

**2018 REPLICATED AGRONOMIC COTTON
EVALUATION (RACE) SOUTH, EAST AND
CENTRAL REGIONS OF TEXAS**



<http://cotton.tamu.edu/>

REPLICATED AGRONOMIC COTTON EVALUATION (RACE)

SOUTH, EAST AND CENTRAL REGIONS OF TEXAS, 2018

Dr. Gaylon Morgan¹, Professor and Extension Cotton Specialist

Dr. Josh McGinty², Assistant Professor and Extension Agronomist

Dale Mott¹, Extension Program Specialist – Cotton

Clinton Livingston², Technician

Rudy Alaniz², Technician

Martin Barroso³, Technician

Bradley Cowan⁴, County Extension Agent

Jason Ott⁵, County Extension Agent

Bobby McCool⁶, County Extension Agent

Robbin Reininger⁷, County Extension Agent

Candace Moeller⁸, County Extension Agent

Stephen Biles⁹, Extension Agent-IPM

Anthony Netardus¹⁰, County Extension Agent

Michael Hiller¹¹, County Extension Agent

Aaron Sumrall¹², County Extension Agent

James Engbrock¹², County Extension Agent, Emeritus

Corrie Bowen¹³, County Extension Agent

Kate Harrell¹⁴, Extension Agent-IPM

Steven Janak¹⁵, County Extension Agent

John Grange¹⁶, County Extension Agent

Tyler Coufal¹⁷, County Extension Agent

Floyd Ingram¹⁸, County Extension Agent

Shane McLellan¹⁹, County Extension Agent

Page Bishop²⁰, County Extension Agent

Mike Berry²¹, County Extension Agent

David Drake²² Extension Agent-IPM

Texas A&M AgriLife Extension Service

^{1,2}Department of Soil and Crop Sciences

¹College Station, ²Corpus Christi, ³Weslaco, ⁴Edinburg, ⁵Robstown, ⁶San Patricio, ⁷Beeville,

⁸Refugio, ⁹Victoria, ¹⁰Cuero, ¹¹Edna, ¹²Matagorda, ¹³Wharton, ¹⁴Columbus, ¹⁵Caldwell, ¹⁶Hondo,

¹⁷Georgetown, ¹⁸Cameron, ¹⁹Waco, ²⁰Waxahachie, ²¹Comanche, and ²²Commerce

ACKNOWLEDGMENTS

Appreciation is expressed to the cooperators that provided their land, equipment and time in assisting with prepping, planting, managing and harvesting of these plots throughout the year. All cooperators are listed in Table 1. In addition, we would like to extend our appreciation to **Cotton Incorporated** through the **Texas State Support Committee, Americot/NexGen, BASF, Croplan Genetics, Delta Pine, Dyna-Gro, and Phylogen** for their partial funding of these trials.

2018 HIGHLIGHTS

Variety selection is the most important decision made during the year. Unlike herbicide or insecticide decisions that can be changed during the season to address specific conditions and pests, variety selection is made only once, and variety selection dictates the management of a field for the entire season. Variety decisions should be based on genetics first and transgenic technology second. Attention should be focused on agronomic characteristics such as yield, maturity, and fiber quality when selecting varieties. Figure 1 illustrates the cotton production regions of Texas.

From the latest data available, transgenic varieties accounted for 99% of the state acreage again in 2018. According to the USDA-Agricultural Marketing Service “Cotton Varieties Planted 2018 Crop” survey, the estimated percentage of upland cotton planted to specific Brands in Texas are as follows: Alltex/DynaGro had 5.2 %, Americot/NexGen had 42.2%, Bayer CropScience – FiberMax had 11.3%, Bayer CropScience – Stoneville had 2%, Delta Pine had 21.5%, and Phylogen had 15.2%. In Texas, 68% was planted in XtendFlex varieties and 11.4% was planted in Enlist varieties.

To assist Texas cotton producers in remaining competitive in the Lower Rio Grande Valley, Blacklands, South Texas/Wintergarden, and Upper Coastal regions (Figure 1), the Texas A&M AgriLife Extension Service-Cotton Agronomy program has been conducting, large plot, on-farm, replicated variety trials for the past eleven years. This approach provides a good foundation of information that can be utilized to assist the variety selection process, where all companies have the opportunity to participate. These trials occur on producer’s farms and are managed by the producers.

Seventeen Replicated Agronomic Cotton Evaluation (RACE) Trials and one Monster Trial were harvested in 2018 with several lost or impacted by extended rain that began to fall during the fall and herbicide injury. The harvested locations are listed in Table 1.

Mean non-irrigated locations yields for the 2018 RACE Trials ranged from a high of 1917 lbs/ac for the Colorado location to 705 lbs/ac for the Williamson Co location. Mean irrigated location yields ranged from 1945 lbs/ac for the Burlseon Co location to 1470 lbs/ac for the Matagorda Co - Reed location.

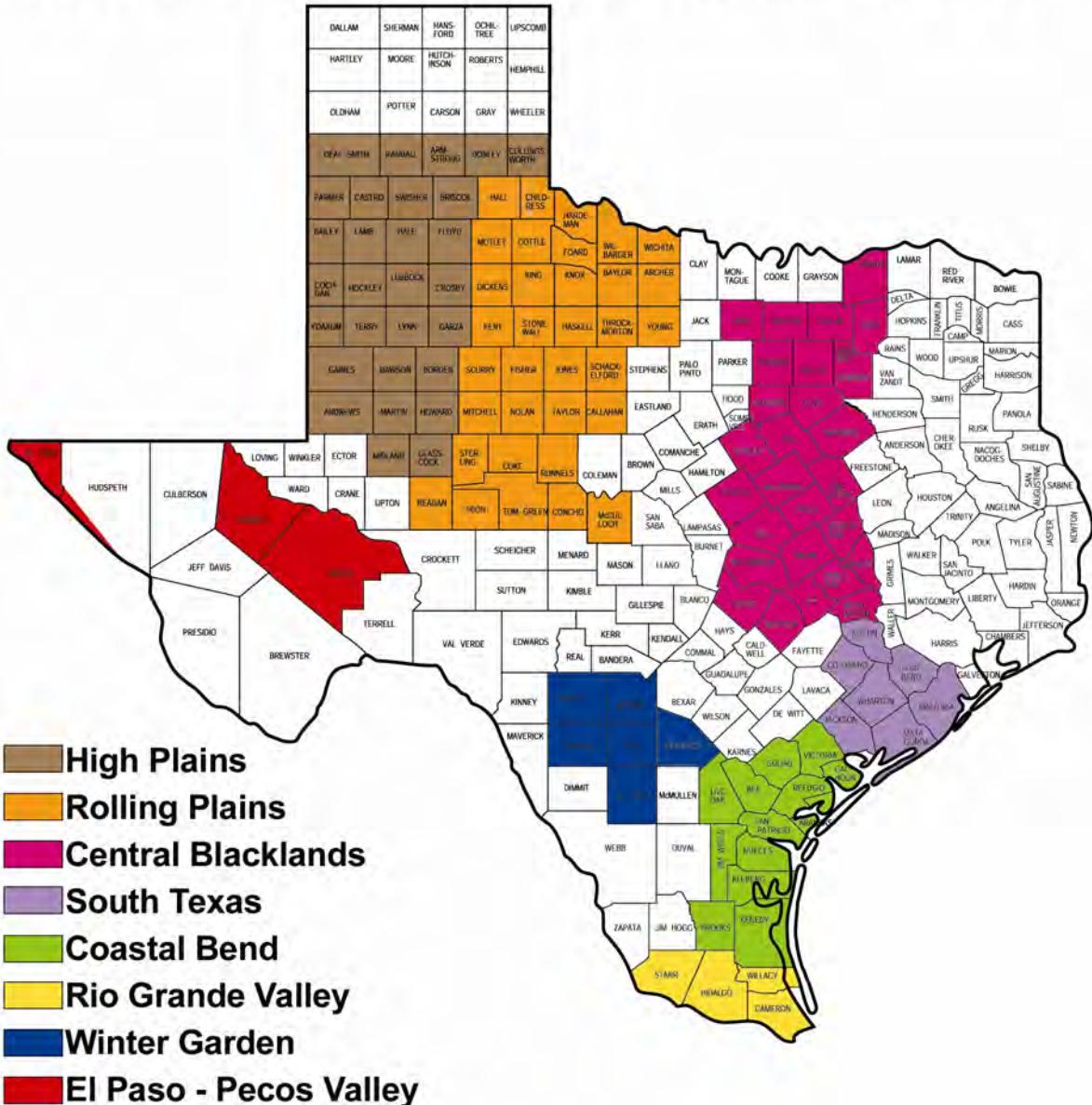
All the major cotton seed companies with GlyTol® LibertyLink®, XtendFlex® or Enlist® technology had the opportunity to include at least one variety in the RACE trial at each location. All varieties were treated with either Aeris or Avicta Complete Pak seed treatment. Included in this publication are the cotton variety descriptions provided by the companies. See descriptions on page 6-12.

In addition to the RACE trials, a Monster cotton variety trial (Table 27) was conducted in 2018 and the final yields and grades are provided in this publication. These trials are conducted as small-plot variety evaluations and include a larger number of both commercially-available and experimental cotton varieties. Table 1 provides a list of cooperators, planting and harvest dates, row spacing and plot area for each location. Tables 2 - 5 show numerical rankings based upon lint yield for the varieties across all locations within a production region.

Tables 6 to 25 include the individual RACE trial yield data and fiber analysis for each individual location. Data featured in these tables include: statistical analysis of yield, turnout, fiber quality parameters, loan and gross lint value/acre. Most locations were ginned with a 20-saw table-top gin with no lint cleaner, unless indicated as otherwise. This table-top gin method consistently produces higher lint turnout percentages than would be common in a commercial gin due to having no lint cleaner. Consequently, higher turnouts equate to lint yields which are generally higher than area-wide commercial yields. Additionally, all data were standardized to a color grade and leaf of 41-4, because an accurate estimate of leaf grade and color are not possible without a lint cleaner on the gin.

The statistical analysis quantifies the variability of the test site conditions, such as soil type, harvesting, insect damage, etc. A CV (coefficient of variation) of 15% or less is generally considered acceptable and means the data are dependable. A trial with a small LSD (least significant difference) indicates more consistency within the trial and higher likelihood of identifying differences among varieties. A trial location with a large LSD and large CV indicates a higher degree of variability at the trial location. Non-statistical significance is represented as “NS” and indicates no differences among the varieties within the data column at a 90% confidence level.

COTTON PRODUCTION REGIONS - TEXAS



Variety Characteristics/Highlights

Below are the cotton variety characteristics and highlights that were included in the 2018 Uniform Variety Trials and other common varieties planted in these regions. These cotton variety descriptions were provided by individual seed company representatives or publicly available information.

CROPLAN GENETICS 3787 B2F

- Mid maturity
- Adapted for dryland but produces good under irrigated conditions
- Excellent seedling vigor and early season emergence
- Very good storm tolerance
- Excellent fiber package

CROPLAN GENETICS 3885 B2XF

- Full season maturity
- Smooth leaf type
- Adapted for both dryland and irrigated soils
- Requires aggressive PGR management in high yield environments
- Premium high quality fiber

DeltaPine 1219 B2RF

- Semi-smooth leaf
- Medium-tall plant height
- Early maturity variety
- Broadly adapted across Texas
- Good combination of yield and fiber quality

DeltaPine 1518 B2XF

- Light-hairy leaf
- Adapted to high yield shorter season environment
- Very good fiber quality
- Very good storm resistance

DeltaPine 1522 B2XF

- Semi-smooth , early-mid maturing variety
- Widely adapted product that has shown very good performance on dryland and irrigated acres
- Good fiber quality
- Tall plant than may need more aggressive PGR management

DeltaPine 1549 B2XF

- Semi-smooth leaf
- Full- season maturity
- Full season variety, manage closely with PGR with irrigation or strong growing conditions
- Excellent performance under dryland and limited water situations

DeltaPine 1553 B2XF

- Smooth leaf
- Full- season maturity
- Broadly adapted to full-season growing areas
- May require timely PGR management under vigorous growing conditions
- Best fit in full season markets in SE and lower Mid-South

DeltaPine 1646 B2XF

- Smooth leaf, mid-full maturity
- Broadly adapted to full-season environments
- Exceptional fiber length and overall quality
- Medium-tall plant that responds well to PGR management

DeltaPine 1725 B2XF

- Early – mid maturity, semi-smooth variety
- Excellent yield potential
- Very responsive to PGR (Mepiquat) Management
- Small Seed Size, plant under favorable conditions
- High turnout
- Good fiber quality
- Moderate resistance to Fusarium

DeltaPine 1835 B3XF

- Mid Maturing BG3XF
- Excellent combination of fiber and yield potential
- Excellent fit on irrigation and more productive dry land acres
- Semi-smooth leaf type

DeltaPine 1845 B3XF

- Mid-full maturing BG3XF product
- Excellent fiber quality
- Bacterial blight resistance
- Semi-smooth leaf type
- Excellent fit for South and Central TX dry land and irrigated acres

DynaGro 3385 B2XF

- Semi-smooth leaf
- Early maturity
- Good seedling vigor
- Modified bushy plant with medium height
- Very responsive to irrigation and intense management

DynaGro 3526 B2XF

- Xtend Flex with Bollgard II technology
- Medium maturity
- Widely adapted across the lower Cotton Belt – irrigated or dryland
- Good seedling vigor and growth regulator response

DynaGro 3605 B2XF

- Smooth leaf
- Medium full maturity
- Very responsive to irrigation and intense management
- Manage with growth regulators early
- Performs best on river bottom type soils
- Not recommended for high stress environments

FiberMax 1830 GLT

- Early/medium maturity
- Excellent fiber quality with high gin turnout
- TwinLink two-gene Bt protection against worm pests
- Liberty and glyphosate herbicide-tolerant

FiberMax FM 1944 GLB2

- Broadly adapted to all cotton-growing regions
- Excellent fiber package
- Excellent yield potential
- Liberty and glyphosate herbicide tolerant
- Two-gene worm protection

FiberMax 1953 GLTP

- Consistently high performance in varied environments
- Resistant to bacterial blight
- Excellent fiber quality package
- Excellent heat tolerance
- Liberty® and glyphosate herbicide tolerant
- Good early-season vigor
- Three-gene Bt trait for enhanced protection against bollworm and fall armyworm

FM 2007 GLT

- Excellent water-use efficiency
- Excellent yield potential
- Excellent fiber package
- Easy to manage with lower rates of plant growth regulators
- Excellent storm-tolerance rating
- Liberty® and glyphosate herbicide tolerant
- TwinLink two-gene *Bt* protection

FiberMax FM 2498GLT

- Excellent yield potential
- Outstanding fiber package
- High gin turnout
- Very good *Verticillium* wilt tolerance
- Resistant to bacterial blight
- Liberty and glyphosate herbicide tolerant
- Two-gene worm protection

NexGen 3406 B2XF

- Early-mid maturity
- Semi-smooth leaf
- Excellent fiber quality and turnout
- Broadly adapted variety for the US cotton belt

NG 4777 B2XF

- Medium maturity
- Smooth leaf
- Tall plant height
- Verticillium Wilt Tolerance

NexGen 5007 B2XF

- Bollgard II®plus XtendFlex® technology
- Medium-late maturity
- Tall plant height
- Well suited to Southern and Eastern Cotton Belt
- Performs well in irrigated and dryland environments

NexGen 5711 B3XF

- Medium-full maturity
- Smooth leaf
- Bacterial blight tolerance
- Widely adapted that thrives under stress or aggressive PGR Management

Phylogen 312 WRF

- Early maturity
- Excellent seedling vigor
- Long staple length and low micronaire
- Medium plant height

Phylogen 300 W3FE

- Light-hairy leaf
- Early to mid-season maturity
- Excellent seedling vigor
- Consistent performance across environments. Does well in both mixed and clay soil types.
- PGR management similar to PHY 312 WRF
- Fiber quality similar to PHY 312 WRF
- Bacterial blight resistant
- WideStrike 3 worm protection

Phylogen 330 W3FE

- Early maturity, good choice for sandy to mixed soil types
- Excellent seedling vigor
- Bacterial blight resistant
- Light-hairy leaf
- Medium plant height with open, upright canopy
- Tolerance to Enlist, glyphosate and glufosinate herbicides and Widestrike 3 lep control

Phylogen 333 WRF

- Early maturity
- Excellent seedling vigor
- Outstanding fiber quality package
- Dryland or irrigated conditions
- Hairy leaf

Phylogen 340 W3FE

- Light-hairy leaf
- Early to mid-season maturity
- Excellent seedling vigor
- Consistent performance across environments and soil types.
- PGR management similar to PHY 312 WRF
- Fiber quality similar to PHY 312 WRF
- Bacterial blight resistant
- WideStrike 3 worm protection

Phylogen 444 WRF

- Mid-maturity
- Superior fiber quality – premium mic and 38 to 40 staple
- Smooth leaf and tighter in bur than other Phylogen varieties
- Very high yield potential, especially under irrigation

Phylogen 480 W3FE

- Mid-maturity ,wide area of adaption, dryland and irrigated
- Outstanding seedling vigor
- Bacterial blight and root knot nematode resistant plus low to medium tolerance to reniform nematodes
- Semi-smooth leaf
- Tolerance to Enlist, glyphosate and glufosinate herbicides and Widestrike 3 lep control

Phylogen 490 W3FE

- Mid-maturity
- Management similar to PHY 499WRF
- Performs best under moderate to adequate N fertility
- Performs better at lower plant populations
- Tall plant height, requires aggressive PGR management
- Semi-smooth leaf

Stoneville 4848 GLT

- Exceptional yield potential
- Very good fiber quality
- Good seedling vigor
- High lint percent
- Liberty® and glyphosate herbicide tolerant
- TwinLink protection

Stoneville 4946 GLB2

- Exceptional yield potential
- Good fiber quality
- Very good seedling vigor
- High lint percent
- Dual tolerance to Liberty® and glyphosate herbicides
- Good root-knot nematode tolerant
- Lepidopteran resistant

Stoneville 4949 GLTP

- Exceptional yield potential
- Good fiber quality
- Very high lint percent
- Intermediate *Verticillium* wilt tolerance
- Liberty® and glyphosate herbicide tolerant
- Lepidopteran resistant

Stoneville 5471 GLTP

- Outstanding yield potential
- Excellent fiber package
- High gin turnout
- Very good *Verticillium* wilt tolerance
- Resistant to bacterial blight
- Smooth leaf
- Liberty and glyphosate herbicide tolerant
- Three-gene lepidopteran resistance, which decreases the likelihood that a worm application will be needed

Stoneville 6182 GLT

- Full season maturity
- Good fiber quality
- High gin turnout
- Well suited for light and heavy soils
- Well suited for irrigation and dryland production
- Liberty and glyphosate tolerance for resistant weed management
- TwinLink two-gen Bt protection against worm pests, such as cotton bollworm and tobacco budworm

Stoneville 6448 GLB2

- Full season maturity
- Dual tolerance to Liberty® and glyphosate herbicides
- Excellent seedling vigor
- Well-suited for dryland and irrigated production

Table 1. Trial location, cooperator, planting date, harvest date, row spacing, plot dimensions and area of 2018 Texas A&M AgriLife Extension RACE Trials harvested.

County	Hildago (Drawe)	Nueces (Lawhon)	Nueces (Massey)	Nueces (AgriLife)
Location (Nearest town)	Mercedes	Driscoll	Robstown	Corpus Christi
Latitude, Longitude	26.108798, -97.901033	27.628636 -97.706411	27.754311 -97.655208	27.780851 -97.574413
Cooperator	Richard Drawe	Darrell Lawhon	Jim Massey	AgriLife Research
Soil Type	Harlingen clay	Victoria clay, 0 to 1 percent slopes	Orelia fine sandy loam, 0 to 1 percent slopes	Victoria clay, 0 to 1 percent slopes
Irrigation	Furrow	none	none	none
Precipitation (Weather Station)	16.14" (2.72" prior to June 12)	7.7" (2.5" prior to June 16)	12.56" (1.89" prior to June 17)	10.73" (2.46" prior to June 17)
Previous Crop	corn	grain sorghum	grain sorghum	grain sorghum
Row Spacing (in)	40	38	30	38
Plant Population (/Ac)	50,000	38,000	41,000	55,000
Plot Dimensions	12 rows by 1110 ft	6 rows by 2980 ft	6 rows by 3050 ft	2 rows by 35 ft
Area harvested/plot	1.02 acre	1.29 acre	1.05 acre	.005 acre
Planting Date	Mar 7	Mar 21	April 4	Mar 21
Harvest Date	Aug 23	Aug 3	Aug 17	Aug 2

Table 1. Continued.

County	San Patricio	Bee	Refugio-Niemann	Refugio - Jackson
Location (Nearest town)	Edroy	Beeville	Bonnie View	Austwell
Latitude, Longitude	28.037171 -97.689005	28.323235 -97.812640	28.166827 -97.283514	28.357967 -96.867305
Cooperator	Robert Rieder	Andres Gaitan	Richard Niemann	Jimmy Jackson
Soil Type	Banquete clay, 0 to 1 percent slopes	Orelia fine sandy loam, 0 to 1 percent slopes	Victoria clay, 0 to 1 percent slopes	Victoria clay, 0 to 1 percent slopes
Irrigation	none	none	none	none
Precipitation (Weather Station)	10.13" (2.1" prior to June 16)	11.45" (2.53" prior to June 17)	11.75" (1.18" prior to June 17)	20.72" (2.44" prior to June 17)
Previous Crop	grain sorghum	grain sorghum	grain sorghum	grain sorghum
Row Spacing (in)	38	36	38	38
Plot Dimensions	6 rows X 2000 ft	8 rows X 570 ft	2 rows X 32 ft	2 rows X 32 ft
Area harvested/plot	0.87 acre	0.31 acre	0.002 acre	0.002 acre
Plant Population (/Ac)	39,600	38,000	41,300	45,800
Planting Date	Mar 16	Apr 4	Apr 10	Apr 6
Harvest Date	Aug 12	Aug 20	Sept 4	Aug 14

Table 1. Continued.

County	DeWitt	Calhoun	Jackson	Matagorda – Hansen
Location (Nearest town)	Yorktown	Port Lavaca	Edna	Tin Top
Latitude, Longitude	29.061437 -97.471124	28.608223 -96.659659	29.021662 -96.396345	28.785677 -95.882831
Cooperator	Tracy Metting	Danny May	Chris Hajovsky	Bill Hansen
Soil Type	Sarnosa fine sandy loam, 1 to 3 percent slopes	Laewest clay, 0 to 1 percent slopes	Laewest clay, 0 to 1 percent slopes	Laewest clay, 0 to 1 percent slopes
Irrigation	none	none	none	none
Precipitation (via Climate FieldView)	15.64" (2.94 prior to June 17)	12.09" (2.33" prior to June 17)	18.95" (Victoria)	16.09"
Previous Crop	cotton	grain sorghum	Corn	Sorghum
Row Spacing (in)	38	38	38	40
Plot Dimensions	6 rows X 1300 ft	2 rows X 32 ft	6 rows x 3163 ft	6 rows x 1378 ft
Area harvested/plot	0.57 acre	0.002 acre	1.38	0.65
Plant Population (/Ac)	38,000	45,400	35,800	41,900
Planting Date	Apr 5	Apr 11	March 22	March 22
Harvest Date	Sept 19-23	Aug 27	Sept 24	Aug 25

Table 1. Continued.

County	Matagorda – Reed	Wharton - 1	Wharton - 2	Colorado
Location (Nearest town)	Bay City	El Campo	El Campo	Eagle Lake
Latitude, Longitude	28.785693 -96.114629	29.249877 -96.219006	29.293993 -96.21497	29.472514 -96.346719
Cooperator	Robbie Reed	Michael Beard	Michael Beard	Mahalitc Farms
Soil Type	Laewest clay, 0 to 1 percent slopes	Lake Charles clay, 0 to 1 percent slopes	Lake Charles clay, 0 to 1 percent slopes	Norwood silty clay loam, 0 to 1 percent slopes, occasionally flooded
Irrigation	furrow	none	furrow	none
Precipitation (Weather Station)	12.90"	13.9"	14.9"	24.5", (11.3" was after open boll)
Previous Crop	Sorghum	Corn	Corn	Cotton
Row Spacing (in)	40	40	40	36
Plot Dimensions	6 rows x 1940 ft	6 rows x 1100 ft	6 rows x 1930 ft	6 row x 1600 ft
Area harvested/plot	0.85	0.50	0.89	0.65
Plant Population (/Ac)	38,100	37,900	34,780	31,770
Planting Date	March 23	March 22	Apr 3	Apr 15
Harvest Date	Aug 20	Aug 21	Sept 2	Oct 8

Table 1. Continued.

County	Burleson	Medina	Williamson - Shirocky	Milam
Location (Nearest town)	Snook	Lytle	Granger	Buckholts
Latitude, Longitude	30.5361 -96.42142	29.269490 -98.811215	30.690604 -97.278176	30.932743 -97.105319
Cooperator	AgriLife Research Farm	Kriedwald Farms	Greg and Adam Shirocky	Jay Beckhusen
Soil Type	Belk clay, 0 to 1 percent slopes, rarely flooded	Montell clay, 0 to 1 percent slopes	Branyon clay, 0 to 1 percent slopes	Branyon clay, 0 to 1 percent slopes
Irrigation	Furrow	Linear	None	None
Precipitation (Weather Station)	12.8", (4.5" was after open boll)	27.3" , (12.3" was after open boll)	19.5", (14.6" was after open boll)	9.9", (5.0" after open boll)
Previous Crop	Corn	Corn	Corn	Corn
Row Spacing (in)	40	36	30	30
Plot Dimensions	2 rows x 675 ft	6 rows x 1205 ft	8 rows x 2720 ft	6 rows x 1100 ft
Area harvested/plot	0.08	0.50	1.25	0.50
Plant Population (/Ac)	36,190	34,600	35,270	35,700
Planting Date	Apr 16	Apr 6	Apr 7	Apr 19
Harvest Date	Sept 13	Oct 6	Oct 29	Aug 28

Table 1. Continued.

County	Comanche
Location (Nearest town)	Gustine
Latitude, Longitude	31.874811, 98.43322
Cooperator	Rodney Stephenson
Soil Type	Chaney loamy sand, Nimrod fine sand, Pedernales loamy fine sand, 1-5% Slopes
Irrigation	Pivot
Precipitation (Weather Station)	19.3"
Previous Crop	Cotton
Row Spacing (in)	30
Plot Dimensions	6 rows x 3260 ft
Area harvested/plot	1.23
Plant Population (/Ac)	42,000
Planting Date	May 15
Harvest Date	Nov 17

Table 2. Mean location lint yield and variety ranking based on lint value for dryland locations, Coastal Bend, 2018.

Location	Nueces - CCAREC	Nueces - Lawhon	Nueces - Massey	San Patricio	Bee	Refugio - Niemann	Refugio – Jackson	DeWitt	Mean Ranking
Mean Yield (lbs/A)	862	1248	1014	623	1228	1191	1393	859	
Variety									
DP 1845 B3XF	1	1	4	1	3	4	4	3	2.6
DP 1646 B2XF	5	5	2	2	2	2	1	5	3.0
PHY 480 W3FE	3	3	3	4	1	5	3	2	3.0
NG 5711 B3XF	7	2	1	3	6	1	8	9	4.6
PHY 330 W3FE	2	6	8	6	7	3	6	1	4.9
ST 4848 GLT	4	4	5	9	5	6	5	8	5.8
DG 3385 B2XF	9	9	9	7	4	10	2	4	6.8
FM 2498 GLT	6	7	7	8	8	8	9	6	7.4
ST 5471 GLTP	8	8	6	5	9	7	10	7	7.5
NG 4777 B2XF	10	10	10	10	10	9	7	10	9.5

Table 3. Mean location lint yield and variety ranking based on lint value, Upper Gulf Coast Counties, 2018.

Location	Calhoun	Jackson	Matagorda - Hansen	Matagorda – Reed ¹	Wharton - 1	Wharton 2	Colorado	Mean
Mean Yield (lbs/A)	1228	1028	1433	1470	1600	1544	1917	
Variety								
DP 1646B2XF	2	4	1	2	2	3	1	2.1
PHY 480 W3FE	1	1	4	1	1	2	5	2.1
ST 5471GLTP	4	2	8	3	4	7	3	4.4
PHY 330 W3FE	7	8	2	6	3	1	6	4.7
NG 5711B3XF	6	6	5	7	7	6	2	5.6
ST 4848GLT	9	9	3	4	5	4	7	5.9
DG 3385B2XF	3	3	6	9	8	5	8	6.0
DP 1845B3XF	10	5	7	5	9	8	4	6.9
FM 2498GLT	5	7	10	8	6	9	9	7.7
NG 4777B2XF	8	10	9	10	10	10	10	9.6

¹Indicates the location was irrigated.

**Table 4. Mean location lint yield and variety ranking based on lint value,
Brazos Bottom and Winter Garden Regions, 2018.**

Location	Burleson ¹	Medina ¹	Mean
Mean Yield (lbs/A)	1945	1838	
Variety			
DP 1845B3XF	2	4	3.0
NG 5711B3XF	5	1	3.0
ST 4848GLT	3	3	3.0
PHY 480 W3FE	1	7	4.0
ST 5471GLTP	4	5	4.5
DG 3605B2XF	8	2	5.0
DP 1835B3XF	7	6	6.5
NG 4777B2XF	6	10	8.0
FM 2498GLT	9	8	8.5
PHY 440 W3FE	10	9	9.5

¹Indicates the location was irrigated.

Table 5. Mean location lint yield and variety ranking based on lint value, non-irrigated Blackland Counties, 2018.

Location	Williamson	Milam	Mean
Mean Yield (lbs/A)	705	883	
Variety			
PHY 480 W3FE	2	2	2
DP 1646B2XF	3	1	2
DG 3385B2XF	1	5	3
PHY 330 W3FE	4	4	4
DP 1845B3XF	6	3	4.5
NG 4777B2XF	5	7	6
ST 4848GLT	9	6	7.5
NG 5711B3XF	7	8	7.5
ST 5471GLTP	8	10	9
FM 2498GLT	10	9	9.5

Table 6. Hidalgo County RACE Trial, 2018¹
Cooperator: Richard Drawe
Brad Cowan, County Extension Agent, Dr. Josh McGinty, Extension Agronomist
Rudy Alaniz, Technician and Clinton Livingston, Technician

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ²	
PHY 480 W3FE	1805	a	45.9	bcd	5.1	cd	1.14	ef	29.8	cde	85.3	a	52.40	cd	946	a
DP 1845 B3XF	1711	abc	48.2	a	4.8	e	1.27	a	32.4	a	85.1	ab	54.65	a	935	ab
DP 1646 B2XF	1753	ab	46.8	b	5.0	d	1.22	bc	29.3	def	83.8	cd	52.53	c	922	abc
PHY 440 W3FE	1682	bcd	45.3	cd	4.6	f	1.21	c	32.5	a	83.9	bc	54.55	ab	917	abc
DG 3385 B2XF	1715	abc	45.1	d	5.3	ab	1.14	ef	28.5	f	84.4	ab	51.18	cd	877	bcd
NG 5711 B3XF	1648	bcd	46.0	bc	5.2	bc	1.24	b	30.9	b	83.6	cd	52.08	cd	858	cd
DP 1835 B3XF	1584	d	48.4	a	5.0	d	1.16	de	28.8	ef	82.5	de	52.37	cd	829	d
ST 4848 GLT	1634	cd	46.2	b	5.4	a	1.13	f	29.9	bcd	84.3	ab	50.68	d	828	d
FM 1944 GLB2	1571	d	42.8	e	5.1	cd	1.17	d	30.5	bc	83.8	bc	52.75	bc	827	d
NG 4777 B2XF	1410	e	42.2	e	5.1	cd	1.13	f	29.3	def	82.2	e	51.68	cd	728	e
Mean	1651		45.7		5.0		1.18		30.2		83.9		52.49		867	
P>F	0.0012		<0.0001		<0.0001		<0.0001		<0.0001		0.0097		0.0259		0.0005	
LSD (P=.10)	117.54		0.965		0.165		0.027		1.069		1.2603		1.8448		65.96	
STD DEV	152.94		2.02		0.24		0.05		1.50		1.19		1.63		84.99	
CV%	9.26		4.43		0.98		4.21		4.95		1.42		3.10		9.81	

¹ Indicates the location was irrigated

² Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 7. Nueces County RACE Trial, 2018

Cooperator: Darrell Lawhon

**Jason Ott - Nueces County Extension Agent, Agriculture and Natural Resources, Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz
- Texas A&M AgriLife Extension, Corpus Christi**

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
DP 1845 B3XF	1324	ab	46.4	a-d	4.9	ef	1.20	a	32.0	a	84.1	a	54.52	a	722	a
NG 5711 B3XF	1304	abc	46.6	ab	4.8	f	1.16	b	29.5	bcd	83.2	abc	54.10	a	706	ab
PHY 480 W3FE	1348	a	47.0	ab	5.2	c	1.08	c	28.8	d	83.7	abc	50.28	cd	678	abc
ST 4848 GLT	1315	ab	45.4	cd	5.4	b	1.11	c	30.1	bc	83.2	abc	50.18	cd	660	bc
DP 1646 B2XF	1234	c	45.9	bcd	5.0	de	1.17	b	29.2	cd	83.5	abc	52.50	b	648	c
PHY 330 W3FE	1262	bc	47.2	a	5.2	cd	1.10	c	30.3	bc	83.8	ab	51.08	c	645	c
FM 2498 GLT	1300	abc	46.5	abc	5.6	a	1.11	c	29.8	bcd	82.6	bcd	49.58	d	645	c
ST 5471 GLTP	1245	bc	43.2	e	5.0	de	1.09	c	30.6	b	81.6	d	51.30	c	639	c
DG 3385 B2XF	1122	d	45.3	d	5.4	b	1.10	c	29.0	cd	83.7	abc	49.52	d	556	d
NG 4777 B2XF	1030	e	43.1	e	5.2	cd	1.08	c	29.8	bcd	82.5	cd	49.82	d	513	d
Mean	1248		45.6		5.2		1.12		29.9		83.2		51.29		641	
P>F	<0.0001		<0.0001		<0.0001		<0.0001		0.0156		0.057		<0.0001		<0.0001	
LSD (P=.10)	78.96		1.182		0.176		0.031		1.255		1.2168		1.1205		47.44	
STD DEV	106.17		1.61		0.27		0.04		1.15		1.05		1.89		66.88	
CV%	8.50		3.53		5.18		4.02		3.85		1.27		3.68		10.43	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 8. Nueces County RACE Trial, 2018

Cooperator: Jim Massey

**Jason Ott - Nueces County Extension Agent, Agriculture and Natural Resources, Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz
- Texas A&M AgriLife Extension, Corpus Christi**

Variety	Lint (lbs/acre)	Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹		
NG 5711 B3XF	1151	a	42.0	cd	4.8	f	1.20	b	31.9	ab	84.5	a	54.55	a	628	a
DP 1646 B2XF	1090	b	44.1	a	4.8	ef	1.26	a	30.9	b	84.2	a	54.47	a	593	b
PHY 480 W3FE	1073	bc	43.8	a	5.2	c	1.16	c	31.5	ab	84.2	a	51.60	de	553	c
DP 1845 B3XF	985	f	44.6	a	5.0	de	1.27	a	32.1	a	85.2	a	53.85	ab	530	d
ST 4848 GLT	1040	cd	44.2	a	5.6	a	1.14	de	31.4	ab	84.5	a	50.52	f	525	d
ST 5471 GLTP	998	ef	41.8	d	5.2	c	1.16	c	32.4	a	83.6	a	52.17	cd	521	d
FM 2498 GLT	1031	de	42.8	bc	5.6	a	1.15	cd	31.0	b	83.5	a	50.45	f	520	d
PHY 330 W3FE	969	f	44.5	a	5.0	d	1.15	cd	31.9	ab	84.0	a	52.88	bc	512	d
DG 3385 B2XF	917	g	42.9	b	5.3	b	1.14	de	29.6	c	84.7	a	50.72	ef	465	e
NG 4777 B2XF	890	g	41.4	d	5.1	cd	1.13	e	32.2	a	83.2	a	51.90	cd	462	e
Mean	1014	43.2		5.2		1.18		31.5		84.2		52.31		531		
P>F	<0.0001	<0.0001		<0.0001		<0.0001		0.0134		0.2149		<0.0001		<0.0001		
LSD (P=.10)	36.35	0.857		0.139		0.018		1.117		NS		1.0216		21.91		
STD DEV	88.54	1.25		0.29		0.05		1.04		0.90		1.63		54.34		
CV%	8.73	2.90		5.60		4.19		3.31		1.07		3.11		10.23		

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 9. Nueces County RACE Trial, 2018
Texas A&M AgriLife Research and Extension Center, Corpus Christi, Texas
Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz - Texas A&M AgriLife Extension, Corpus Christi

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
DP 1845 B3XF	1011	ab	46.7	a	5.2	f	1.20	a	32.2	a	83.0	a	52.29	a	530	a
PHY 330 W3FE	928	bcd	46.3	a	5.4	cde	1.08	cd	30.5	bc	82.7	ab	49.83	bc	462	b
PHY 480 W3FE	1027	a	46.1	a	5.6	c	1.01	g	30.8	b	80.9	d	45.00	f	462	b
ST 4848 GLT	945	abc	46.0	ab	5.8	b	1.06	de	29.7	cd	81.3	cd	47.59	de	448	b
DP 1646 B2XF	854	cde	46.1	a	5.3	ef	1.19	a	30.9	b	81.7	c	51.13	ab	437	bc
FM 2498 GLT	802	e	46.7	a	6.0	a	1.09	c	30.3	bcd	81.9	bc	49.34	c	395	c
NG 5711 B3XF	783	e	45.1	b	5.4	cde	1.12	b	30.9	b	82.0	bc	50.28	bc	394	c
ST 5471 GLTP	778	e	42.6	c	5.4	de	1.10	bc	31.9	a	79.9	e	50.25	bc	393	c
DG 3385 B2XF	838	de	46.1	a	5.8	b	1.05	ef	28.7	e	81.5	cd	46.76	de	393	c
NG 4777 B2XF	655	f	43.1	c	5.6	cd	1.03	fg	29.4	de	81.4	cd	45.86	ef	302	d
Mean	862		45.5		5.5		1.09		30.5		81.6		48.83		422	
P>F	<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
LSD (P=.10)	93.12		0.917		0.175		0.027		0.991		0.8199		1.6877		52.49	
STD DEV	145.80		1.54		0.30		0.06		1.24		1.04		2.59		77.34	
CV%	16.91		3.39		1.17		5.90		4.05		1.27		5.31		18.35	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 10. San Patricio County RACE Trial, 2018
Cooperator: Robert Rieder
Bob McCool - San Patricio County Extension Agent, Agriculture and Natural Resources
Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz - Texas A&M AgriLife Extension, Corpus Christi

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
DP 1845 B3XF	697	a	47.8	a	5.3	abc	1.20	a	31.5	b	83.3	a	51.03	ab	356	a
DP 1646 B2XF	674	ab	47.7	a	5.1	bcd	1.19	ab	30.3	c	82.4	a	51.88	a	350	a
NG 5711 B3XF	649	abc	45.5	b	5.2	bcd	1.15	bc	30.9	bc	82.7	a	52.10	a	338	ab
PHY 480 W3FE	692	a	47.5	ab	5.6	a	1.07	e	29.7	cde	82.1	a	47.87	cd	333	ab
ST 5471 GLTP	624	bcd	42.8	c	5.1	cd	1.13	cd	32.9	a	81.9	a	52.28	a	327	abc
PHY 330 W3FE	625	bcd	48.2	a	5.2	bcd	1.07	e	30.4	bc	82.3	a	50.30	abc	314	bcd
DG 3385 B2XF	639	a-d	47.1	ab	5.4	ab	1.06	e	28.6	e	82.1	a	46.85	d	299	cd
FM 2498 GLT	613	cd	47.0	ab	5.6	a	1.08	e	29.9	cd	81.5	a	48.10	cd	295	d
ST 4848 GLT	582	d	46.4	ab	5.4	abc	1.08	e	28.7	de	82.3	a	49.07	bcd	286	d
NG 4777 B2XF	435	e	42.3	c	5.0	d	1.10	de	29.8	cde	82.5	a	50.97	ab	221	e
Mean	623		46.2		5.3		1.11		30.3		82.3		50.05		312	
P>F	<0.0001		0.0007		0.0308		0.0001		0.0003		0.8477		0.013		<0.0001	
LSD (P=.10)	60.61		2.094		0.321		0.046		1.183		NS		2.592		28.93	
STD DEV	96.35		2.51		0.29		0.06		1.44		1.12		2.55		52.76	
CV%	15.46		5.43		5.48		5.41		4.77		1.36		5.10		16.91	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 11. Bee County RACE Trial, 2018

Cooperator: Andres Gaitan

Robbin Reininger - Bee County Extension Agent, Agriculture and Natural Resource

Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz - Texas A&M AgriLife Extension, Corpus Christi

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 480 W3FE	1352	a	42.5	a	4.4	b	1.13	f	30.6	a	83.8	a	54.12	a	731	a
DP 1646 B2XF	1315	a	43.2	a	4.3	bc	1.24	a	30.2	a	83.8	a	54.40	a	716	a
DP 1845 B3XF	1286	a	42.2	a	4.3	bc	1.23	ab	31.4	a	83.7	a	54.47	a	701	a
DG 3385 B2XF	1264	a	41.8	ab	4.4	b	1.17	def	29.8	a	84.1	a	54.27	a	686	a
ST 4848 GLT	1282	a	42.4	a	4.7	ab	1.15	def	29.8	a	83.1	a	53.35	a	686	a
NG 5711 B3XF	1240	a	41.4	abc	3.9	c	1.22	abc	30.1	a	83.2	a	54.32	a	674	a
PHY 330 W3FE	1244	a	43.0	a	4.3	bc	1.13	f	30.6	a	83.6	a	53.93	a	672	a
FM 2498 GLT	1214	a	41.6	abc	4.9	a	1.17	cde	31.1	a	83.9	a	52.87	a	642	a
ST 5471 GLTP	1160	a	39.7	c	4.5	ab	1.14	ef	31.1	a	82.7	a	54.13	a	628	a
NG 4777 B2XF	926	a	39.9	bc	4.3	bc	1.18	bcd	30.2	a	81.1	a	53.77	a	498	a
Mean	1228		41.8		4.4		1.17		30.5		83.3		53.96		663	
P>F	0.1547		0.0751		0.0566		0.0012		0.7689		0.8229		0.2868		0.1909	
LSD (P=.10)	NS		1.948		0.427		0.043		NS		NS		NS		NS	
STD DEV	176.26		1.75		0.37		0.05		1.20		1.89		0.78		99.41	
CV%	14.35		4.18		8.46		4.13		3.94		2.27		1.45		14.98	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 12. Refugio County RACE Trial, 2018**Cooperator: Richard Niemann****Candace Moeller - Refugio County Extension Agent, Agriculture and Natural Resources****Stephen Biles - Victoria, Calhoun, and Refugio County IPM Agent, Port Lavaca****Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz - Texas A&M AgriLife Extension, Corpus**

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
NG 5711 B3XF	1412	a	42.8	bc	4.8	d	1.17	b	30.1	a	82.9	bc	54.13	a	765	a
DP 1646 B2XF	1331	ab	43.0	b	4.9	c	1.22	a	30.5	a	83.9	ab	53.55	a	713	ab
PHY 330 W3FE	1254	abc	43.4	ab	4.8	d	1.15	bc	31.0	a	84.0	ab	53.60	a	676	ab
DP 1845 B3XF	1229	abc	44.4	a	4.8	d	1.21	a	31.5	a	83.9	ab	53.67	a	660	ab
PHY 480 W3FE	1211	a-d	42.8	bc	5.0	c	1.14	cd	32.3	a	84.3	a	52.92	abc	640	bc
ST 4848 GLT	1203	a-e	44.4	a	5.1	b	1.11	d	30.3	a	83.4	ab	51.58	cd	625	b-
ST 5471 GLTP	1161	b-e	41.1	d	5.0	c	1.13	cd	31.9	a	81.9	c	53.10	ab	618	b-
FM 2498 GLT	1110	cde	44.2	a	5.3	a	1.13	cd	30.4	a	82.9	bc	50.70	d	563	cd
NG 4777 B2XF	997	e	39.5	e	4.7	d	1.13	cd	30.6	a	81.9	c	53.97	a	538	de
DG 3385 B2XF	998	de	41.9	cd	5.1	b	1.13	cd	29.5	a	83.8	ab	51.70	bcd	516	e
Mean	1191		42.8		4.9		1.15		30.8		83.3		52.89		632	
P>F	0.0623		<0.0001		<0.0001		<0.0001		0.2481		0.0247		0.0085		0.0304	
LSD (P=.10)	212.86		1.050		0.111		0.030		NS		1.2462		1.4802		113.97	
STD DEV	225.71		1.81		0.27		0.04		1.35		1.11		1.64		129.94	
CV%	18.96		4.22		5.42		3.42		4.38		1.34		3.09		20.58	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 13. Refugio County RACE Trial, 2018

Cooperator: Jimmy Jackson

Candace Moeller - Refugio County Extension Agent, Agriculture and Natural Resources

Stephen Biles - Victoria, Calhoun, and Refugio County IPM Agent, Port Lavaca

Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz - Texas A&M AgriLife Extension, Corpus

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DP 1646 B2XF	1537	a	44.1	ab	4.5	c	1.24	b	30.9	cde	84.4	a	54.40	a	836	a
DG 3385 B2XF	1481	a	43.1	cd	4.9	b	1.16	cd	30.3	e	84.9	a	53.57	b	791	a
PHY 480 W3FE	1450	a	42.5	d	4.5	c	1.13	ef	31.6	bcd	84.2	a	54.33	a	788	a
DP 1845 B3XF	1414	a	44.0	ab	4.3	d	1.26	a	32.9	ab	84.2	a	54.65	a	773	a
ST 4848 GLT	1422	a	44.8	a	4.8	b	1.14	def	30.7	de	84.5	a	54.27	ab	773	a
PHY 330 W3FE	1385	a	44.2	ab	4.6	c	1.15	cde	31.3	cde	85.0	a	54.52	a	755	a
NG 4777 B2XF	1371	a	40.5	f	4.6	c	1.13	f	31.1	cde	83.7	a	54.22	ab	744	a
NG 5711 B3XF	1324	a	43.2	cd	4.3	d	1.21	b	31.0	cde	83.8	a	54.48	a	722	a
FM 2498 GLT	1374	a	43.8	bc	5.2	a	1.18	c	32.0	abc	84.6	a	52.25	c	718	a
ST 5471 GLTP	1169	a	41.7	e	4.6	c	1.18	c	33.0	a	83.2	a	54.45	a	636	a
Mean	1393		43.2		4.6		1.18		31.5		84.2		54.11		753	
P>F	0.3314		<0.0001		<0.0001		<0.0001		0.0293		0.284		0.0007		0.3279	
LSD (P=.10)	NS		0.758		0.206		0.024		1.333		NS		0.7267		NS	
STD DEV	195.90		1.35		0.28		0.05		1.21		0.88		0.82		104.93	
CV%	14.06		3.12		1.02		4.00		3.84		1.05		1.51		13.93	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 14. DeWitt County RACE Trial, 2018**Cooperator: Tracy Metting****Anthony Netardus - DeWitt County Extension Agent, Agriculture and Natural Resources****Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz - Texas A&M AgriLife Extension, Corpus Christi**

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 330 W3FE	1001	a	39.5	a	4.1	de	1.09	d	28.1	cd	81.9	bc	52.88	ab	529	a
PHY 480 W3FE	987	ab	38.6	ab	4.3	cd	1.09	de	28.1	cd	83.0	a	52.55	b	519	ab
DG 3385 B2XF	925	bc	39.6	a	4.5	b	1.10	d	28.2	cd	82.4	ab	53.04	ab	490	ab
DP 1845 B3XF	914	bc	38.7	ab	4.2	de	1.19	a	30.6	a	82.8	ab	54.30	a	496	ab
DP 1646 B2XF	891	cd	39.6	a	4.2	de	1.15	b	28.6	bc	81.0	de	53.90	ab	480	b
FM 2498 GLT	828	de	39.5	a	4.8	a	1.09	de	27.7	cde	82.1	ab	52.63	b	436	c
ST 4848 GLT	821	de	38.8	ab	4.4	bc	1.07	ef	26.8	e	81.1	de	50.89	c	418	cd
ST 5471 GLTP	814	e	37.7	b	4.3	cd	1.08	de	29.4	bc	81.4	cd	52.68	b	429	c
NG 5711 B3XF	720	f	38.0	b	4.2	cde	1.13	c	28.2	cd	79.8	f	53.16	ab	383	de
NG 4777 B2XF	692	f	36.2	c	4.1	e	1.05	f	27.2	de	80.2	ef	50.75	c	353	e
Mean	859		38.6		4.3		1.10		28.3		81.6		52.68		453	
P>F	<0.0001		0.0013		<0.0001		<0.0001		0.0004		<0.0001		0.0141		<0.0001	
LSD (P=.10)	75.76		1.255		0.202		0.022		1.135		0.9838		1.5822		42.6	
STD DEV	123.51		2.38		0.26		0.04		1.31		1.24		1.57		69.95	
CV%	14.37		6.15		6.10		3.87		4.65		1.52		2.98		15.43	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 15. Calhoun County RACE Trial, 2018
Cooperator: Danny May
Geri Kline - Calhoun County Extension Agent, Agriculture and Natural Resources
Stephen Biles - Victoria, Calhoun, and Refugio County IPM Agent, Port Lavaca
Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz - Texas A&M AgriLife Extension, Corpus

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 480 W3FE	1465	a	44.5	abc	4.3	def	1.16	d	30.9	bcd	84.6	a	54.53	a	799	a
DP 1646 B2XF	1420	ab	45.7	a	4.7	abc	1.23	b	30.7	cde	84.2	a	54.35	ab	772	ab
DG 3385 B2XF	1285	abc	43.8	cd	4.8	ab	1.16	de	30.3	de	84.3	a	53.55	bc	687	bc
ST 5471 GLTP	1259	bc	42.8	d	4.6	bc	1.16	de	32.1	a	82.9	cd	54.37	ab	685	bc
FM 2498 GLT	1278	abc	45.5	ab	5.0	a	1.16	de	31.8	ab	83.2	bc	52.78	c	673	bc
NG 5711 B3XF	1206	cd	44.1	bcd	4.6	bcd	1.21	c	31.1	bcd	83.7	ab	54.43	a	656	cd
PHY 330 W3FE	1163	cd	44.5	abc	4.3	ef	1.15	def	30.1	de	83.2	bc	54.08	ab	628	cd
NG 4777 B2XF	1140	cd	41.2	e	4.5	cde	1.14	ef	29.8	e	82.7	d	54.07	ab	616	cd
ST 4848 GLT	1039	d	45.4	ab	4.6	b-e	1.13	f	30.1	de	83.1	cd	53.88	ab	560	d
DP 1845 B3XF	1026	d	44.6	abc	4.2	f	1.27	a	31.6	abc	84.1	ab	54.53	a	559	d
Mean	1228		44.2		4.6		1.18		30.8		83.6		54.06		664	
P>F	0.0184		0.001		0.0076		<0.0001		0.0078		0.037		0.0405		0.0166	
LSD (P=.10)	200.33		1.398		0.297		0.021		1.002		1.0216		0.8315		108.15	
STD DEV	240.27		1.56		0.30		0.04		1.00		0.89		0.73		128.70	
CV%	19.56		3.53		0.98		3.81		3.23		1.07		1.36		19.40	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 16. Jackson County RACE Trial, 2018
Cooperator: Chris Hajovosky
Michael Hiller - Jackson County Extension Agent, Agriculture and Natural Resources
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 480 W3FE	1191	a	45.3	bc	4.30	e	1.10	e	29.0	a	82.6	a-d	53.25	c	635	a
ST 5471GLTP	1168	a	47.8	ab	4.30	e	1.12	de	28.3	a	81.7	cde	53.65	abc	627	a
DG 3385 B2XF	1127	a	45.1	c	4.90	b	1.14	b-e	28.7	a	83.3	ab	53.83	ab	606	a
DP 1646 B2XF	1063	a	48.2	a	4.70	c	1.18	ab	27.9	a	82.3	a-e	53.88	ab	573	a
DP 1845 B3XF	1031	a	46.5	ab	4.35	e	1.21	a	29.7	a	81.9	b-e	54.10	a	558	a
NG 5711 B3XF	1015	a	46.4	ab	4.65	c	1.18	abc	28.7	a	82.9	abc	53.93	ab	548	a
FM 2498 GLT	987	a	45.8	ab	4.40	e	1.13	cde	28.3	a	80.9	e	53.73	abc	530	a
PHY 330 W3FE	957	a	46.3	ab	4.45	de	1.12	de	27.4	a	81.3	de	53.58	bc	513	a
ST 4848 GLT	956	a	48.3	a	5.50	a	1.15	bcd	30.4	a	83.7	a	50.43	d	482	a
NG 4777 B2XF	785	a	42.1	d	4.60	cd	1.15	b-e	28.4	a	81.7	cde	53.73	abc	422	a
Mean	1028		46.2		4.62		1.15		28.7		82.2		53.41		549	
P>F	0.1349		0.0439		<0.0001		0.0518		0.1771		0.0997		<0.0001		0.1333	
LSD (P=.10)	211.06		2.619		0.184		0.0476		1.611		1.478		0.518		116.89	
STD DEV	115.14		1.43		0.10		0.03		0.88		0.81		0.28		63.77	
CV%	11.20		3.10		2.17		2.27		3.07		0.98		0.53		11.61	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 17. Matagorda County RACE Trial, 2018
Cooperator: Hansen Farms
Aaron Sumrall, County Extension Agent, Kate Harrell, Extension Agent-IPM
James Engbrock, County Extension Agent, Emeratis
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist¹

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DP 1646 B2XF	1562	a	46.0	bc	4.73	c	1.25	ab	31.3	cd	84.7	ab	54.53	a	852	a
PHY 312 WRF	1505	a	45.9	bc	4.77	bc	1.19	e	31.7	c	85.1	ab	54.58	a	822	ab
PHY 330 W3FE	1478	a	46.7	a	4.53	cde	1.18	ef	31.9	c	84.7	ab	54.57	a	806	abc
ST 4848 GLT	1478	a	46.4	ab	4.63	cde	1.15	f	30.4	d	83.9	cd	54.25	ab	802	abc
PHY 444 WRF	1448	a	45.3	cde	3.87	g	1.24	bc	33.5	a	85.8	a	54.82	a	794	abc
PHY 480 W3FE	1445	a	45.5	cd	4.27	f	1.15	f	31.4	cd	84.3	bc	54.45	a	787	abc
NG 5711 B3XF	1443	a	45.6	cd	4.67	cd	1.22	cd	32.4	abc	84.2	bc	54.50	a	786	abc
DG 3385 B2XF	1430	a	44.8	e	5.00	b	1.18	ef	31.6	cd	85.0	ab	53.73	b	769	bcd
DP 1845 B3XF	1396	a	46.0	bc	4.40	ef	1.27	a	33.3	ab	84.5	bc	54.72	a	764	b-e
ST 5471 GLTP	1361	a	43.4	f	4.47	def	1.15	f	31.4	cd	83.2	d	54.25	ab	739	cde
NG 4777 B2XF	1309	a	41.7	g	4.67	cd	1.20	de	32.2	bc	84.0	cd	54.55	a	714	de
FM 2498 GLT	1341	a	45.0	de	5.27	a	1.18	ef	31.3	cd	84.6	bc	51.72	c	694	e
Mean	1433		45.2		4.61		1.20		31.9		84.5		54.22		777	
P>F	0.1068		<0.0001		<0.0001		<0.0001		0.0122		0.0671		<0.0001		0.0458	
LSD (P=.10)	128.36		0.673		0.262		0.0282		1.198		1.113		0.6278		71.81	
STD DEV	91.55		0.48		0.19		0.02		0.86		0.79		0.45		51.22	
CV%	6.39		1.06		4.05		1.68		2.68		0.94		0.83		6.59	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 18. Matagorda County RACE Trial, 2018
Cooperator: Robbie Reed
Aaron Sumrall, County Extension Agent
James Engbrock, County Extension Agent, Emeratis
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist¹

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 480 W3FE	1576	a	43.8	c	4.47	de	1.17	de	32.9	ab	85.0	a	54.68	a	862	a
DP 1646 B2XF	1541	a	45.2	b	4.75	cd	1.27	b	31.3	c	85.0	a	54.62	a	842	ab
ST 5471 GLTP	1539	a	42.1	d	4.90	bc	1.16	def	33.5	a	84.0	bc	53.78	a	828	ab
ST 4848 GLT	1494	a	44.5	bc	4.77	cd	1.13	g	32.1	bc	83.7	bc	54.30	a	811	ab
DP 1845 B3XF	1469	a	44.3	bc	4.49	de	1.30	a	33.6	a	85.0	a	54.75	a	804	ab
PHY 330 W3FE	1466	a	46.5	a	4.38	e	1.17	d	33.1	ab	84.5	ab	54.62	a	800	ab
NG 5711 B3XF	1465	a	43.6	c	4.65	cde	1.23	c	31.9	bc	84.4	ab	54.52	a	798	ab
FM 2498 GLT	1512	a	44.1	bc	5.32	a	1.15	efg	31.2	c	83.6	c	50.97	c	770	bc
DG 3385 B2XF	1461	a	44.7	bc	5.18	ab	1.15	fg	31.1	c	84.3	ab	52.27	b	764	c
NG 4777 B2XF	1178	b	41.6	d	4.49	de	1.17	de	31.3	c	83.8	bc	54.35	a	640	d
Mean	1470		44.0		4.74		1.19		32.2		84.3		53.89		792	
P>F	0.0105		<0.0001		0.0012		<0.0001		0.0093		0.0584		0.0002		0.0087	
LSD (P=.10)	142.76		1.143		0.3339		0.0222		1.283		0.871		1.1425		77.77	
STD DEV	100.83		0.81		0.24		0.02		0.91		0.62		0.81		54.93	
CV%	6.86		1.83		4.98		1.32		2.81		0.73		1.50		6.94	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 19. Wharton County RACE Trial - 1, 2018
Cooperator: Michael Beard
Corrie Bowen, County Extension Agent, Kate Harrell, Extension Agent- IPM
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist¹

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 480 W3FE	1785	a	45.5	bcd	4.67	gh	1.15	ef	31.7	ab	84.8	ab	54.48	a	973	a
PHY 312 WRF	1703	b	44.9	cde	4.85	ef	1.18	de	31.3	bc	84.4	ab	54.48	a	928	b
DP 1646 B2XF	1706	b	46.0	abc	4.84	efg	1.25	b	30.1	cde	83.7	bc	54.27	a	926	b
PHY 330 W3FE	1669	bc	46.1	ab	4.75	fg	1.17	def	30.8	b-e	84.3	ab	54.28	a	906	b
ST 5471 GLTP	1567	e	43.4	f	4.91	def	1.18	d	32.9	a	83.7	bc	54.53	a	855	c
ST 4848 GLT	1622	cd	45.6	bcd	5.14	bc	1.16	def	30.8	b-e	84.1	ab	52.35	b	849	cd
DP 1725 B2XF	1595	de	46.9	a	5.05	cd	1.14	f	29.4	de	83.8	bc	52.50	b	837	cd
FM 2498 GLT	1579	de	44.0	ef	5.33	a	1.18	d	32.2	ab	84.9	ab	51.77	bc	818	de
NG 5711 B3XF	1496	f	44.8	de	4.78	fg	1.21	c	31.2	bc	83.4	c	54.43	a	814	e
DG 3385 B2XF	1592	de	44.6	def	5.26	ab	1.17	de	29.3	e	85.1	a	50.93	c	811	e
DP 1845 B3XF	1483	f	44.9	cde	4.57	h	1.28	a	32.1	ab	84.4	ab	54.55	a	809	e
NG 4777 B2XF	1407	g	41.5	g	4.98	cde	1.17	def	31.0	bcd	83.5	c	52.78	b	743	f
Mean	1600		44.8		4.93		1.19		31.1		84.2		53.45		856	
P>F	<0.0001		<0.0001		<0.0001		<0.0001		0.0151		0.33		0.0002		<0.0001	
LSD (P=.10)	53.5420390		1.154		0.17		0.0237		1.541		1.263		1.312		32.88	
STD DEV	38.19		0.82		0.12		0.02		1.10		0.90		0.94		23.45	
CV%	2.39		1.84		2.46		1.42		3.54		1.07		1.75		2.74	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 20. Wharton County RACE Trial -2, 2018
Cooperator: Michael Beard
Corrie Bowen, County Extension Agent, Kate Harrell, Extension Agent- IPM
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 330 W3FE	1706	a	44.6	ab	4.50	fg	1.19	cde	31.4	b	84.9	ab	54.53	abc	931	a
DP 1725 B2XF	1642	ab	46.2	a	4.93	bc	1.20	cde	29.5	c	83.4	de	54.12	c	888	ab
PHY 480 W3FE	1616	bc	42.7	c	4.60	ef	1.18	e	31.8	ab	85.0	ab	54.60	ab	883	b
DP 1646 B2XF	1628	ab	44.9	ab	4.73	de	1.25	b	29.6	c	84.3	bc	54.17	bc	881	b
ST 4848 GLT	1585	bc	43.4	bc	4.87	cd	1.19	de	31.4	b	84.9	ab	54.52	abc	864	b
PHY 312 WRF	1553	cd	42.6	c	4.73	de	1.21	c	31.3	b	84.9	ab	54.57	abc	848	bc
DG 3385 B2XF	1561	bc	42.4	c	5.10	b	1.20	cde	29.8	c	85.4	a	52.10	d	813	cd
NG 5711 B3XF	1476	de	42.4	c	4.83	cd	1.24	b	31.3	b	84.2	bc	54.47	abc	804	cd
ST 5471 GLTP	1464	f	42.3	c	4.90	cd	1.20	cde	32.9	a	83.0	e	54.43	abc	797	de
DP 1845 B3XF	1456	fg	43.2	bc	4.40	g	1.30	a	33.0	a	84.7	ab	54.65	a	796	de
FM 2498 GLT	1474	ef	42.6	c	5.40	a	1.21	cd	30.9	bc	84.9	ab	51.08	e	753	ef
NG 4777 B2XF	1371	g	38.8	d	4.60	ef	1.19	cde	31.4	b	83.8	cd	54.47	abc	747	f
Mean	1544		43.0		4.80		1.21		31.2		84.5		53.98		834	
P>F	<0.0001		<0.0001		<0.0001		<0.0001		0.0026		<0.0001		<0.0001		<0.0001	
LSD (P=.10)	86.803461		1.66		0.181		0.0259		1.374		0.981		0.4746		44.47	
STD DEV	61.91		1.18		0.13		0.02		0.98		0.70		0.34		31.72	
CV%	4.01		2.75		2.69		1.52		3.14		0.83		0.63		3.80	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 21. Colorado County RACE Trial, 2018

Cooperator: Mahalite Farms

Stephen Janak, County Extension Agent

Dr. Gaylon D. Morgan, Extension Cotton Agronomist

Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)	Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹		
DP 1646 B2XF	2219	a	48.0	a	4.55	c	1.26	a	29.4	a	83.9	a	54.20	a	1203	a
NG 5711 B3XF	2089	ab	47.2	a	4.70	bc	1.21	b	29.7	a	82.7	bc	54.15	a	1131	ab
ST 5471 GLTP	2055	bc	45.9	a	4.50	c	1.16	def	30.6	a	82.3	c	54.15	a	1113	bc
DP 1845 B3XF	2025	bc	48.4	a	4.50	c	1.28	a	30.3	a	83.5	ab	54.20	a	1097	bc
PHY 480 W3FE	1959	bc	45.4	a	4.50	c	1.17	cde	30.3	a	84.0	a	54.30	a	1064	bc
PHY 330 W3FE	1923	cd	46.6	a	4.50	c	1.15	ef	29.8	a	82.7	bc	54.05	a	1039	cd
ST 4848 GLT	1884	d	46.8	a	5.15	a	1.17	cde	30.2	a	82.3	c	51.88	c	977	d
DG 3385 B2XF	1820	d	44.4	a	4.80	b	1.13	f	28.1	a	83.2	abc	53.65	ab	976	d
FM 2498 GLT	1819	d	46.4	a	5.10	a	1.18	bcd	29.4	a	83.4	ab	52.93	b	964	d
NG 4777 B2XF	1378	e	42.3	a	4.20	d	1.19	bc	29.0	a	82.2	c	54.03	a	745	e
Mean	1917	46.1		4.7		1.19		29.7		83.0		53.75		1031		
P>F	<0.0001	0.128		0.0006		<0.0001		0.3274		0.0862		0.0243		0.0002		
LSD (P=.10)	140.86	3.118		0.227		0.0261		1.69		1.085		0.9961		85.11		
STD DEV	76.84	1.701		0.124		0.0142		0.922		0.592		0.5434		46.43		
CV%	4.01	3.69		2.66		1.2		3.11		0.71		1.01		4.5		

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 22. Burleson County RACE Trial, 2018²
Texas A&M AgriLife Research and Extension Center, Snook, Texas
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 480 W3FE	2100	a	43.4	c	4.10	def	1.19	c-f	30.0	bc	84.3	a	54.35	a	1141	a
PHY 495 W3FE	2096	a	43.5	c	4.17	cde	1.21	cde	30.2	ab	83.9	ab	54.42	a	1141	a
DP 1845 B3XF	2098	a	45.4	ab	3.90	f	1.27	a	30.1	b	83.0	bcd	54.32	a	1140	a
ST 4848 GLT	2075	a	45.9	a	4.40	b	1.16	f	29.7	bc	83.4	ab	54.13	a	1123	a
DP 1646 B2XF	1981	a	45.7	ab	4.10	def	1.25	ab	29.1	bc	83.2	ab	54.20	a	1073	a
ST 5471 GLTP	1978	a	43.3	c	4.43	b	1.16	f	30.0	bc	81.8	d	53.98	ab	1068	a
NG 5711 B3XF	1907	ab	44.8	b	4.33	bc	1.21	cd	29.8	bc	82.9	bcd	54.17	a	1033	a
NG 4777 B2XF	1902	ab	40.5	d	4.23	bcd	1.18	ef	28.8	c	81.9	cd	53.97	ab	1026	a
DP 1835 B3XF	1887	ab	46.3	a	4.33	bc	1.18	def	28.8	c	83.0	bc	54.02	a	1019	a
DG 3605 B2XF	1835	ab	45.5	ab	4.10	def	1.25	a	29.5	bc	83.2	ab	54.17	a	994	a
FM 2498 GLT	1834	ab	43.7	c	4.97	a	1.18	ef	29.5	bc	83.6	ab	53.38	b	980	b
PHY 440 W3FE	1649	b	45.4	ab	4.00	ef	1.22	bc	31.5	a	83.2	ab	54.50	a	899	c
Mean	1945		44.5		4.26		1.20		29.7		83.1		54.13		1053	
P>F	0.24		<0.0001		<0.0001		<0.0001		0.0965		0.0704		0.2575		0.2057	
LSD (P=.10)	282.02		1.03		0.209		0.0305		1.281		1.193		0.6043		151.03	
STD DEV	201.15		0.73		0.15		0.02		0.91		0.85		0.43		107.72	
CV%	10.34		1.65		3.50		1.80		3.07		1.02		0.80		10.23	

¹ Indicates the location was irrigated

² Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 23. Medina County RACE Trial, 2018²

Cooperator: David Kriewald
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
NG 5711 B3XF	2034	a	46.2	bc	4.20	c	1.20	b	29.1	de	81.6	e	53.47	a	1087	a
DG 3605 B2XF	2008	a	45.2	d	4.33	bc	1.24	a	29.7	cde	82.1	de	53.80	a	1080	a
ST 4848 GLT	1969	a	45.3	cd	4.87	a	1.18	cd	30.3	b-e	83.6	bc	53.80	a	1060	a
DP 1845 B3XF	1979	a	47.4	a	4.23	bc	1.26	a	30.8	abc	83.5	bc	53.22	a	1053	ab
ST 5471 GLTP	1989	a	42.7	f	4.53	b	1.16	d	31.2	ab	81.7	e	51.48	a	1025	abc
DP 1835 B3XF	1853	b	46.8	ab	4.43	bc	1.20	b	30.4	a-d	84.2	ab	53.70	a	995	bc
PHY 480 W3FE	1866	b	44.7	de	4.43	bc	1.17	cd	30.2	b-e	84.7	a	52.15	a	974	c
FM 2498 GLT	1723	c	43.7	e	4.97	a	1.20	b	29.9	b-e	83.7	ab	52.22	a	900	d
PHY 440 W3FE	1558	d	44.1	e	4.17	c	1.19	bc	31.7	a	82.8	cd	53.05	a	826	e
NG 4777 B2XF	1406	e	41.1	g	4.47	bc	1.18	cd	29.0	e	81.8	e	50.10	a	703	f
Mean	1838		44.7		4.46		1.20		30.2		83.0		52.70		970	
P>F	<0.0001		<0.0001		0.006		<0.0001		0.0841		<0.0001		0.3084		<0.0001	
LSD (P=.10)	86.25		0.99		0.33		0.0213		1.43		0.981		2.6141		64.05	
STD DEV	60.92		0.70		0.23		0.02		1.01		0.69		1.85		45.24	
CV%	3.31		1.56		5.22		1.25		3.34		0.84		3.50		4.66	

¹ Indicates the location was irrigated

² Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 24. Williamson County RACE Trial, 2018
Cooperator: Greg and Adam Shirocky
Tyler Coufal, County Extension Agent
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)	Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹		
DG 3385B2XF	806	a	45.5	b	4.47	b	1.06	bcd	27.0	bc	81.3	a	51.08	abc	412	a
PHY 480 W3FE	788	abc	43.0	e	4.27	c	1.04	cd	27.6	b	80.8	ab	51.10	ab	402	ab
DP 1646B2XF	744	bc	44.8	bc	4.07	d	1.12	a	30.0	a	79.7	b-e	53.05	a	394	ab
PHY 330 W3FE	778	abc	44.4	bc	4.37	bc	1.04	cd	25.2	d	80.3	a-d	48.22	de	376	ab
NG 4777B2XF	793	ab	47.0	a	4.27	c	1.03	d	23.6	e	78.2	e	47.33	e	375	b
DP 1845B3XF	733	c	45.6	b	4.37	bc	1.09	ab	25.6	d	79.0	cde	50.85	a-d	374	b
NG 5711B3XF	645	d	45.3	b	4.23	cd	1.06	bcd	25.9	cd	79.3	cde	49.62	b-e	321	c
ST 5471GLTP	612	d	43.1	de	4.27	c	1.02	d	26.0	cd	78.8	de	48.23	cde	296	cd
ST 4848GLT	599	de	43.5	cde	4.50	ab	1.03	d	25.1	d	79.8	a-d	47.88	e	287	cd
FM 2498GLT	549	e	42.9	e	4.67	a	1.07	bc	27.0	bc	80.4	abc	50.78	a-d	280	d
Mean	705	45		4.3		1.06		26.3		79.8		49.8		352		
P>F	<0.0001	0.0003		0.0044		0.0054		<0.0001		0.0541		0.0456		<0.0001		
LSD (P=.10)	56.120	1.282		0.199		0.0371		1.303		1.488		2.8552		36.62		
STD DEV	39.63	0.91		0.14		0.03		0.92		1.05		2.02		25.86		
CV%	5.62	2.03		3.23		2.48		3.50		1.32		4.05		7.36		

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 25. Milam County RACE Trial, 2018
Cooperator: Jay Beckhusen
Floyd Ingram, County Extension Agent
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DP 1646B2XF	991	ab	45.4	a	4.03	a	1.15	a	29.3	a	81.4	ab	53.93	a	535	a
PHY 480 W3FE	1017	a	43.3	b	3.97	a	1.04	cd	27.0	bc	81.3	ab	49.65	cd	506	ab
DP 1845B3XF	916	bc	45.2	a	4.27	a	1.12	b	26.9	bc	80.5	bc	53.33	ab	488	bc
PHY 330 W3FE	930	bc	42.9	b	4.30	a	1.05	cd	26.1	cd	81.7	a	51.12	bc	476	bcd
DG 3385B2XF	895	c	45.2	a	4.27	a	1.05	cd	27.4	b	81.5	ab	51.10	bc	457	cde
ST 4848GLT	865	cde	42.6	b	4.47	a	1.05	cd	26.0	cd	80.8	ab	49.95	cd	433	def
NG 4777B2XF	883	cd	45.8	a	4.03	a	1.04	d	24.6	e	79.8	cd	47.70	d	421	ef
NG 5711B3XF	816	de	42.2	b	4.03	a	1.06	c	27.5	b	79.9	cd	51.57	abc	420	ef
FM 2498GLT	801	e	42.4	b	4.17	a	1.05	cd	25.3	de	80.1	cd	49.22	cd	393	fg
ST 5471GLTP	721	f	42.1	b	4.10	a	1.04	d	26.9	bc	79.2	d	48.67	d	350	g
Mean	883		43.7		4.16		1.06		26.7		80.6		50.62		448	
P>F	<0.0001		<0.0001		0.3145		<0.0001		0.0003		0.0089		0.0051		<0.0001	
LSD (P=.10)	78.87		1.338		0.344		0.0204		1.224		1.088		2.3967		44.12	
STD DEV	55.70		0.95		0.24		0.01		0.87		0.77		1.69		31.16	
CV%	6.31		2.16		5.83		1.35		3.24		0.95		3.34		6.96	

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 26. Comanche County RACE Trial, 2018
Cooperator: Rodney Stephens
Michael Berry, County Extension Agent
Dr. Gaylon D. Morgan, Extension Cotton Agronomist
Dale A. Mott, Extension Program Specialist

Variety	Yield (lbs/acre)	Turnout %	Micronaire	Length (inches)	Strength (g/tex)	Uniformity	Loan Value (¢/lbs)	Lint Value (\$/Ac) ¹
DP 1845B3XF	2129 a	46.8	3.8 d	1.21 a	30.0 a	79.5 c	53.45 a	1138 a
NG 5711B3XF	2100 a	44.5	4.1 b	1.15 bc	29.1 a	80.3 bc	54.00 a	1134 a
ST 4848GLT	2057 ab	43.8	4.1 b	1.15 bc	29.1 a	80.3 bc	54.00 a	1111 ab
ST 5471GLTP	2054 ab	40.5	4.1 b	1.14 cd	28.8 a	80.2 bc	53.63 a	1102 ab
CL 9608B3XF	1935 ab	45.3	4.0 bc	1.15 bc	29.3 a	79.6 c	53.72 a	1039 abc
DP 1646B2XF	1858 bc	46.2	4.1 b	1.15 bc	29.1 a	80.3 bc	54.00 a	1003 bc
FM 2498GLT	1793 c	40.5	4.5 a	1.14 bcd	29.4 a	79.9 bc	53.72 a	963 c
PHY 330 W3FE	1765 c	41.9	4.1 b	1.16 b	30.3 a	80.7 ab	54.13 a	955 c
DG 3385B2XF	1488 d	41.7	4.1 b	1.13 d	29.0 a	80.3 bc	53.57 a	797 d
PHY 480 W3FE	1428 d	39.4	3.9 cd	1.15 bc	30.0 a	81.6 a	54.17 a	773 d
Mean	1861	43.1	4.07	1.15	29.4	80.3	53.84	1002
P>F	0.0001	--	0.0004	0.0009	0.5663	0.034	0.1008	0.0001
LSD (P=.10)	206.3	--	0.176	0.0217	1.327	0.901	0.4362	111.07
STD DEV	145.70	--	0.13	0.02	0.94	0.64	0.31	78.45
CV%	7.83	--	3.06	1.33	3.19	0.79	0.57	7.83

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.
CL=Croplan, DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phylogen, ST= Stoneville.

Table 27. Corpus Christi Center Monster Cotton Variety Trial, 2018
Texas A&M AgriLife Research and Extension Center, Corpus Christi, Texas
Dr. Josh McGinty, Assistant Professor and Extension Agronomist
Rudy Alaniz, Technician and Clinton Livingston, Technician

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 444 WRF	1004	a	46.7	a-e	4.9	f	1.20	abc	31.4	a-g	83.4	ab	53.48	a	536	a
PX3B09 W3FE	981	ab	46.2	a-g	5.2	c-f	1.09	d-i	31.4	a-g	82.5	a-e	50.61	a-f	500	ab
PX4A69 W3FE	957	abc	48.4	a	5.0	ef	1.09	d-i	30.5	a-h	81.7	a-f	51.61	a-d	493	abc
PHY 430 W3FE	955	abc	48.2	ab	5.5	a-e	0.99	j	29.6	e-i	80.3	c-g	43.85	g	420	a-g
PX3B07 W3FE	938	a-d	46.7	a-e	5.2	c-f	1.09	d-i	31.5	a-g	81.6	a-g	50.38	a-f	475	a-d
PHY 480 W3FE	936	a-e	46.4	a-g	5.4	b-f	1.02	ij	30.2	c-i	80.7	b-g	45.88	fg	429	a-g
PX4A64 W3FE	917	a-e	46.7	a-e	5.4	b-f	1.04	f-j	31.7	a-g	81.3	a-g	47.50	c-g	437	a-g
PX5C09 W3FE	908	a-f	46.1	b-g	5.3	b-f	1.09	d-i	30.9	a-h	82.4	a-e	51.19	a-e	465	a-e
PHY 300 W3FE	889	a-f	47.0	a-e	5.3	b-f	1.04	g-j	30.5	a-h	81.4	a-g	47.00	c-g	417	a-g
PX3A82 W3FE	888	a-f	45.7	c-h	5.3	c-f	1.08	d-i	31.8	a-g	83.7	a	50.09	a-f	444	a-f
PX3C06 W3FE	888	a-f	46.5	a-f	5.6	a-d	1.06	e-j	29.6	e-i	81.8	a-f	48.50	b-g	431	a-g
DP 1845 B3XF	874	a-g	46.1	b-g	5.2	c-f	1.20	ab	32.2	a-e	83.1	a-d	51.74	abc	452	a-f
PX5D28B W3FE	868	a-g	45.6	c-i	5.2	c-f	1.07	d-j	31.3	a-g	80.4	c-g	49.65	a-f	430	a-g
ST 4848 GLT	851	a-g	45.7	c-h	5.7	abc	1.08	d-i	31.0	a-g	82.1	a-e	48.51	b-g	413	a-g
DP 1725 B2XF	841	a-g	46.1	b-g	5.2	c-f	1.12	b-f	30.4	a-h	81.8	a-f	51.04	a-e	430	a-g
DP 1646 B2XF	839	a-g	45.7	c-h	5.3	c-f	1.21	a	31.3	a-g	83.2	abc	51.30	a-e	430	a-g
PHY 340 W3FE	837	a-g	46.8	a-e	5.4	b-f	1.09	d-i	32.3	abc	82.7	a-e	49.54	a-f	415	a-g
CPS 18503A B3XF	837	a-g	43.0	k-n	5.5	a-e	1.11	d-h	31.5	a-g	81.9	a-f	49.54	a-f	414	a-g
PHY 330 W3FE	830	a-g	47.4	a-d	5.4	b-f	1.08	d-i	31.3	a-g	82.5	a-e	50.11	a-f	416	a-g
CPS 18501B B3XF	824	a-g	47.4	a-d	5.4	b-f	1.09	d-i	31.0	a-g	82.1	a-e	50.16	a-f	414	a-g
NG 5711 B3XF	823	a-g	45.3	d-j	5.3	b-f	1.14	a-e	31.2	a-g	81.9	a-f	51.04	a-e	420	a-g
PX3A99 W3FE	822	a-g	45.7	c-h	5.5	a-e	1.07	e-j	30.6	a-h	82.1	a-f	48.08	b-g	395	a-g

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
FM 1953 GLTP	818	a-g	44.2	g-l	5.2	c-f	1.07	e-j	30.5	a-h	81.7	a-f	48.80	a-f	399	a-g
NG 5007 B2XF	814	a-g	43.9	h-m	4.9	f	1.10	d-i	27.7	i	81.8	a-f	52.86	ab	430	a-g
CPS 18502A B3XF	813	a-g	45.6	c-i	5.5	a-e	1.10	d-i	30.3	b-i	80.7	b-g	49.21	a-f	400	a-g
PX5B73 W3FE	811	a-g	43.3	j-n	5.2	c-f	1.09	d-i	30.6	a-h	81.6	a-g	50.19	a-f	407	a-g
NG 3780 B2XF	791	a-g	44.3	g-l	5.7	a-d	1.10	d-i	31.5	a-g	81.9	a-f	49.24	a-f	391	a-g
FM 1830 GLT	785	a-g	46.9	a-e	5.7	a-d	1.09	d-i	31.2	a-g	82.2	a-e	49.28	a-f	387	b-g
CPS 18507D B3XF	783	a-g	45.0	e-k	5.5	a-e	1.09	d-i	30.6	a-h	81.9	a-f	49.76	a-f	390	a-g
CPS 18508A B3XF	780	a-g	46.5	a-f	5.5	a-e	1.05	e-j	28.4	hi	82.6	a-e	47.54	c-g	370	b-g
CPS 18507C B3XF	776	a-g	46.2	a-g	5.5	a-e	1.07	d-j	29.5	f-i	82.0	a-f	48.66	b-f	378	b-g
DP 1835 B3XF	776	a-g	47.7	abc	5.2	c-f	1.11	d-h	29.5	ghi	80.7	b-f	50.16	a-f	389	b-g
PHY 440 W3FE	774	a-g	45.5	c-i	5.2	def	1.10	d-i	32.9	a	81.7	a-f	50.75	a-e	393	a-g
ST 5471 GLTP	761	a-g	43.6	h-m	5.5	a-e	1.09	d-i	31.5	a-g	78.7	g	48.99	a-f	372	b-g
ST 5517 GLTP	761	a-g	42.6	lmn	5.3	c-f	1.10	d-i	32.1	a-f	80.2	d-g	49.96	a-f	381	b-g
ST 5818 GLT	755	a-g	43.5	i-n	5.3	b-f	1.11	d-h	32.2	a-d	79.9	efg	50.28	a-f	380	b-g
FM 2498 GLT	727	b-g	46.6	a-e	6.0	a	1.08	d-i	30.0	c-i	81.1	a-g	48.46	b-g	352	c-g
ST 5122 GLT	726	b-g	45.0	e-k	5.4	b-f	1.03	hij	30.9	a-h	79.2	fg	46.63	efg	339	d-g
NG 3729 B2XF	706	c-g	43.9	h-m	5.8	ab	1.09	d-i	29.7	c-i	82.0	a-f	49.15	a-f	347	d-g
UA 107	700	c-g	43.3	j-n	5.5	a-e	1.09	d-i	31.8	a-g	81.8	a-f	49.13	a-f	344	d-g
UA 222	700	c-g	41.7	mn	5.5	a-e	1.12	c-g	30.5	a-h	82.6	a-e	50.31	a-f	352	c-g
CPS 18503D B3XF	686	d-g	44.9	e-k	5.5	a-e	1.10	d-i	30.6	a-h	80.2	d-g	48.95	a-f	336	d-g
NG 4689 B2XF	685	d-g	44.3	f-l	5.7	abc	1.06	e-j	31.2	a-g	81.1	a-g	47.99	c-g	329	d-g
FM 2574 GLT	684	d-g	47.3	a-d	5.5	a-e	1.16	a-d	32.8	ab	82.8	a-e	50.38	a-f	345	d-g
AMX 1801 B3XF	672	efg	43.1	j-n	5.3	b-f	1.14	a-e	29.6	d-i	83.4	ab	50.43	a-f	339	d-g
UA 114	651	fg	41.3	n	5.6	a-d	1.09	d-i	31.1	a-g	82.4	a-e	49.71	a-f	324	efg
NG 4545 B2XF	624	g	43.8	h-m	5.6	a-d	1.06	e-j	30.8	a-h	81.1	a-g	46.90	d-g	293	g
NG 4777 B2XF	614	g	43.5	i-m	5.2	c-f	1.07	d-j	30.8	a-h	81.0	a-g	49.84	a-f	307	fg

Variety	Yield (lbs/acre)	Turnout %	Micronaire	Length (inches)	Strength (g/tex)	Uniformity	Loan Value (¢/lbs)	Lint Value (\$/Ac) ¹
Mean	806	45.3	5.4	1.09	30.86	81.68	49.46	399
P>F	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
LSD (P=.05)	264.42	2.1808	0.51384	0.08382	2.6332	2.9044	4.8115	146.22
STD DEV	126.87	1.8140	0.265	0.048	1.325	0.095	2.32	68.68
CV%	15.747	4.000	4.934	4.476	4.295	0.117	4.703	17.21

¹ Lint values were calculated using the 2018 Upland Cotton Loan Valuation Model from Cotton Incorporated.

AT =AllTex, ATX = AllTexExperimental, DP=DeltaPine, DPX = DeltaPine Experimental, DG= DynaGrow, FM=FiberMax, NG=NexGen, PHY=Phylogen, PX = Phylogen Experimental, SSG= Seed Source Genetics, ST= Stoneville



<http://cotton.tamu.edu>

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas A&M AgriLife Extension Service is implied.

Educational programs conducted by Texas A&M AgriLife Extension Service serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Douglas L. Steele, Director, Texas A&M AgriLife Extension Service, The Texas A&M University System.