official variety trials 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 official variety trials, 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 official variety trials 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 taken into account along with newer varieties that perform well.

Selecting Varieties

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.

Varieties that are shaded in each table are statistically the highest yielding. To identify promising varieties that are new to the market and have only one year of testing in the LSU AgCenter official variety trials, 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 2020 Louisiana Suggested Chemical Weed Management Guide for more information.

Liberty Link: 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 Liberty Link weed control program, which is covered in more detail in the LSU AgCenter 2020 Louisiana Suggested Chemical Weed Management Guide publication. Liberty Link cotton will be injured by applications or drift from glyphosate. On farms or in areas where Liberty Link 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 Liberty Link: 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, Deltapine 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 tolerant to 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 are tolerant to the bollworm, soybean looper, fall armyworm, and beet armyworm. For those and other pests, 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 non-caterpillar 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: PhytoGen varieties with designation “W” or “W3” in their brand names are cotton lines tolerant to 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 II traits remain the same for the Widestrike trait in PhytoGen varieties.

Twinlink: In 2014, Stoneville varieties with the designation “T” in their brand names became available; these are tolerant to the tobacco budworm. They also provide reduced bollworm damage to levels comparable to Bollgard II and reduced armyworm damage compared to non-Bt cotton. Under high and persistent populations of bollworms and armyworms, supplemental chemical control strategies may be necessary for satisfactory management.

Twinlink Plus: In 2016, 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.

Root-knot nematode: Since 2015, several companies have been marketing cotton varieties with tolerance to the root-knot nematode. This is not a transgenic technology. Planting these varieties on sandier soils with known root-knot nematode populations is a new option, particularly since the decline in use of in-furrow nematicide technologies.

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 in 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, one-third to one-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

Cotton brands and varieties included in the variety trials are listed in Table 3. Acronyms are defined in Table 4, and agronomic milestones for each variety trial location are listed

in Table 5. Table 6 details yield data across all five locations during 2020. Tables 7-11 contain individual variety trial location data, and tables 12-15 contain on-farm core block data.

Table 3. Brands and varieties included in cotton official variety trials, 2020.

Brand	Variety	Brand	Variety	Brand	Variety
Americot	AMX19A014B3XF	Croplan	CP 9608 B3XF	Dyna-Gro	DG 3317
Americot	AMX19A015B3XF	Croplan	CP 20XG91 B3XF	Dyna-Gro	DG 3402
Americot	AMX19A016B3XF	Deltapine	DP 1646 B2XF	Dyna-Gro	DG 3427
Americot	AMX19A018B3XF	Deltapine	DP 1845 B3XF	Dyna-Gro	DG 3520
Americot	AMX19B001B3XF	Deltapine	DP 2020 B3XF	Dyna-Gro	DG 3535
Americot	AMX19B003B3XF	Deltapine	DP 2038 B3XF	Dyna-Gro	DG 3605
BASF	BX 2193B3XF	Deltapine	DP 2055 B3XF	Dyna-Gro	DG 3615
BASF	BX 2151GLTP	Deltapine	19R132B3XF	Dyna-Gro	DG 3799
BASF	BX 2192B3XF	Deltapine	DP 2012 B3XF	Dyna-Gro	Halo 959
BASF	BX 2194B3XF	Deltapine	19R113B3XF		
BASF	BX 2191B3XF	Deltapine	19R125B3XF		
Nexgen	NG 4936B3XF	Phytogen	PHY 350 W3FE	Stoneville	ST 4550GLTP
Nexgen	NG 4098B3XF	Phytogen	PHY 360 W3FE	Stoneville	ST 5471GLTP
Nexgen	NG 5711B3XF	Phytogen	PHY 390 W3FE	Stoneville	ST 4990B3XF
Nexgen	NG 3729B3XF	Phytogen	PHY 400 W3FE	Stoneville	ST 4480B3XF
Nexgen	NG 3930B3XXF	Phytogen	PHY 480 W3FE	Stoneville	ST 5600B2XF
		Phytogen	PHY 500 W3FE		
		Phytogen	PHY 580 W3FE		
		Phytogen	PHY 332 W3FE		
		Phytogen	PHY 443 W3FE		
		Phytogen	PX 4B08 W3FE		
		Phytogen	PHY 545 W3FE		
		Phytogen	PX 5E28 W3FE		
		Phytogen	PX 5E34 W3FE		

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 (dollars per pound lint)
GR	Gross return (dollars per acre)
NS	Not significant
TS	Target spot (0-9 scale where 0=no disease and 9=complete defoliation)

Table 5. Agronomic milestones for each variety trial location, 2020.

	MRRS-sl ¹	NERS-c	NERS-sl	RRRS-c	RRRS-sl
planting date	5/18	5/12	5/12	6/4	6/2
emergence date	5/25	5/18	5/17	6/9	6/8
row spacing	40"	40"	40"	40"	40"
previous crop	soybean	corn	corn	cotton	corn
irrigation	yes	yes	No	no	yes
NPK (lb/A)	110-50-90	100-46-46-5	90-46-46-5	65-0-0	65-0-0
defoliation dates	10/1	9/30	9/13; 9/30	10/22	10/23
harvest date	10/22	10/20; 10/21	10/15	11/12; 11/13	11/5; 11/6
harvested plot size	280.1 ft ²	333.5 ft ²	333.5 ft ²	333.5 ft ²	333.5 ft ²

¹MRRS=Macon Ridge Research Station, Winnsboro; NERS=Northeast Research Station, St. Joseph; RRRS=Red River Research Station, Bossier City. sl=silt loam; c=clay.

Table 6. One-year lint yield (lb/A) performance of cotton varieties across five locations, 2020.

Variety	MRRS-sl ¹	NERS-c	NERS-sl	RRRS-c	RRRS-sl	Average
19R113 B3XF	1,417 ²	1,516	1,214	1,168	1,279	1,319
PX 4B08 W3FE	1,431	1,460	1,332	1,154	1,208	1,317
AMX 19B003 B3XF	1,390	1,361	1,149	1,361	1,030	1,258
19R125 B3XF	1,313	1,289	1,094	1,298	1,220	1,243
PHY 400 W3FE	1,347	1,212	1,052	1,334	1,236	1,236
BX 2191 B3XF	1,235	1,387	1,190	1,270	1,099	1,236
DP 1646 B2XF	1,449	1,315	1,066	1,382	937	1,230
DP 1845 B3XF	1,185	1,411	1,273	1,326	916	1,222
NG 4936 B3XF	1,270	1,258	1,062	1,286	1,204	1,219
PHY 350 W3FE	1,267	1,266	1,079	1,224	1,195	1,203
PHY 545 W3FE	1,323	1,226	973	1,360	1,109	1,198
PHY 332 W3FE	1,150	1,312	1,255	1,332	936	1,197
PHY 390 W3FE	1,412	1,212	1,107	1,102	1,140	1,195
AMX 19B001 B3XF	1,280	1,445	1,107	1,176	964	1,194
DG 3520	1,289	1,306	1,118	1,289	1,080	1,193
ST 4990 B3XF	1,357	1,131	975	1,260	1,079	1,187
PHY 480 W3FE	1,303	1,239	948	1,234	1,180	1,186
AMX 19A014 B3XF	1,132	1,281	1,089	1,458	1,048	1,185
BX 2192 B3XF	1,432	1,122	976	1,207	1,196	1,181
DP 2012 B3XF	1,290	1,266	999	1,318	942	1,181
BX 2151GLTP	1,540	1,099	1,103	1,327	948	1,176
PHY 500 W3FE	1,235	1,241	1,008	1,263	1,163	1,176
BX 2194 B3XF	1,187	1,186	1,154	1,381	1,019	1,175
19R132 B3XF	1,290	1,290	1,110	1,089	1,046	1,174
BX 2193 B3XF	1,302	1,258	1,092	1,152	1,145	1,173
ST 4550 GLTP	1,318	1,332	1,130	1,240	871	1,171
AMX 19A016 B3XF	1,265	1,279	949	1,219	947	1,168
DP 2055 B3XF	1,390	1,332	966	1,264	897	1,166
DP 2038 B3XF	1,283	1,289	1,097	1,218	1,027	1,164
DP 2020 B3XF	1,284	1,282	898	1,115	1,025	1,161
PHY 443 W3FE	1,273	1,388	926	1,049	970	1,160
PHY 580 W3FE	1,246	1,210	1,003	1,291	1,147	1,158
ST 5600 B2XF	1,366	1,260	1,114	1,136	1,103	1,158
PHY 360 W3FE	1,231	1,222	1,035	1,168	1,049	1,153
DG 3605	1,230	1,110	866	1,306	1,001	1,152
DG 3535	1,175	1,296	1,006	1,214	1,040	1,152
CP 20XG91 B3XF	1,530	1,262	1,095	1,114	980	1,150
CP 9608 B3XF	1,443	1,150	1,037	1,173	972	1,150
NG 5711 B3XF	1,239	1,221	1,032	1,245	986	1,146
PX 5E28 W3FE	1,125	1,158	1,012	1,363	1,022	1,140
DG 3799	1,312	1,217	847	1,288	1,004	1,134
NG 3729 B3XF	1,249	1,082	972	1,256	996	1,111
DG 3615	1,280	1,174	915	1,318	843	1,106
ST 5471 GLTP	1,331	1,095	875	1,111	1,085	1,093
DG 3317	1,463	949	841	1,136	1,038	1,092

Variety	MRRS-sl ¹	NERS-c	NERS-sl	RRRS-c	RRRS-sl	Average
DG HALO 959	1,256	1,049	848	1,191	1,086	1,086
NG 4098 B3XF	1,184	947	908	1,322	1,103	1,079
NG 3930 B3XF	1,255	1,024	876	1,107	1,100	1,079
DG 3427	1,334	1,243	1,026	986	934	1,075
AMX 19A015 B3XF	1,044	1,072	939	1,124	973	1,048
PX 5E34 W3FE	1,148	1,164	840	897	1,077	1,045
DG 3402	1,110	1,323	958	941	799	1,026
ST 4480 B3XF	1,112	1,063	847	1,109	860	998
AMX 19A018 B3XF	1,204	1,031	877	1,075	798	997
LSD (0.10)	164	366	159	192	200	
CV (%)	10.9	10.9	13.3	13.7	16.5	
Grand Mean	1,287	1,228	1,023	1,203	1,038	

¹MRRS=Macon Ridge Research Station, Winnsboro; NERS=Northeast Research Station, St. Joseph; RRRS=Red River Research Station, Bossier City. sl=silt loam; c=clay.

²Shaded values are not statistically different than the highest value in each column.

Table 7. Lint-yield, fiber characteristics, loan value and dollar return per acre of cotton varieties grown on an irrigated Gigger-Gilbert silt loam at Macon Ridge Research Station, Winnsboro, 2020.

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)	TS (0-9)
BX 2151GLTP	1,540 ²	43.8	3.9	1.23	29.9	85.2	54.14	\$1,016.85	3.3
CP 20XG91 B3XF	1,530	43.8	4.1	1.21	31.9	83.3	54.26	\$1,011.68	3.1
DG 3317	1,463	41.4	4.3	1.17	30.5	84.4	54.13	\$965.02	3.3
DP 1646 B2XF	1,449	42.3	4.0	1.25	30.1	84.4	54.18	\$956.41	2.3
CP 9608 B3XF	1,443	42.4	3.8	1.20	27.7	83.3	53.85	\$947.81	2.6
BX 2192 B3XF	1,432	40.6	3.8	1.28	31.5	85.2	54.33	\$946.23	3.3
PX 4B08 W3FE	1,431	42.1	4.0	1.16	31.8	84.8	54.24	\$945.78	2.8
19R113B3XF	1,417	43.0	4.1	1.20	30.1	84.0	54.30	\$937.53	1.8
PHY 390 W3FE	1,412	40.9	3.6	1.21	31.6	84.8	53.34	\$921.73	2.6
DP 2055 B3XF	1,390	42.6	3.9	1.28	30.4	84.6	54.19	\$917.95	1.9
AMX 19B003 B3XF	1,390	40.5	3.8	1.23	30.1	84.0	54.10	\$916.69	3.0
ST 5600B2XF	1,366	40.0	4.3	1.21	33.2	85.1	54.34	\$903.75	2.4
ST 4990B3XF	1,357	38.6	3.9	1.25	29.6	86.2	54.21	\$895.01	2.4
PHY 400 W3FE	1,347	40.9	3.7	1.23	32.6	84.5	54.38	\$892.34	2.1
DG 3427	1,334	43.8	4.1	1.18	29.9	82.4	53.88	\$876.33	1.6
ST 5471GLTP	1,331	38.3	3.8	1.17	31.3	82.8	54.14	\$878.05	1.8
PHY 545 W3FE	1,323	42.5	3.7	1.18	32.8	84.8	53.38	\$859.43	3.6
ST 4550GLTP	1,318	39.8	3.8	1.20	32.9	84.2	53.48	\$861.90	4.6
19R125B3XF	1,313	42.0	4.0	1.22	33.1	86.1	54.54	\$871.60	3.3
DG 3799	1,312	40.5	4.3	1.21	33.1	84.2	54.36	\$868.73	3.3
PHY 480 W3FE	1,303	40.4	3.7	1.17	32.0	84.9	54.26	\$862.59	3.8
BX 2193B3XF	1,302	41.9	4.4	1.20	33.0	85.2	54.36	\$862.40	4.1
19R132B3XF	1,290	41.0	4.0	1.23	34.3	85.9	54.55	\$856.82	3.3

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)	TS (0-9)
DP 2012 B3XF	1,290	39.0	3.8	1.24	30.2	84.6	54.11	\$850.69	1.3
DG 3520	1,289	37.8	3.3	1.28	31.4	85.8	50.70	\$805.07	2.6
DP 2020 B3XF	1,284	38.7	3.5	1.24	31.1	85.4	51.95	\$824.03	2.0
DP 2038 B3XF	1,283	44.6	3.7	1.17	29.8	83.4	53.00	\$834.98	2.0
AMX 19B001 B3XF	1,280	41.0	3.8	1.22	29.8	84.8	54.08	\$843.69	2.9
DG 3615	1,280	39.6	4.0	1.23	32.5	84.3	54.40	\$846.71	2.8
PHY 443 W3FE	1,273	41.0	3.5	1.20	32.7	84.4	52.46	\$820.09	3.0
NG 4936 B3XF	1,270	39.1	3.8	1.26	29.5	85.0	54.10	\$837.45	2.8
PHY 350 W3FE	1,267	38.0	3.6	1.23	31.4	85.5	54.31	\$838.44	3.4
AMX 19A016 B3XF	1,265	36.5	3.4	1.19	29.3	83.8	50.85	\$794.03	2.0
DG HALO 959	1,256	36.3	3.8	1.26	31.8	84.2	53.40	\$820.09	2.9
NG 3930 B3XF	1,255	38.8	3.5	1.21	28.3	84.4	52.08	\$793.17	0.9
NG 3729 B3XF	1,249	39.0	4.0	1.23	29.8	85.1	54.15	\$822.93	0.9
PHY 580 W3FE	1,246	41.9	3.9	1.20	34.4	85.9	54.56	\$827.68	2.6
NG 5711 B3XF	1,239	39.5	3.8	1.26	30.4	85.3	54.24	\$818.70	2.6
BX 2191 B3XF	1,235	40.0	3.5	1.23	29.3	84.1	51.20	\$778.62	2.3
PHY 500 W3FE	1,235	42.5	3.8	1.19	33.7	85.0	54.40	\$817.99	3.3
PHY 360 W3FE	1,231	39.1	3.7	1.22	29.3	83.9	53.08	\$798.21	3.0
DG 3605	1,230	39.6	3.8	1.25	30.7	84.8	54.33	\$814.20	3.0
AMX 19A018 B3XF	1,204	39.9	3.9	1.19	31.5	84.0	54.25	\$795.84	2.8
BX 2194 B3XF	1,187	37.7	3.2	1.23	30.4	84.2	49.18	\$724.17	3.6
DP 1845 B3XF	1,185	41.0	3.6	1.26	32.5	85.4	53.12	\$762.27	3.4
NG 4098 B3XF	1,184	38.7	3.6	1.26	35.0	84.3	53.28	\$779.53	3.9
DG 3535	1,175	39.8	3.9	1.24	30.0	85.5	54.20	\$776.08	2.8
PHY 332 W3FE	1,150	38.2	3.0	1.26	30.8	83.7	48.08	\$690.34	4.1
PX 5E34 W3FE	1,148	38.6	3.4	1.22	32.4	84.1	49.98	\$710.65	3.4
AMX 19A014 B3XF	1,132	36.4	3.4	1.21	28.9	83.1	51.15	\$714.02	2.9
PX 5E28 W3FE	1,125	37.7	3.2	1.21	32.8	84.1	49.80	\$693.60	3.3
ST 4480B3XF	1,112	38.0	3.5	1.25	30.5	85.0	52.38	\$719.99	1.8
DG 3402	1,110	37.8	3.5	1.24	30.9	85.3	52.05	\$711.24	1.5
AMX 19A015 B3XF	1,044	35.5	3.1	1.24	29.4	82.8	48.24	\$628.15	2.1
LSD (0.10)	164	1.3	0.2	0.03	1.1	1.2	1.52	\$111.87	1.4
CV (%)	****	2.8	5.4	1.8	3.1	1.2	2.5	11.4	41.6
Grand Mean	10.9	40.1	3.7	1.22	31.2	84.5	53.18	\$838.25	2.8

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 8. Lint-yield, fiber characteristics, loan value and gross return per acre of cotton varieties grown on a nonirrigated Sharkey clay at Northeast Research Station, St. Joseph, 2020.

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
19R113 B3XF	1,516 ²	43.3	5.0	1.183	30.8	85.0	53.03	\$914.30
PX 4B08 W3FE	1,460	42.3	4.9	1.173	31.6	83.3	53.46	\$957.00
AMX 19B001 B3XF	1,445	41.0	4.7	1.193	31.1	84.9	54.21	\$955.00
DP 1845 B3XF	1,411	40.7	4.1	1.293	32.0	85.0	54.35	\$934.00
PHY 443 W3FE	1,388	40.2	4.6	1.185	33.6	85.9	54.46	\$920.50
BX 2191 B3XF	1,387	40.5	4.4	1.225	29.8	84.9	54.10	\$914.50
AMX 19B003 B3XF	1,361	40.8	4.6	1.218	28.9	84.8	53.91	\$895.30
DP 2055 B3XF	1,332	42.2	4.6	1.253	30.9	84.7	54.15	\$879.30
ST 4550 GLTP	1,332	41.7	4.6	1.188	32.2	83.9	54.20	\$879.50
DG 3402	1,323	39.8	4.2	1.218	31.0	84.3	54.26	\$874.50
DP 1646 B2XF	1,315	41.1	4.5	1.248	30.8	85.2	54.14	\$867.80
PHY 332 W3FE	1,312	39.5	4.4	1.228	31.5	84.4	54.29	\$867.50
DG 3520	1,306	37.1	3.8	1.273	31.7	86.3	54.48	\$866.30
DG 3535	1,296	40.1	4.7	1.228	29.7	84.7	53.96	\$853.00
19R132 B3XF	1,290	42.2	4.9	1.2	34.0	84.5	53.74	\$846.50
19R125 B3XF	1,289	42.1	5.1	1.2	33.9	85.3	52.09	\$824.30
DP 2038 B3XF	1,289	44.8	4.8	1.16	29.3	83.6	52.85	\$839.70
DP 2020 B3XF	1,282	37.3	4.4	1.25	30.4	85.0	54.14	\$845.50
AMX 19A014 B3XF	1,281	39.1	4.5	1.215	29.3	83.9	53.91	\$842.30
AMX 19A016 B3XF	1,279	36.8	4.3	1.17	29.9	83.9	53.95	\$848.70
DP 2012 B3XF	1,266	38.9	4.5	1.233	30.7	84.8	54.15	\$835.80
PHY 350 W3FE	1,266	38.6	4.5	1.21	30.7	85.2	54.21	\$835.80
CP 20XG91 B3XF	1,262	42.5	4.9	1.203	33.0	84.1	53.14	\$819.30
ST 5600 B2XF	1,260	39.3	5.0	1.215	31.8	85.4	52.61	\$814.00
BX 2193 B3XF	1,258	42.6	5.0	1.19	33.7	86.0	53.26	\$819.00
NG 4936 B3XF	1,258	38.0	4.6	1.235	30.6	85.1	54.20	\$830.50
DG 3427	1,243	44.9	4.7	1.175	29.6	82.4	53.73	\$798.70
PHY 500 W3FE	1,241	43.6	4.2	1.183	32.5	84.0	54.22	\$796.30
PHY 480 W3FE	1,239	39.5	4.5	1.2	31.0	85.3	54.25	\$819.00
PHY 545 W3FE	1,226	42.4	4.5	1.163	31.6	84.6	54.14	\$809.30
PHY 360 W3FE	1,222	39.9	4.8	1.198	29.3	83.5	53.93	\$804.00
NG 5711 B3XF	1,221	39.7	4.5	1.24	30.7	85.1	54.19	\$806.50
DG 3799	1,217	39.7	4.4	1.198	31.7	83.7	54.18	\$803.50
PHY 400 W3FE	1,212	40.5	4.4	1.215	32.7	84.0	54.28	\$808.30
PHY 390 W3FE	1,212	41.3	4.3	1.22	32.8	84.6	54.39	\$803.00
PHY 580 W3FE	1,210	42.0	4.6	1.183	31.6	84.5	54.24	\$799.30
BX 2194 B3XF	1,186	37.6	3.8	1.248	29.4	85.0	54.05	\$781.30
DG 3615	1,174	40.2	4.7	1.2	32.7	84.6	54.33	\$776.80
PX 5E34 W3FE	1,164	38.3	4.0	1.203	32.4	84.3	54.35	\$771.00
PX 5E28 W3FE	1,158	36.8	4.1	1.205	33.1	84.5	54.41	\$767.80
CP 9608 B3XF	1,150	42.4	4.5	1.21	29.4	84.4	53.99	\$757.00
ST 4990 B3XF	1,131	36.7	4.5	1.238	30.6	85.5	54.18	\$746.30
BX 2192 B3XF	1,122	38.4	4.5	1.273	32.3	84.4	54.23	\$714.70

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
DG 3605	1,110	39.9	4.6	1.26	30.6	85.1	54.15	\$732.80
BX 2151 GLTP	1,099	42.5	4.7	1.218	30.5	84.4	53.54	\$719.50
ST 5471 GLTP	1,095	38.2	4.5	1.203	32.3	84.0	54.28	\$724.30
NG 3729 B3XF	1,082	38.2	4.9	1.21	30.7	85.8	54.19	\$714.30
AMX 19A015 B3XF	1,072	35.2	4.2	1.243	29.6	84.2	54.01	\$706.00
ST 4480 B3XF	1,063	39.0	4.4	1.265	31.2	84.7	54.29	\$702.80
DG HALO 959	1,049	37.3	4.6	1.24	33.2	84.5	54.35	\$694.80
AMX 19A018 B3XF	1,031	38.6	4.6	1.183	32.3	84.7	54.26	\$681.80
NG 3930 B3XF	1,024	37.5	4.5	1.218	30.6	85.0	54.16	\$676.30
DG 3317	949	40.6	4.7	1.175	32.2	84.4	54.18	\$626.80
NG 4098 B3XF	947	38.5	4.3	1.261	34.7	85.6	54.38	\$653.00
LSD (0.10)	366	3.3	0.4	0.07	2.5	3.0	1.48	\$244.59
CV (%)	10.9	3.0	3.1	2.1	3.0	1.3	1.0	11.0
Grand Mean	1,228	40.0	4.5	1.21	31.4	84.6	54.00	\$806.92

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 9. Lint-yield, fiber characteristics, loan value and gross return per acre of cotton varieties grown on an irrigated Commerce silt loam at Northeast Research Station, St. Joseph, 2020.

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
PX 4B08 W3FE	1,332 ²	41.7	4.6	1.16	33.0	83.7	54.14	\$878.89
DP 1845 B3XF	1,273	42.0	4.2	1.30	33.7	86.3	54.54	\$844.79
PHY 332 W3FE	1,255	38.8	4.3	1.26	33.5	85.0	54.40	\$831.21
19R113 B3XF	1,214	43.1	4.7	1.23	32.1	85.5	54.36	\$803.83
BX 2191 B3XF	1,190	40.7	4.4	1.22	29.6	84.8	54.03	\$783.83
19R132 B3XF	1,154	40.5	5.0	1.21	33.5	86.0	53.30	\$750.88
AMX 19B003 B3XF	1,149	40.4	4.7	1.23	30.8	84.7	53.61	\$752.01
AMX 19A016 B3XF	1,130	37.4	4.7	1.19	30.6	84.0	53.48	\$737.38
PHY 443 W3FE	1,118	39.9	4.3	1.18	34.9	84.8	54.41	\$740.68
DG 3605	1,114	40.4	4.6	1.25	30.5	84.4	54.11	\$734.53
ST 4990 B3XF	1,110	38.8	4.7	1.26	31.0	86.3	54.26	\$734.13
AMX 19B001 B3XF	1,107	41.4	4.7	1.22	32.1	86.2	53.81	\$707.01
PHY 390 W3FE	1,107	40.3	4.3	1.22	33.2	84.5	54.40	\$733.42
BX 2194 B3XF	1,103	37.8	3.8	1.27	31.1	84.3	54.23	\$728.70
DP 2020 B3XF	1,097	37.9	4.5	1.24	30.5	85.2	54.20	\$724.58
PHY 360 W3FE	1,095	41.5	4.8	1.20	29.5	84.4	52.95	\$711.02
19R125 B3XF	1,094	41.2	5.2	1.20	34.9	85.3	51.74	\$694.66
ST 4550 GLTP	1,092	41.7	4.6	1.22	33.5	84.8	54.34	\$722.38
DP 2012 B3XF	1,089	38.8	4.6	1.26	32.4	85.9	54.39	\$721.50
NG 4936 B3XF	1,079	38.7	4.7	1.28	32.1	87.5	54.46	\$747.68
DP 1646 B2XF	1,066	41.6	4.6	1.28	31.1	85.2	53.61	\$698.37
PHY 350 W3FE	1,062	39.4	4.5	1.22	32.0	85.6	54.38	\$703.12
PHY 400 W3FE	1,052	40.8	4.5	1.22	33.8	84.9	54.39	\$697.00
NG 5711 B3XF	1,037	39.3	4.6	1.25	31.5	85.1	54.26	\$685.44
DG 3535	1,035	38.6	4.8	1.25	30.6	85.8	53.59	\$676.57
PX 5E28 W3FE	1,032	37.7	3.9	1.22	34.4	84.9	54.48	\$684.41
AMX 19A015 B3XF	1,026	38.4	4.2	1.26	32.6	84.6	54.40	\$679.47
CP 9608 B3XF	1,012	41.7	4.5	1.21	29.0	85.0	54.00	\$666.34
BX 2193 B3XF	1,008	41.3	4.9	1.22	35.3	85.6	53.33	\$655.61
AMX 19A014 B3XF	1,006	37.1	4.4	1.20	30.5	83.7	54.11	\$683.80
DP 2038 B3XF	1,003	41.9	4.7	1.16	30.9	83.5	53.40	\$664.88
DG 3520	999	37.6	3.9	1.27	32.7	86.6	54.53	\$663.11
PHY 500 W3FE	976	41.2	4.1	1.22	35.0	85.0	54.50	\$647.55
PHY 480 W3FE	975	39.0	4.3	1.21	33.1	85.9	54.48	\$646.74
PHY 545 W3FE	973	42.2	4.6	1.18	33.3	84.8	54.30	\$643.74
NG 3729 B3XF	972	39.1	4.9	1.20	30.7	84.9	53.51	\$636.56
BX 2151 GLTP	966	42.7	4.8	1.24	32.3	85.5	53.76	\$634.51
DG 3402	958	39.8	4.5	1.22	32.4	85.4	54.39	\$634.84
DP 2055 B3XF	949	43.6	4.7	1.30	33.7	86.3	53.89	\$624.38
BX 2192 B3XF	948	39.3	4.6	1.32	33.2	85.6	53.83	\$621.52
PX 5E34 W3FE	939	38.3	3.9	1.25	33.8	84.8	54.41	\$622.12
ST 5600 B2XF	926	38.9	5.1	1.23	33.6	85.9	52.33	\$593.34
DG 3615	915	39.7	4.9	1.24	33.0	85.1	53.80	\$599.69

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
NG 3930 B3XF	908	38.4	4.5	1.21	30.6	85.3	54.10	\$585.06
PHY 580 W3FE	898	40.6	4.5	1.19	33.7	84.2	53.74	\$587.90
AMX 19A018 B3XF	877	39.5	4.6	1.21	33.7	84.2	54.33	\$580.39
DG 3427	876	42.3	4.6	1.20	30.7	83.7	54.06	\$577.27
DG 3317	875	40.2	4.8	1.19	32.1	85.5	54.30	\$578.82
CP 20XG91 B3XF	866	42.4	4.9	1.23	34.5	84.5	53.76	\$567.06
DG HALO 959	848	36.7	4.6	1.27	33.6	85.7	54.44	\$562.02
ST 4480 B3XF	847	37.8	4.4	1.27	32.3	85.9	54.40	\$561.10
DG 3799	847	40.5	4.8	1.23	34.1	85.5	53.88	\$556.08
ST 5471 GLTP	841	36.6	4.6	1.23	33.2	85.0	54.35	\$557.01
NG 4098 B3XF	840	36.4	4.4	1.29	37.4	85.6	54.50	\$622.84
LSD (0.10)	159	2.1	0.2	0.03	1.3	1.2	0.76	\$105.88
CV (%)	13.3	4.4	3.6	1.9	3.3	1.2	1.2	13.4
Grand Mean	1,023	39.9	4.5	1.23	32.5	85.1	54.01	\$675.59

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 10. Lint-yield, fiber characteristics, loan value and dollar return per acre of cotton varieties grown on an irrigated Moreland clay at Red River Research Station, Bossier City, 2020.

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
DP 1646 B2XF	1,385 ²	42.3	4.5	1.17	31.6	83.8	54.08	\$900.96
BX 2194 B3XF	1,375	40.5	4.3	1.16	32.9	83.8	54.14	\$907.16
PX 5E28 W3FE	1,363	40.3	4.4	1.16	32.5	83.3	54.16	\$899.57
AMX 19B003 B3XF	1,361	39.9	4.6	1.17	31.6	83.5	54.18	\$898.34
PHY 545 W3FE	1,360	39.2	4.4	1.17	32.1	83.3	54.04	\$896.38
PHY 400 W3FE	1,334	39.7	4.5	1.17	33.6	84.3	54.21	\$880.98
PHY 332 W3FE	1,332	40.8	4.5	1.17	32.3	84.1	54.21	\$879.46
DP 2012 B3XF	1,318	40.5	4.6	1.14	32.3	82.9	53.10	\$854.76
DG 3615	1,318	39.2	4.5	1.19	32.7	83.8	54.14	\$869.53
DG 3605	1,306	39.8	4.4	1.16	34.0	84.3	54.26	\$862.84
19R125B3XF	1,298	40.0	4.5	1.14	32.9	83.8	53.91	\$853.70
PHY 580 W3FE	1,291	41.0	4.7	1.16	33.3	83.9	54.20	\$852.48
DG 3799	1,288	37.7	4.3	1.18	34.2	83.8	54.00	\$867.39
AMX 19A014 B3XF	1,273	38.6	4.6	1.16	32.1	83.7	54.10	\$855.71
DP 1845 B3XF	1,272	40.3	4.4	1.19	32.3	84.3	54.28	\$840.89
BX 2191 B3XF	1,270	40.6	4.5	1.16	31.9	83.0	53.90	\$889.27
DP 2055 B3XF	1,264	39.2	4.5	1.17	31.7	84.1	54.14	\$834.61
PHY 500 W3FE	1,263	39.4	4.2	1.16	36.2	84.4	54.22	\$823.50
BX 2151GLTP	1,258	41.1	4.6	1.16	33.2	83.8	54.16	\$846.12
NG 3729 B3XF	1,256	38.6	4.3	1.15	33.2	82.9	54.09	\$827.91
NG 5711 B3XF	1,245	37.7	4.5	1.19	32.0	83.7	54.13	\$821.09
ST 4550GLTP	1,237	40.9	4.3	1.16	33.1	83.8	54.26	\$818.03
PHY 480 W3FE	1,234	38.0	4.5	1.16	34.0	85.4	54.20	\$814.58

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
PHY 350 W3FE	1,224	38.7	4.2	1.17	33.4	84.3	54.33	\$810.08
AMX 19A016 B3XF	1,219	41.1	4.6	1.17	32.1	83.4	54.11	\$803.71
DG 3535	1,214	37.4	4.3	1.21	32.9	84.1	54.30	\$802.75
BX 2192 B3XF	1,207	38.4	4.4	1.17	32.8	84.2	54.25	\$797.87
DG 3520	1,202	37.6	4.4	1.16	31.9	83.5	53.75	\$830.48
DG HALO 959	1,193	35.7	4.4	1.22	32.2	85.1	54.37	\$719.89
NG 4936 B3XF	1,191	37.3	4.4	1.19	32.8	84.9	54.23	\$752.61
PHY 443 W3FE	1,187	40.6	4.3	1.19	34.4	84.9	54.15	\$720.70
DP 2038 B3XF	1,185	41.7	4.1	1.16	33.7	83.6	54.21	\$783.01
AMX 19B001 B3XF	1,176	39.0	4.3	1.18	32.5	84.6	54.23	\$776.97
ST 4990B3XF	1,173	37.1	4.4	1.17	31.6	83.6	54.16	\$790.79
19R113B3XF	1,170	40.5	4.5	1.13	35.1	84.1	53.93	\$786.09
PX 4B08 W3FE	1,154	40.3	4.4	1.21	33.7	85.2	54.43	\$780.29
BX 2193B3XF	1,152	41.1	4.4	1.15	35.3	83.7	54.10	\$741.22
DG 3317	1,138	38.4	4.5	1.16	32.9	83.8	54.11	\$766.31
ST 5600B2XF	1,136	36.0	4.5	1.17	34.5	85.7	54.34	\$752.01
PHY 360 W3FE	1,132	39.9	4.7	1.12	32.5	81.9	52.85	\$732.80
NG 4098 B3XF	1,131	34.6	4.3	1.22	34.9	85.5	54.48	\$796.04
AMX 19A015 B3XF	1,124	37.8	4.5	1.19	32.3	84.7	54.29	\$743.31
DP 2020 B3XF	1,115	37.2	4.6	1.16	32.5	83.6	54.06	\$734.69
CP 20XG91 B3XF	1,114	40.5	4.7	1.18	34.5	84.1	54.18	\$735.69
ST 5471GLTP	1,111	37.5	4.7	1.13	32.5	82.6	52.91	\$719.02
ST 4480B3XF	1,109	39.3	4.5	1.17	34.8	85.0	54.23	\$733.00
NG 3930 B3XF	1,107	38.3	4.4	1.19	31.5	84.5	54.26	\$731.76
PHY 390 W3FE	1,104	38.5	4.4	1.19	32.7	84.5	54.28	\$745.96
CP 9608 B3XF	1,099	37.5	4.5	1.22	33.4	84.9	54.35	\$742.67
19R132B3XF	1,085	40.2	4.5	1.19	32.6	84.1	54.26	\$717.58
AMX 19A018 B3XF	1,075	39.5	4.3	1.14	33.3	83.5	54.10	\$709.01
DG 3427	986	39.3	4.5	1.18	34.5	83.6	54.00	\$649.86
DG 3402	943	38.5	4.7	1.20	34.0	83.7	53.40	\$674.30
PX 5E34 W3FE	894	38.5	4.4	1.19	32.2	84.4	54.28	\$606.66
LSD (0.10)	192	NS	NS	0.04	NS	1.3	0.46	\$130.04
CV (%)	13.7	7.1	5.3	3.0	6.0	1.3	0.7	14.0
Grand Mean	1,203	39.2	4.4	1.17	33.1	84.0	54.09	\$795.97

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 11. Lint-yield, fiber characteristics, loan value and dollar return per acre of cotton varieties grown on an irrigated Caplis very fine sandy loam at Red River Research Station, Bossier City, 2020.

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
19R113 B3XF	1,279 ²	40.8	4.6	1.20	33.4	84.6	54.35	\$847.10
PHY 400 W3FE	1,236	40.9	3.9	1.24	34.2	84.0	54.41	\$819.19
19R125 B3XF	1,220	42.3	4.2	1.19	34.6	84.0	54.31	\$808.51
PX 4B08 W3FE	1,208	42.2	4.2	1.19	33.4	83.1	53.29	\$784.55
NG 4936 B3XF	1,204	39.7	4.1	1.21	34.2	84.7	54.40	\$797.62
BX 2192 B3XF	1,196	40.5	4.1	1.24	32.5	85.1	54.43	\$792.45
PHY 350 W3FE	1,195	40.3	4.0	1.22	35.3	85.6	54.49	\$792.57
PHY 480 W3FE	1,180	39.5	3.8	1.19	34.7	84.7	53.50	\$771.96
PHY 500 W3FE	1,163	40.6	4.1	1.19	35.0	84.5	54.40	\$770.18
PHY 580 W3FE	1,147	40.5	4.2	1.15	34.6	83.1	54.21	\$757.51
BX 2193 B3XF	1,145	41.5	4.4	1.22	33.4	85.0	53.80	\$753.63
PHY 390 W3FE	1,140	39.8	4.2	1.18	34.0	84.2	54.45	\$759.59
PHY 545 W3FE	1,109	39.6	4.3	1.17	34.5	83.8	54.30	\$733.75
NG 4098 B3XF	1,103	38.9	4.3	1.21	34.9	85.0	54.45	\$731.38
ST 5600 B2XF	1,103	41.0	4.2	1.20	34.7	84.6	54.40	\$730.45
NG 3930 B3XF	1,100	40.6	4.4	1.21	34.1	84.6	54.31	\$727.73
BX 2191 B3XF	1,099	41.2	4.3	1.20	33.0	83.9	54.34	\$727.60
DG HALO 959	1,086	38.9	3.8	1.19	34.1	83.1	53.35	\$707.54
ST 5471 GLTP	1,085	39.5	4.1	1.20	35.8	84.4	54.43	\$718.93
DG 3520	1,080	38.2	3.8	1.20	34.9	84.3	54.35	\$714.71
ST 4990 B3XF	1,079	40.2	4.4	1.20	33.0	84.6	54.31	\$713.96
PX 5E34 W3FE	1,077	38.9	4.1	1.19	35.9	85.2	53.74	\$705.46
PHY 360 W3FE	1,049	40.1	3.9	1.19	32.8	84.4	53.41	\$685.48
AMX 19A014 B3XF	1,048	39.8	4.1	1.17	33.1	83.1	54.23	\$692.40
19R132 B3XF	1,046	41.3	4.3	1.20	35.3	84.9	53.46	\$683.74
DG 3535	1,040	40.0	4.1	1.18	32.7	83.8	54.20	\$686.56
DG 3317	1,038	40.2	4.2	1.20	32.7	84.0	54.30	\$686.69
AMX 19B003 B3XF	1,030	40.9	4.3	1.21	33.4	84.5	54.31	\$681.42
DP 2038 B3XF	1,027	42.5	4.1	1.19	33.6	83.2	54.23	\$678.45
DP 2020 B3XF	1,025	38.4	4.3	1.24	34.9	85.7	53.91	\$671.93
PX 5E28 W3FE	1,022	34.9	4.3	1.18	34.5	84.4	52.95	\$664.02
BX 2194 B3XF	1,019	38.9	3.9	1.22	32.9	83.6	53.41	\$666.02
DG 3799	1,004	39.9	4.1	1.22	34.7	83.6	54.34	\$664.61
DG 3605	1,001	41.7	4.1	1.22	33.0	84.2	54.36	\$662.93
NG 3729 B3XF	996	38.9	3.8	1.21	33.8	84.7	54.34	\$659.08
NG 5711 B3XF	986	38.5	4.2	1.23	34.1	85.2	54.45	\$654.04
CP 20XG91 B3XF	980	39.5	4.3	1.18	33.8	83.0	54.28	\$648.28
AMX 19A015 B3XF	973	39.2	4.0	1.22	35.1	84.2	53.45	\$635.69
CP 9608 B3XF	972	42.3	4.1	1.18	33.1	83.8	54.28	\$642.85
PHY 443 W3FE	970	39.7	4.2	1.18	35.5	83.8	54.24	\$640.86
AMX 19B001 B3XF	964	41.0	3.9	1.19	34.0	84.9	54.39	\$638.58
BX 2151 GLTP	948	41.4	4.0	1.19	33.4	84.1	54.28	\$626.78
AMX 19A016 B3XF	947	37.2	4.1	1.18	32.8	83.8	54.25	\$625.76

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF (%)	LV (¢/lb)	GR (\$/A)
DP 2012 B3XF	942	38.3	4.2	1.23	33.6	84.3	54.41	\$623.93
DP 1646 B2XF	937	42.2	4.0	1.21	33.2	84.0	54.41	\$620.74
PHY 332 W3FE	936	37.9	4.0	1.19	34.5	85.1	54.43	\$620.43
DG 3427	934	41.2	4.1	1.22	34.6	84.7	54.36	\$618.17
DP 1845 B3XF	916	42.1	4.1	1.22	34.5	84.3	54.33	\$605.45
DP 2055 B3XF	897	40.3	4.2	1.22	33.0	83.9	54.36	\$594.15
ST 4550 GLTP	871	41.1	4.0	1.16	35.0	84.2	54.30	\$555.21
ST 4480 B3XF	860	36.4	4.1	1.23	33.4	85.0	54.43	\$569.63
DG 3615	843	38.9	4.3	1.16	34.4	83.7	54.06	\$555.40
DG 3402	799	40.8	4.0	1.20	34.9	84.9	53.06	\$520.55
AMX 19A018 B3XF	798	38.4	4.1	1.18	33.7	83.8	54.34	\$528.19
LSD (0.10)	200	2.8	NS	NS	NS	NS	1.08	\$133.91
CV (%)	16.5	6.0	9.0	3.2	5.1	1.4	1.7	16.7
Grand Mean	1,038	40.0	4.1	1.20	34.0	84.3	54.14	\$684.71

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 12. Lint yield, gin turnout, fiber characteristics, loan values and dollar return per acre, Morehouse core block demonstration, 2020.

Parish: Morehouse

Harvest date: 10/18/20

Field size: 82 ac. total, 8.2 ac strips

Community: Mer Rouge

Previous crop: Corn

Row spacing: 38 in.

Fertilizer: 100 lbs N/A

Soil type: Gallion silt loam

Seeding rate: 36,000/A

Agent: Bruce Garner

Cooperator: Dan Turner

Tillage: Minimum

Planting date: 5/12/20

GPS: 32°46'16.54"N, -91°46'54.47"W

Irrigation: Furrow

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF	LV (¢/lb)	GR (\$/A)
PHY 400 W3FE	1,069	41.8	3.6	1.25	35	85.7	54.45	\$709
DP 1646 B2XF	1,069	43.1	3.9	1.29	29.5	83.7	53.95	\$703
PHY 390 W3FE	1,066	41.1	3.4	1.25	33.2	84.7	50.75	\$667
NG 4936 B3XF	991	38.6	3.6	1.3	30.3	87.2	54.25	\$655
ST 4550GLTP	925	41.3	3.6	1.2	31.9	84.6	54.25	\$611
DG 3520	918	36.3	3.4	1.31	32.8	84.4	50.65	\$574
ST 49900 B3XF	825	38.4	3.9	1.27	30.3	86.3	54.35	\$546
DP2038B3XF	811	47	3.8	1.19	31.7	83.4	54.3	\$536
DG HALO 959	795	36.7	3.8	1.29	35.5	86.6	54.6	\$528
NG 4098 B3XF	602	36.5	3.2	1.28	34.7	84.3	49	\$366

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 13. Lint yield, gin turnout, fiber characteristics, loan values and dollar return per acre, Ouachita core block demonstration, 2020.

Parish: Ouachita

Previous crop: Corn

Irrigation type: None

Community: Bosco

Soil type: Rilla silt loam

GPS: 32.341225, -92.100366

Cooperator: Trip Faulk

Tillage Type: Minimal

Plot size: 8 rows

Agent: Keith Collins

N rate (lbs/acre): 70

Planting date: 5/21/2020

Seeding rate: 41,000

Harvest date: 10/22/2020

Row spacing: 38 in.

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF	LV (¢/lb)	GR (\$/A)
PHY 400 W3FE	1,208	42.3	4.4	1.23	33.7	84.2	54.35	\$800
ST 4550 GLTP	1,175	41.6	4.8	1.22	33.8	83.5	54.30	\$777
PHY 390 W3FE	1,171	39.9	4.3	1.24	32.5	86.7	54.40	\$776
NG 4098 B3XF	1,168	41.0	4.5	1.29	38.4	85.9	54.45	\$774
DG 3402	1,125	41.2	4.5	1.24	32.6	87.6	54.40	\$745
DP 1646 B2XF	1,105	42.1	4.6	1.24	29.1	84.0	53.90	\$727
DG 3520	1,090	37.9	4.0	1.26	34.5	84.9	54.45	\$723
ST 4990 B3XF	1,080	37.4	4.5	1.28	33.0	85.7	54.45	\$716
DG 3585	1,056	40.2	4.5	1.24	30.5	86.5	54.25	\$698
DP 2038 B3XF	988	45.0	4.9	1.16	32.0	83.7	54.15	\$652
NG 4936 B3XF	970	37.2	4.4	1.30	32.3	86.9	54.40	\$643
DG HALO 959	802	39.0	4.9	1.23	32.6	84.3	54.25	\$530
DG 3799	794	40.1	5.2	1.22	33.5	85.5	52.15	\$508

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 14. Lint yield, gin turnout, fiber characteristics, loan values and dollar return per acre, Pointe Coupee core block demonstration, 2020.

Parish: Pointe Coupee
Community: Innis
Cooperator: George LaCour
Agent: Mark Carriere
Seeding rate: 33,000/A

Previous crop: Corn
Soil type: Clay/mix
Tillage: Conventional
N rate (lbs/acre): 85 units
Harvest date: 9/30, 10/1

Irrigation type: None
GPS: 30.812672, -91.778219
Plot size: 6 rows
Planting date: 5/4/2020
Row spacing: 38"

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF	LV (¢/lb)	GR (\$/A)
NG 4936 B3XF	1,285	40.2	4.5	1.22	29.5	86.2	54.05	\$847
ST 4990 B3XF	1,269	37.0	4.5	1.21	29.5	83.8	53.85	\$834
DP 1646 B2XF	1,266	42.8	4.5	1.25	29.5	84.3	53.90	\$833
DG HALO 959	1,191	39.0	4.4	1.23	33.1	86.4	54.50	\$790
PHY 400 W3FE	1,162	41.5	4.4	1.22	32.8	84.5	54.25	\$768
DP 2038 B3XF	1,136	43.5	4.7	1.14	29.4	81.3	53.45	\$742
PHY 390 W3FE	1,133	40.9	4.5	1.19	32.7	84.8	54.25	\$749
ST 4550 GLTP	1,099	41.9	4.5	1.17	32.2	85.3	54.30	\$727
DG 3520	1,063	36.8	4.0	1.25	34.7	86.4	54.60	\$706
NG 4098 B3XF	909	36.6	4.3	1.25	34.3	84.6	54.35	\$602
LSD (0.10)	121	3.9						
CV (%)	7.4	6.9						
Grand Mean	1,151	40.0						

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

Table 15. Lint yield, gin turnout, fiber characteristics, loan values and dollar return per acre, Tensas core block demonstration, 2020.

Parish: Tensas
Community: Newellton
Cooperator: L. Stonecipher/B. Kifer
Agent: Dennis Burns
Seeding rate: 40k

Previous crop: Cotton
Soil type: Commerce silt loam
Tillage Type: Stale seedbed
N rate (lbs/acre): 120
Harvest date: 10/1/202

Irrigation type: Furrow
GPS: -91.178, 32.109
Plot size: 6 row
Planting date: 5/4/2020
Row spacing: 38"

Variety	LY (lb/A) ¹	TO (%)	MIC	LGTH (in.)	SGTH (g/ tex)	UNIF	LV (¢/lb)	GR (\$/A)
NG 4936 B3XF	1,657	41.1	4.4	1.26	29.6	85.1	54.00	\$1,091
ST 4990 B3XF	1,581	37.7	4.1	1.27	34.6	84.8	54.45	\$1,048
DG 3520	1,464	39.4	4.2	1.27	31.2	87.7	54.50	\$972
DP 2038 B3XF	1,457	38.1	4.0	1.27	34.2	87.1	54.60	\$968
DG HALO 959	1,435	41.8	4.4	1.31	31.3	86.7	54.40	\$950
DP 1646 B2XF	1,367	44.5	5.0	1.21	35.6	86.4	52.20	\$875
NG 4098 B3XF	1,234	37.4	4.7	1.29	34.3	86.7	54.50	\$819

¹Please refer to Table 4 for acronym definitions.

²Shaded values are not statistically different than the highest value in each column.

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