

2021 REPLICATED AGRONOMIC COTTON EVALUATION (RACE) SOUTH, EAST AND CENTRAL REGIONS OF TEXAS



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REPLICATED AGRONOMIC COTTON EVALUATION (RACE)

SOUTH, EAST AND CENTRAL REGIONS OF TEXAS, 2021

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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 **Phytogen** for their partial funding of these trials.

2021 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.

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.

Sixteen Replicated Agronomic Cotton Evaluation (RACE) Trials and four Monster trials were harvested in 2021 with several lost or impacted by extended rain occurring in the fall and herbicide injury. The harvested locations are listed in Table 1.

Mean non-irrigated location yields for the 2021 RACE Trials ranged from 1749 lbs/ac to 992 lbs/ac for Nueces (CCARES) and Navarro county locations, respectively. Mean irrigated location yields ranged from 1776 lbs/ac to 998 lbs/ac for Burleson and Cameron county locations, respectively.

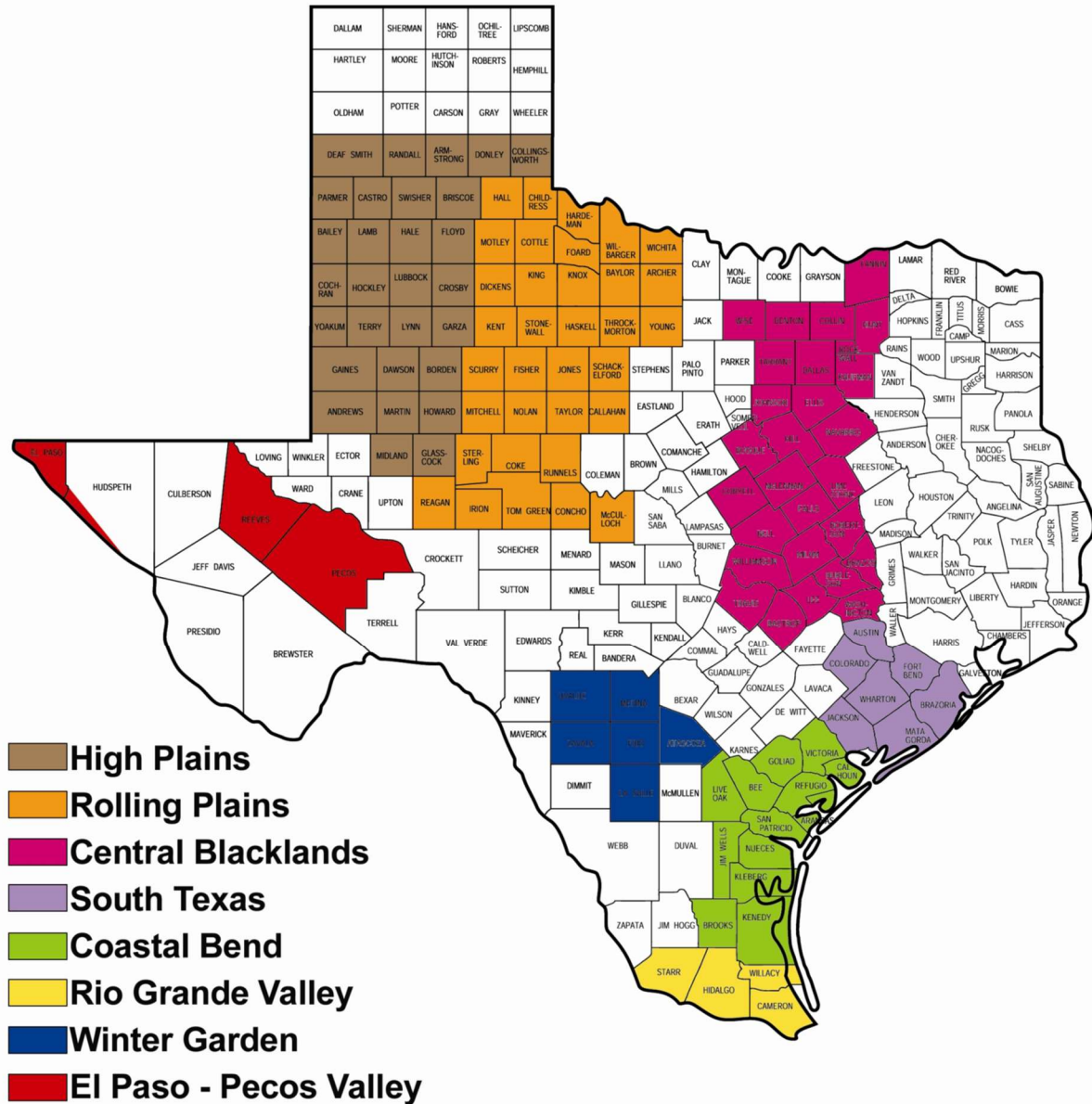
All the major cotton seed companies with GlyTol[®] LibertyLink[®], XtendFlex[®] or Enlist[®] technology had the opportunity to include at least one variety in the RACE trial at each location. All varieties were treated with either Aeris, Avicta Complete Pak or TRiO seed treatment. Included in this publication are the cotton variety descriptions provided by the companies. See descriptions on pages 6-8.

Table 1 also provides a list of cooperators, planting and harvest dates, row spacing and plot area for each location. Tables 2-6 show numerical rankings based upon lint yield for the varieties across all locations within a production region.

Tables 7 to 22 include the individual RACE trial yield data and fiber analysis for each 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. In addition to the RACE trials, several Monster cotton variety trials (Tables 23-26) were conducted in 2021 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.

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 10% 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 2021 RACE trials. These cotton variety descriptions were provided by individual seed company representatives or publicly available information.

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 2012 B3XF

- Smooth leaf, early maturity variety
- Bacterial blight resistant
- Above average fiber quality
- Medium plant type that responds well to PGR management

DeltaPine 2020 B3XF

- Semi-smooth leaf, early-mid maturity variety
- Bacterial blight resistant
- Above average fiber quality
- Medium plant type that responds well to PGR management

Dyna-Gro 3402 B3XF

- Early-med Maturity
- Excellent seedling vigor and fiber package
- Bacterial blight resistance
- Excellent storm tolerance

Dyna-Gro 3615 B3XF

- Enhanced with new BollGard III XtendFlex trait
- Adapted to TX, Delta, and Southeast
- Medium-tall plant height with smooth leaf characteristics
- Excellent fiber quality and seedling vigor
- Excellent Verticillium wilt tolerance and bacterial blight resistance
- Excellent storm tolerance

Dyna-Gro H959 B3XF

- Halo w salt tolerance
- Good seedling vigor
- Bacterial blight resistance and Verticillium wilt tolerance

FiberMax 2398 GLTP

- Medium maturity, slightly earlier than FM 2498GLT
- Excellent yield potential
- High gin turnout
- Very good Verticillium wilt tolerance
- Resistant to bacterial blight
- Liberty® herbicide and glyphosate tolerant
- Three-gene lepidopteran resistance for improved protection against worms

NexGen 4936 B3XF

- Medium to medium-early maturity
- Semi-smooth leaf
- Widely adapted with good heat tolerance
- Very high yield potential
- Excellent fiber quality package
- Medium plant height , easy to manage

NexGen 5150 B3XF

- Medium to Full Maturity
- Smooth leaf
- Medium-tall plant type, early PGR apps are beneficial
- Adapted to both dryland and irrigated environments
- Exceptional fiber length and quality

Phytogen 332 W3FE

- Semi-smooth leaf, early-mid maturity
- Resistant to Root-knot and Reniform nematodes
- Exceptional fiber length and overall quality
- Medium-tall plant that responds well to PGR management

Phytogen 400 W3FE

- Early-mid maturity, wide area of adaptation, dryland or irrigated
- Outstanding seedling vigor
- Bacterial blight and root knot nematode resitant
- Semi-smooth leaf
- Medium height plant, easy to manage with growth regulators
- Tolerance to Enlist, glyphosate, and glufosinate herbicides with Widestrike 3 lep control

Stoneville 4550 GLTP

- Hairy leaf, early-mid maturity
- Great emergence and early season vigor
- Strong on tough acres with high-end yield potential
- Medium-tall/vigorous plant that needs PGR management with water
- TwinLink protection

Stoneville 4993 B3XF

- Semi-smooth leaf
- Early-mid maturity with medium growth
- Easy to manage growth, responds well to PGRs
- Resistant to bacterial blight
- Easy to management (PGR)
- Good storm tolerance

Table 1. Trial location, cooperators, planting date, harvest date, row spacing, plot dimensions and area of 2021 Texas A&M AgriLife Extension RACE Trials harvested.

County	Hildago (Ybarra)	Hildago (TX AgriScience)	Cameron	Nueces (Lawhon)
Location (Nearest town)	Lasara	Lyford	Bluetown	Driscoll
Latitude, Longitude	26.44976, -97.96571	26.35489, -97.70191	26.06677, -97.80159	27.63067, -97.70568
Cooperator	Ybarra Bros.	TX AgriScience	James Bauer	Darrell Lawhon
Soil Type	Hargill fine sandy loam, 0 to 2% slopes	Raymondville clay loam, 0 to 1% slopes	Harlingen clay	Victoria Clay, 0 to 1% slopes
Irrigation	furrow	furrow	furrow	none
Precipitation (Estimated)	28.3"	27"	23.1"	24.2"
Previous Crop	corn	sorghum	corn	sorghum
Row Spacing (in)	40	40	40	38
Plot Dimensions	8 rows x 604-976 ft	2 rows x 40 ft	6 rows x 2,303 ft	6 rows x 2979 ft
Area harvested/plot	varied	.006 acre	1.06 acre	1.29 acre
Plant Population (/Ac)		45,000	39,200	40,000
Planting Date	3/24/21	3/30/21	3/29/21	3/15/21
Harvest Date	9/2/21	8/30/21	9/11/21	9/3/21
Yield Limiting Factor(s)				

Table 1. Continued.

County	Nueces (CCAREC)	San Patricio	DeWitt	Calhoun
Location (Nearest town)	Robstown	Edroy	Yorktown	Port Lavaca
Latitude, Longitude	27.78190, -97.57538	28.10114, -97.64476	28.98502, -97.62724	28.60934, -96.65958
Cooperator	AgriLife Research	Robert Rieder	Tracy Metting	Danny May
Soil Type	Victoria clay, 0 to 1% slopes	Victoria clay, 0 to 1% slopes	Runge fine sandy loam, 2 to 5% slopes	Laewest clay, 0 to 1% slopes
Irrigation	none	none	none	none
Precipitation (Estimated)	24.2"	33.2"	24.5"	44.4"
Previous Crop	sorghum	sorghum		cotton
Row Spacing (in)	38	38	38	38
Plot Dimensions	2 rows x 35 ft	6 rows x 2500 ft	6 rows x 985 ft	2 row x 30 ft
Area harvested/plot	.005 acre	1.09 acre	0.43 acre	.004 acre
Plant Population (/Ac)	55,000	38,000		55,000
Planting Date	3/26/21	3/23/21	4/13/21	3/26/21
Harvest Date	8/25/21	9/30/21	9/9 – 9/10/21	9/10/21
Yield Limiting Factor(s)				

Table 1. Continued.

County	Jackson	Matagorda	Wharton	Fort Bend
Location (Nearest town)	Palacios	Tin Top	Crescent	Beasley
Latitude, Longitude	29.055397 -96.488543		29.299097 -96.220326	29.293993 -96.21497
Cooperator	Chris Hajovosky	Bill Hansen	Michael Beard	Alan & Lisa Stasney
Soil Type	Laewest clay, 0 to 1 percent slopes	Laewest clay, 0 to 1 percent slopes	Lake Charles clay, 0 to 1 percent slopes	Lake Charles clay and Bernard clay loam, 0 to 1 percent slopes
Irrigation	none	none	none	furrow
Precipitation (Estimated)	45.6"	51.2'	34.5"	43.2"
Previous Crop	Sorghum	Sorghum	Corn	Corn
Row Spacing (in)	38	40	40	36
Plot Dimensions	6 rows x 2275 ft	6 rows x 1378 ft	6 rows x 2175 ft	6 rows x 1700 ft
Area harvested/plot	0.69 acre	0.65 acre	1.0 acre	0.70 acre
Plant Population (/Ac)	55,000	42,000	34,780	33,700
Planting Date	4/2/21	3/25/21	3/26/21	
Harvest Date	9/24/21	n/a	9/21/21	
Yield Limiting Factor(s)		Trial lost due to hurricane		Trial lost due to hormone herbicide injury

Table 1. Continued.

County	Colorado	Burleson	Medina	Williamson
Location (Nearest town)	Eagle Lake	Snook	Lytle	Hutto
Latitude, Longitude	29.472514, -96.346719	30.5361, -96.42142	29.269490, -98.811215	30°33'28.29"N 97°32'19.45"W
Cooperator	Mahalite Farms	AgriLife Research Farm	Kriedwald Farms	Kruger Farms
Soil Type	Norwood silty clay loam, 0 to 1 percent slopes, occasionally flooded	Belk clay, 0 to 1 percent slopes, rarely flooded	Victoria clay, 0 to 1 percent slopes	Branyon clay, 0 to 1 percent slopes
Irrigation	none	furrow	linear	none
Precipitation (Estimated)	33.3	25.1"	22.9"	22.2"
Previous Crop	Cotton	Corn	Corn	Corn
Row Spacing (in)	36	40	36	38
Plot Dimensions	6 row x 1600 ft	2 rows x 675 ft	6 rows x 1205 ft	6 rows x 1050 ft
Area harvested/plot	0.65 acre	0.08 acre	0.50 acre	0.46 acre
Plant Population (/Ac)	31,770	36,190	41,000	35,270
Planting Date	4/5/21	4/14/21	4/12/21	4/13/21
Harvest Date	10/10/21	9/28/21	10/11/21	10/19/21
Yield Limiting Factor(s)			Some dicamba injury	

Table 1. Continued.

County	Milam	Navarro	Delta
Location (Nearest town)	Buckholts	Corsicana	
Latitude, Longitude		32.06019, -96.60793	
Cooperator	Jay Beckhusen	Reed Farms	
Soil Type	Houston Black clay, 1 to 3 percent slopes	Houston Black clay, 1 to 3 percent slopes	
Irrigation	none	none	
Precipitation (Estimated)	23.8"	18.9'	
Previous Crop	Corn	Corn	
Row Spacing (in)	30	30	
Plot Dimensions	8 rows x 700 ft	12 rows x 1150 ft	
Area harvested/plot	0.32	0.80 acre	
Plant Population (/Ac)	45,000	42,000	
Planting Date	4/9/21	4/28/21	
Harvest Date	9/21/21	10/6/21	
Yield Limiting Factor(s)			Yield data coming soon

Table 1. Continued.

County	LRGV Monster	Corpus Christi Monster	Mid-Coast Monster	Upper Gulf Coast Monster
Location (Nearest town)	Lyford	Robstown	Port Lavaca	Danewang
Latitude, Longitude	26.35489, -97.70191	27.78296, -97.56102	28.608223, -96.659659	29.07098, -96.24548
Cooperator	TX AgriScience	AgriLife Research	Dannie May	Dean Hansen
Soil Type	Raymondville clay loam, 0 to 1% slopes	Victoria clay, 0 to 1% slopes	Laewest clay, 0 to 1 percent slopes	Lake Charles Clay, 0 to 1% slopes
Irrigation	none	none	none	none
Precipitation (Estimated)	27"	24.2"	44.4"	43.7"
Previous Crop	sorghum	sorghum	corn	cotton
Row Spacing (in)	40	38	38	38
Plot Dimensions	2 row x 40 ft	2 row x 35 ft	2 row x 30 ft	2 row x 37 ft
Area harvested/plot	.006 acre	.005 acre	.004 acre	.005 acre
Plant Population (/Ac)	45,000	55,000	55,000	55,000
Planting Date	3/31/21	3/24/21	3/26/21	4/6/21
Harvest Date	8/30/21	8/24/21	9/10/21	9/27/21
Yield Limiting Factor(s)				

Table 2. Variety rankings based on lint value, Lower Rio Grande Valley, 2021.

Location	Hidalgo (TX AgriScience)	Hidalgo (Ybarra)	Cameron	Mean Ranking
Mean Yield (lbs/acre)	859	1045	998	
Variety				
PHY 332 W3FE	1	8	1	3.3
PHY 400 W3FE	4	5	2	3.7
DP 2020 B3XF	2	6	3	3.7
DP 2012 B3XF	6	3	4	4.3
NG 5150 B3XF	10	1	6	5.7
FM 2398 GLTP	7	2	9	6.0
DG 3402 B3XF	8	7	5	6.7
NG 4936 B3XF	9	4	8	7.0
ST 5091 B3XF	5	10	7	7.3
DG H959 B3XF	3	9	10	7.3

Table 3. Variety rankings based on lint value, Coastal Bend, 2021.

Location	Nueces – Lawhon	Nueces – CCAREC	San Patricio	DeWitt	Mean Rank
Mean Yield (lbs/acre)	755	1749	1101	1391	
Variety					
PHY 400 W3FE	1	2	3	2	2.0
DG 3555 B3XF	4		2	1	2.3
DP 2012 B3XF	2	4	4	3	3.3
DP 2020 B3XF	3	7	6	5	5.3
ST 5091 B3XF	6	1	5	10	5.5
PHY 332 W3FE	7	6	1	8	5.5
DG H959 B3XF	5	5	7	7	6.0
FM 2398 GLTP	10	8	8	4	7.5
NG 5150 B3XF	8	10	10	6	8.5
NG 4936 B3XF	9	9	9	9	9.0

Table 4. Mean location lint yield and variety ranking based on lint value, Upper Gulf Coast Counties, 2021.

Location	Calhoun	Jackson	Wharton	Colorado	Mean Rank
Mean Yield (lbs/A)	1288	1087	1154	1611	
Variety					
PHY 400 W3FE	1	2	3	2	2.0
DP 2020 B3XF	2	5	1	3	2.8
DP 2012 B3XF	6	1	4	1	3.0
NG 5150 B3XF	5	4	6	6	5.3
NG 4936 B3XF	8	3	2	9	5.5
ST 5091 B3XF	-	6	7	4	5.7
DG 3402 B3XF	-	7	5	5	5.7
FM 2398 GLTP	7	8	8	7	7.5
PHY 332 W3FE	9	9	9	8	8.8
H 959 B3XF	10	10	10	10	10.0

Table 5. Mean location lint yield and variety ranking based on lint value, Irrigated Cen-Tex trials 2021.

Location	Burleson¹	Medina^{1,2}	Mean
Mean Yield (lbs/A)	1776	1751	
Variety			
ST 5091 B3XF	3	1	2.0
DG 3615 B3XF	4	2	3.0
DP 2020 B3XF	2	6	4.0
PHY 400 W3FE	1	8	4.5
NG 5150 B3XF	5	5	5.0
DP 1646 B2XF	8	3	5.5
NG 4936 B3XF	7	4	5.5
PHY 332 W3FE	6	9	7.5
DG H959 B3XF	9	7	8.0
FM 2398 GLTP	10	10	10.0

¹ Location was irrigated

² Some varieties at this location suffered injury from dicamba herbicide

Table 6. Mean location lint yield and variety ranking based on lint value, Non-irrigated Cen-Tex trials 2021.

Location	Williamson	Milam	Navarro	Mean
Mean Yield (lbs/A)	1252	1243	992	
Variety				
PHY 332 W3FE	2	-	1	1.5
PHY 400 W3FE	1	-	2	1.5
ST 4993 B3XF	8	1	4	4.3
NG 5150 B3XF	4	4	5	4.3
DP 2020 B3XF	7	7	1	5.0
ST 4550 GLTP	6	6	3	5.0
DG 3402 B3XF	3	5	8	5.5
DG H959 B3XF	5	8	6	5.5
DP 1646 B2XF	10	3	7	6.7
NG 4936 B3XF	9	2	10	7.0

Table 7. Hidalgo County RACE Trial, 2021

Cooperator: Texas AgriScience, LLC

Vidal Saenz - Hidalgo County Extension Agent, Agriculture and Natural Resources

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

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
PHY 332 W3FE	1121	a	41.6	ab	5.2	ab	1.15	bcd	32.5	a	84.0		51.40	c	575	a
DP 2020 B3XF	1059	ab	39.7	c	4.8	de	1.17	ab	32.0	ab	83.9		53.42	ab	567	a
DG H959 B3XF	1035	ab	38.1	d	5.1	bc	1.18	ab	33.0	a	84.1		51.95	bc	537	a
PHY 400 W3FE	994	ab	41.6	ab	4.9	cde	1.14	cd	32.9	a	84.2		53.02	ab	522	a
ST 5091 B3XF	917	ab	42.5	ab	4.8	e	1.14	d	30.3	c	83.9		53.15	ab	488	a
DP 2012 B3XF	879	ab	41.3	b	4.8	de	1.18	ab	30.9	bc	83.4		54.23	a	477	a
FM 2398 GLTP	844	abc	42.6	a	5.5	a	1.16	bcd	33.2	a	84.7		50.43	c	426	ab
DG 3402 B3XF	782	bc	39.2	cd	4.7	e	1.17	bc	32.2	ab	84.2		54.33	a	425	ab
NG 4936 B3XF	514	cd	39.9	c	4.9	cde	1.20	a	30.9	bc	85.0		54.30	a	279	bc
NG 5150 B3XF	444	d	42.2	ab	5.1	bcd	1.14	d	30.0	c	83.3		53.08	ab	237	c
Mean	859		40.9		5.0		1.16		31.8		84.1		52.93		453	
P>F	0.0323		<0.0001		0.0046		0.0221		0.012		0.6626		0.0036		0.0481	
LSD (P=.10)	333.74		1.326		0.293		0.029		1.563		NS		1.528		179.72	
STD DEV	333.19		1.71		0.30		0.03		0.26		0.96		1.58		177.41	
CV%	39.49		4.19		5.98		2.26		0.83		1.14		2.98		39.13	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 8. Hidalgo County RACE Trial, 2021**Cooperator: Ybarra Bros****Vidal Saenz - Hidalgo County Extension Agent, Agriculture and Natural Resources****Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz, Texas A&M AgriLife Extension Service - Corpus Christi**

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
NG 5150 B3XF	1232		39.6	ab	4.9	ab	1.16	bcd	30.3	cd	83.4		52.73	bcd	658	
FM 2398 GLTP	1173		41.5	a	5.3	a	1.15	cd	31.9	bc	83.5		51.32	d	601	
DP 2012 B3XF	1109		39.6	ab	4.8	bc	1.15	cd	31.1	bc	82.4		54.10	abc	600	
NG 4936 B3XF	1093		38.2	b	4.4	cd	1.22	a	31.7	bc	83.9		54.28	ab	593	
PHY 400 W3FE	1022		39.5	ab	4.5	bc	1.15	cd	32.0	b	82.9		52.62	cd	550	
DP 2020 B3XF	1010		38.4	b	4.7	bc	1.17	bcd	31.2	bc	83.2		54.20	abc	548	
DG 3402 B3XF	989		38.6	b	4.8	bc	1.18	a-d	32.1	b	84.1		54.33	ab	537	
PHY 332 W3FE	960		37.8	b	4.1	d	1.20	ab	34.0	a	82.9		54.42	a	523	
DG H959 B3XF	942		39.5	ab	4.8	bc	1.19	abc	32.7	ab	83.4		54.33	ab	512	
ST 5091 B3XF	917		41.2	a	4.6	bc	1.14	d	29.4	d	83.2		53.40	abc	491	
Mean	1045		39.4		4.7		1.17		31.6		83.3		53.57		561	
P>F	0.7797		0.0893		0.0153		0.0566		0.0115		0.5526		0.0496		0.8618	
LSD (P=.10)	NS		2.071		0.421		0.041		1.634		NS		1.630		NS	
STD DEV	384.48		1.69		0.40		0.04		1.52		0.95		1.46		208.50	
CV%	36.80		4.28		8.58		3.67		4.81		1.14		2.72		37.15	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 9. Cameron County RACE Trial, 2021

Cooperator: James Bauer

Marco Ponce - Cameron County Extension Agent, Agriculture and Natural Resources

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

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
PHY 332 W3FE	1172	a	42.6		4.9		1.13		30.4	ab	83.3		53.70		629	a
PHY 400 W3FE	1177	a	44.7		4.9		1.13		29.3	abc	82.3		52.60		619	a
DP 2020 B3XF	1065	b	43.4		5.0		1.15		29.8	abc	83.1		52.85		563	b
DP 2012 B3XF	1033	bc	44.5		5.1		1.11		28.5	cd	82.1		51.70		535	bc
DG 3402 B3XF	987	c	43.2		4.8		1.14		28.2	cde	83.0		53.78		531	bc
NG 5150 B3XF	996	bc	44.1		4.9		1.08		26.4	e	81.7		51.40		513	cd
ST 5091 B3XF	995	bc	45.1		4.9		1.12		27.5	de	81.8		51.20		510	cd
NG 4936 B3XF	886	d	41.9		4.6		1.10		28.7	bcd	82.8		53.38		473	de
FM 2398 GLTP	876	d	43.9		5.0		1.12		28.6	bcd	82.4		52.27		458	ef
DG H959 B3XF	790	e	41.6		4.9		1.15		30.6	a	82.2		53.18		420	f
Mean	998		43.5		4.9		1.12		28.8		82.5		52.61		525	
P>F	<0.0001		0.1101		0.1076		0.1368		0.0221		0.5984		0.4283		<0.0001	
LSD (P=.10)	75.02		NS		NS		NS		1.830		NS		NS		46.61	
STD DEV	134.13		1.68		0.17		0.03		1.65		1.04		1.65		74.75	
CV%	13.45		3.87		3.47		2.70		5.72		1.26		3.13		14.24	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 10. Nueces County RACE Trial, 2021

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 Service - Corpus Christi

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
PHY 400 W3FE	909	a	43.6	a	4.8	a	1.13		31.1	ab	81.5		53.62		487	a
DP 2012 B3XF	900	a	41.5	cd	4.8	a	1.14		30.4	bcd	81.0		53.58		483	a
DP 2020 B3XF	865	ab	41.4	cd	4.7	a	1.12		29.3	de	81.4		53.37		462	ab
DG 3555 B3XF	755	bc	41.4	cd	4.2	bcd	1.16		30.8	abc	82.6		54.08		408	bc
DG H959 B3XF	754	bc	40.7	d	4.6	ab	1.14		32.0	a	81.7		54.05		408	bc
ST 5091 B3XF	732	c	42.8	ab	3.9	d	1.09		28.3	e	80.7		52.57		385	cd
PHY 332 W3FE	712	c	42.1	bc	4.2	cd	1.11		31.4	ab	81.6		53.63		382	cd
NG 5150 B3XF	662	c	41.8	bcd	3.9	d	1.13		30.1	bcd	82.3		53.92		357	cd
NG 4936 B3XF	629	c	38.5	e	4.0	d	1.12		29.7	cde	82.3		53.43		336	d
FM 2398 GLTP	628	c	43.3	a	4.6	abc	1.13		30.4	bcd	82.4		52.83		331	d
Mean	755		41.7		4.4		1.13		30.4		81.7		53.51		404	
P>F	0.0072		<0.0001		0.0087		0.293		0.0066		0.3549		0.1451		0.0065	
LSD (P=.10)	131.46		1.174		0.465		NS		1.341		NS		NS		70.552	
STD DEV	129.27		1.56		0.44		0.03		1.30		1.04		0.71		69.88	
CV%	17.13		3.74		9.98		2.66		4.28		1.28		1.33		17.30	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 11. Nueces County RACE Trial, 2021

Cooperator: Texas A&M AgriLife Research

Jason Ott - Nueces County Extension Agent, Agriculture and Natural Resources

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

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
ST 5091 B3XF	2135	a	41.2	a	4.4	bc	1.17	de	30.5	c	83.0	bc	54.10	a	1155	a
PHY 400 W3FE	1924	ab	41.0	a	4.3	bcd	1.20	bc	33.4	a	83.9	ab	54.44	a	1048	ab
DG 3402 B3XF	1905	ab	38.4	de	4.1	cd	1.20	bc	33.1	ab	83.9	ab	54.46	a	1037	ab
DP 2012 B3XF	1847	ab	38.9	cd	4.2	bcd	1.21	bc	31.9	b	83.4	abc	54.41	a	1005	ab
DG H959 B3XF	1817	bc	38.1	e	4.5	b	1.23	a	32.9	ab	82.7	c	54.35	a	987	b
PHY 332 W3FE	1805	bc	38.8	cde	4.0	d	1.20	bc	33.1	ab	82.7	c	54.41	a	982	b
DP 2020 B3XF	1726	bc	39.2	c	4.4	b	1.22	ab	31.9	b	84.1	a	54.45	a	940	bc
FM 2398 GLTP	1547	cd	41.5	a	4.9	a	1.19	cd	32.3	ab	83.5	abc	52.69	b	813	cd
NG 4936 B3XF	1409	d	38.3	de	4.1	cd	1.22	ab	30.6	c	83.4	abc	54.25	a	764	d
NG 5150 B3XF	1376	d	40.1	b	4.2	bcd	1.16	e	30.5	c	82.5	c	54.09	a	744	d
Mean	1749		39.5		4.3		1.20		32.0		83.3		54.2		948	
P>F	0.0042		<0.0001		0.005		<0.0001		0.0005		0.0677		0.0071		0.0021	
LSD (P=.10)	301.89		0.699		0.321		0.020		1.219		0.92837		0.708		159.11	
STD DEV	323.30		1.34		0.33		0.03		1.38		0.85		0.73		176.32	
CV%	18.48		3.40		7.67		2.19		4.31		1.02		1.35		18.61	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 12. San Patricio County RACE Trial, 2021

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 Service - Corpus Christi

Variety	Lint (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lb)		Lint Value (\$/acre) ¹	
PHY 332 W3FE	1302	a	41.3	cd	4.8	b	1.20	ab	32.3	ab	83.7	ab	54.37	a	708	a
DG 3555 B3XF	1264	ab	41.5	bcd	4.4	c	1.20	ab	31.7	bcd	84.5	a	54.40	a	688	ab
PHY 400 W3FE	1245	ab	42.6	a	4.8	b	1.16	cde	33.3	a	83.7	ab	54.30	a	676	ab
DP 2012 B3XF	1221	abc	41.7	bc	4.7	b	1.18	bcd	31.0	cde	83.9	ab	54.27	a	663	abc
ST 5091 B3XF	1228	ab	42.3	ab	4.7	b	1.13	e	29.6	f	82.5	c	53.75	a	660	bc
DP 2020 B3XF	1206	bc	40.6	de	4.8	b	1.23	a	32.1	b	84.1	a	54.42	a	657	bc
DG H959 B3XF	1139	c	40.1	e	4.6	bc	1.19	bc	32.1	b	82.8	c	54.32	a	619	c
FM 2398 GLTP	897	d	43.0	a	5.1	a	1.15	de	32.0	bc	84.0	ab	52.28	b	469	d
NG 4936 B3XF	762	e	39.9	e	4.7	b	1.19	bc	30.7	de	83.7	ab	54.22	a	413	e
NG 5150 B3XF	744	e	41.7	bc	5.0	a	1.15	de	30.5	ef	83.2	bc	52.42	b	390	e
Mean	1101		41.5		4.7		1.18		31.5		83.6		53.87		594	
P>F	<0.0001		<0.0001		0.0011		0.0023		0.0005		0.0242		0.0226		<0.0001	
LSD (P=.10)	87.55		0.822		0.214		0.033		1.052		0.878		1.168		46.26	
STD DEV	215.55		1.16		0.23		0.04		1.28		0.79		1.06		121.27	
CV%	19.58		2.80		4.87		2.99		4.06		0.95		1.97		20.41	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 13. DeWitt County RACE Trial, 2021

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 Service - Corpus Christi

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DG 3555 B3XF	1575	a	44.4	ab	4.9		1.15	a	29.3		82.3		53.12		836	a
PHY 400 W3FE	1501	ab	45.3	a	4.8		1.10	c	27.3		81.2		51.60		775	b
DP 2012 B3XF	1400	bc	43.5	abc	4.9		1.10	c	27.8		82.0		53.35		747	bc
FM 2398 GLTP	1436	bc	45.0	a	5.1		1.11	bc	28.8		81.8		51.70		743	bc
DP 2020 B3XF	1363	cd	43.7	abc	4.9		1.12	bc	30.0		82.9		53.60		731	bcd
NG 5150 B3XF	1399	bc	43.9	ab	5.0		1.14	ab	28.9		83.5		52.22		730	bcd
DG H959 B3XF	1363	cd	43.0	bcd	4.9		1.14	ab	29.3		83.0		52.73		718	b-e
PHY 332 W3FE	1367	cd	42.9	bcd	5.0		1.09	c	28.0		82.2		51.13		698	cde
NG 4936 B3XF	1261	de	41.4	d	4.7		1.12	bc	28.0		82.8		53.38		673	de
ST 5091 B3XF	1242	e	41.8	cd	4.9		1.16	a	30.5		82.8		53.23		661	e
Mean	1391		43.5		4.9		1.12		28.8		82.5		52.61		731	
P>F	0.0028		0.0502		0.1782		0.0186		0.3255		0.2804		0.5594		0.0055	
LSD (P=.10)	113.51		1.971		NS		0.033		NS		NS		NS		61.3	
STD DEV	120.16		1.68		0.17		0.03		1.65		1.04		1.65		62.23	
CV%	8.64		3.87		3.47		2.70		5.72		1.26		3.13		8.51	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 14. Calhoun County RACE Trial, 2021

Cooperator: Danny May

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

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

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 400 W3FE	1384	a	45.1	a	4.5	d	1.19	ab	32.5	ab	83.4		54.37	a	752	a
DP 2020 B3XF	1371	a	40.6	e	4.6	cd	1.22	a	31.6	bc	83.7		54.35	ab	745	ab
DG 3555 B3XF	1349	ab	41.6	d	4.1	e	1.17	bcd	30.3	cde	83.0		54.10	ab	730	ab
ST 5091 B3XF	1340	ab	42.6	c	4.5	d	1.14	de	29.2	e	81.7		53.68	ab	719	ab
NG 5150 B3XF	1342	ab	42.8	c	4.8	b	1.12	e	29.4	e	82.3		53.42	b	717	ab
DP 2012 B3XF	1308	ab	42.0	cd	4.8	b	1.19	ab	31.5	bc	83.4		54.15	ab	708	b
FM 2398 GLTP	1271	bc	44.3	b	5.2	a	1.15	cde	31.0	bcd	83.2		52.02	c	661	c
NG 4936 B3XF	1221	c	40.4	e	4.5	d	1.18	bc	29.6	de	84.3		54.07	ab	660	c
PHY 332 W3FE	1203	c	42.0	cd	4.2	e	1.20	ab	33.3	a	83.5		54.45	a	655	c
DG H959 B3XF	1088	d	39.5	f	4.7	bc	1.19	ab	32.5	ab	82.6		54.33	ab	591	d
Mean	1288		42.1		4.6		1.17		31.1		83.1		53.89		694	
P>F	<0.0001		<0.0001		<0.0001		0.0039		0.0017		0.2158		0.0098		<0.0001	
LSD (P=.10)	78.79		0.811		0.164		0.035		1.561		NS		0.9486		40.37	
STD DEV	107.87		1.73		0.31		0.00		1.64		1.13		0.91		57.86	
CV%	8.38		4.10		6.87		0.30		5.27		1.36		1.68		8.34	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 15. Jackson County RACE Trial, 2021

Cooperator: Brent Batchelder

Michael Hiller - Jackson County Extension Agent, Agriculture and Natural Resources

Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac)¹	
DP 2012 B3XF	1178	a	44.33	b	5.0	b	1.17	bcd	29.4	c	83.3	a	52.35	cd	617	a
PHY 400 W3FE	1161	a	47.1	a	5.1	b	1.15	def	30.7	b	84.1	a	52.42	bcd	609	a
NG 4936 B3XF	1128	b	42.47	c	4.9	b	1.16	cde	29.4	c	84.0	a	53.93	ab	609	a
NG 5150 B3XF	1223	a	46.47	a	5.4	a	1.12	f	28.2	d	82.2	b	49.40	f	604	a
DP 2020 B3XF	1112	b	42.87	c	4.8	c	1.20	a	30.8	ab	83.4	a	54.22	a	603	a
ST 5091 B3XF	1047	d	46.77	a	5.0	b	1.13	ef	27.5	d	82.1	b	52.12	cd	546	b
DG 3402 B3XF	998	ef	44.63	b	5.0	b	1.19	ab	31.1	ab	83.8	a	53.42	abc	533	b
FM 2398 GLTP	1053	c	47.47	a	5.5	a	1.14	def	29.5	c	84.2	a	50.45	ef	531	b
PHY 332 W3FE	997	ef	44.47	b	5.0	b	1.18	abc	31.8	a	83.3	a	52.70	a-d	526	b
DG H959 B3XF	968	f	43.1	c	5.1	b	1.19	ab	31.3	ab	83.9	a	51.87	de	502	b
Mean	1087		44.967		5.1		1.16		30.0		83.4		52.29		568	
P>F	0.0002		0.0001		0.0001		0.001		0.0001		0.0157		0.0008		0.0019	
LSD (P=.10)	77.95		1.078		0.1808		0.0304		1.021		1.014		1.5203		48.3	
STD DEV	55.05		0.762		0.1277		0.0215		0.721		0.716		1.0737		34.1	
CV%	5.07		1.69		2.51		1.85		2.4		0.86		2.05		6.01	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 16. Wharton County RACE Trial - 2021

Cooperator: Michael Beard

**Corrie Bowen, County Extension Agent, Kate Harrell, Extension Agent- IPM
Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station**

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DP 2020 B3XF	1299	a	45.5	abc	4.6	d	1.18	abc	28.1	bc	82.8	ab	53.88	a	700	a
NG 4936 B3XF	1199	b	41.5	e	4.7	cd	1.17	abc	28.3	bc	82.9	ab	53.83	a	646	b
PHY 400 W3FE	1194	b	47.1	a	4.6	d	1.14	de	29.6	a	82.2	bc	53.83	a	643	b
DP 2012 B3XF	1189	bc	43.6	cde	4.7	cd	1.19	a	29.2	ab	83.3	a	53.95	a	641	bc
DG 3402 B3XF	1171	bc	47.0	ab	4.8	bc	1.16	cd	28.5	bc	82.1	bc	53.80	a	630	bc
NG 5150 B3XF	1168	bc	44.6	bcd	4.9	b	1.16	bcd	28.3	bc	82.3	bc	53.03	a	619	bc
ST 5091 B3XF	1103	cd	44.6	bcd	4.6	d	1.16	cd	27.5	c	81.5	c	53.77	a	593	cd
FM 2398 GLTP	1154	bcd	45.6	abc	5.2	a	1.13	e	27.5	c	81.7	c	50.73	b	586	d
PHY 332 W3FE	1078	d	43.6	cde	4.5	d	1.18	ab	29.2	ab	82.0	bc	53.88	a	581	d
DG H959 B3XF	984	e	42.2	de	5.0	b	1.16	bcd	28.8	ab	82.0	bc	53.02	a	522	e
Mean	1154		44.57		4.8		1.16		28.5		82.3		53.37		616	
P>F	0.0011		0.0114		0.0001		0.006		0.0584		0.0706		0.0011		0.0008	
LSD (P=.10)	87.87		2.437		0.1664		0.0209		1.148		0.918		1.0362		49.2	
STD DEV	62.06		1.721		0.1175		0.0147		0.811		0.648		0.7319		34.8	
CV%	5.38		3.86		2.47		1.27		2.85		0.79		1.37		5.64	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 17. Colorado County RACE Trial, 2021
Cooperator: Mahalite Farms
Laramie Naumann, County Extension Agent
Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DP 2012 B3XF	1750	a	40.2	cd	4.6	b	1.23	b	30.4	cd	84.5	ab	54.2	a	949	a
PHY 400 W3FE	1717	a	42.1	b	4.3	cd	1.21	bc	32.7	ab	84.7	ab	54.45	a	935	a
DP 2020 B3XF	1672	ab	39.3	de	4.53	bc	1.22	b	29.7	d	83.9	ab	54.05	a	903	ab
ST 5091 B3XF	1631	bc	40.3	cd	4.13	d	1.17	d	29.1	d	81.8	c	54.08	a	882	bc
DG 3402 B3XF	1583	cd	39.5	de	4.43	bc	1.22	b	32.0	abc	84.2	ab	54.45	a	862	bc
NG 5150 B3XF	1574	cd	40.8	c	4.57	bc	1.22	b	30.8	bc	83.9	ab	54.25	a	854	cd
FM 2398 GLTP	1620	bc	43.4	a	5.27	a	1.19	cd	30.4	cd	84.5	ab	52.08	b	843	cd
PHY 332 W3FE	1549	de	38.7	e	3.73	e	1.22	b	33.3	a	83.6	b	54.43	a	843	cd
NG 4936 B3XF	1539	ef	38.6	e	4.3	cd	1.23	ab	30.6	cd	84.4	ab	54.2	a	834	de
DG H959 B3XF	1478	f	37.4	f	4.7	b	1.26	a	32.2	abc	84.7	a	54.41	a	804	e
Mean	1611		40.063		4.5		1.22		31.1		84.0		54.06		871	
P>F	0.0003		0.0001		0.0001		0.0026		0.0461		0.0103		0.0115		0.0009	
LSD (P=.10)	79.67		1.043		0.289		0.027		2.098		1.112		0.9334		47.6	
STD DEV	56.27		0.737		0.204		0.0191		1.482		0.785		0.6593		33.6	
CV%	3.49		1.84		4.58		1.57		4.76		0.93		1.22		3.86	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.
 DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 18. Burleson County RACE Trial, 2021¹
Texas A&M AgriLife Research and Extension Center, Snook, Texas
Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ²	
PHY 400 W3FE	1925	a	43.3	b	3.9	e	1.23	cd	33.8	a	84.0	abc	54.51	a	1049	a
DP 2020 B3XF	1892	ab	41.8	c	4.4	bc	1.25	bc	31.3	bcd	83.3	bcd	54.34	a	1028	a
ST 5091 B3XF	1858	ab	43.4	b	4.2	d	1.21	d	30.1	d	83.6	bc	54.16	a	1006	a
DG 3615 B3XF	1800	a-	41.6	c	4.4	bc	1.21	d	32.6	ab	83.8	abc	54.36	a	979	a
NG 5150 B3XF	1789	a-	41.1	cd	4.5	b	1.21	d	31.1	bcd	83.7	abc	54.24	a	970	a
PHY 332 W3FE	1747	b-	40.4	de	3.8	e	1.25	bc	32.6	ab	83.9	abc	54.46	a	952	b
NG 4936 B3XF	1728	cd	40.1	de	4.3	cd	1.21	d	30.3	cd	84.1	ab	54.23	a	937	c
DP 1646 B2XF	1697	de	44.5	a	4.4	bc	1.29	a	30.9	cd	83.2	cd	54.26	a	921	d
DG H959 B3XF	1637	e	39.6	e	4.5	bc	1.27	ab	33.9	a	82.7	d	54.39	a	890	e
FM 2398 GLTP	1689	de	44.8	a	5.0	a	1.20	d	31.8	bc	84.4	a	52.54	b	888	f
Mean	1776		42.1		4.3		1.23		31.8		83.6		54.15		962	
P>F	0.0414		0.0001		0.0001		0.0002		0.0013		0.0631		0.0001		0.0207	
LSD (P=.10)	147.48		1.059		0.1935		0.0306		1.544		0.84		0.4575		80.3	
STD DEV	122.45		0.879		0.1606		0.0254		1.282		0.698		0.3799		66.7	
CV%	6.89		2.09		3.7		2.06		4.03		0.83		0.7		6.94	

¹ Indicates the location was irrigated

² Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 19. Medina County RACE Trial, 2021¹

Cooperator: David Kriewald

Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ²	
ST 5091 B3XF	2018	a	41.15	a	4.5	ab	1.23		31.3	bc	85.6		54.40	bc	1098	a
DG 3615 B3XF	1906	ab	39.3	a-d	4.6	ab	1.22		32.0	ab	84.8		54.43	ab	1037	ab
DP 1646 B2XF	1846	abc	39.25	a-d	4.4	abc	1.30		30.5	cd	85.0		54.28	cd	1002	abc
NG 4936 B3XF	1837	abc	39.75	abc	4.5	ab	1.23		30.0	d	83.8		54.13	d	994	abc
NG 5150 B3XF	1798	abc	37.35	cde	4.3	bc	1.24		29.6	d	84.3		54.13	d	973	bcd
DP 2020 B3XF	1694	bcd	37.4	cde	4.3	bc	1.29		31.6	bc	86.2		54.55	ab	924	b-e
DG H959 B3XF	1651	cd	35.85	e	4.4	bc	1.27		32.1	ab	85.8		54.50	ab	900	cde
PHY 400 W3FE	1733	bcd	38.4	bc	3.5	d	1.24		32.2	ab	84.5		49.45	e	857	de
PHY 332 W3FE	1518	d	37.05	de	4.0	c	1.27		32.9	a	85.3		54.58	a	828	e
FM 2398 GLTP	1514	d	40.65	ab	4.8	a	1.21		32.1	ab	85.0		54.43	ab	824	e
Mean	1751		38.615		4.3		1.25		31.4		85.0		53.89		944	
P>F	0.0487		0.0553		0.0099		0.0108		0.0093		0.1881		0.0001		0.032	
LSD (P=.10)	235.18		2.514		0.4087		0.0353		1.178		1.415		0.1668		124.2	
STD DEV	128.3		1.372		0.223		0.0193		0.643		0.772		0.091		67.8	
CV%	7.33		3.55		5.17		1.55		2.05		0.91		0.17		7.18	

¹ Indicates the location was irrigated

² Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 20. Williamson County RACE Trial, 2021
Cooperator: Rick, Tim and Adam Kruger
Gary Pastushok, County Extension Agent
Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 400 W3FE	1460	a	45.03		4.4	cd	1.11	bcd	27.9	b	81.5	bc	53.25		778	
PHY 332 W3FE	1347	ab	40.97		4.3	cde	1.14	ab	28.0	b	82.6	b	53.82		725	
DG 3402 B3XF	1248	bc	42.73		4.0	f	1.12	bc	27.7	bc	82.0	bc	53.45		667	
NG 5150 B3XF	1272	abc	44.1		4.1	ef	1.12	bcd	26.7	bcd	81.9	bc	52.07		666	
DG H959 B3XF	1232	bc	43.27		4.5	c	1.10	cd	28.0	b	81.3	c	53.02		653	
ST 4550 GLTP	1201	bc	44.03		4.3	cde	1.09	d	29.5	a	81.6	bc	52.75		633	
DP 2020 B3XF	1223	bc	40.87		4.4	cd	1.14	ab	25.7	d	81.9	bc	50.85		621	
ST 4993 B3XF	1214	bc	41.07		5.2	a	1.10	cd	29.8	a	83.8	a	50.58		614	
NG 4936 B3XF	1162	bc	43.03		4.2	de	1.15	a	26.3	cd	82.1	bc	52.45		611	
DP 1646 B2XF	1156	bc	41.47		4.7	de	1.16	a	26.2	cd	82.2	bc	52.42		607	
Mean	1252		42.7		4.4		1.12		27.6		82.1		52.47		658	
P>F	0.2564		0.9342		0.0001		0.0131		0.0007		0.0538		0.3718		0.2258	
LSD (P=.10)	189.39		6.022		0.23		0.0322		1.379		1.106		2.4075		111.8	
STD DEV	133.77		4.253		0.162		0.0227		0.974		0.781		1.7004		78.9	
CV%	10.69		9.97		3.68		2.02		3.53		0.95		3.24		12.01	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.
 DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 21. Milam County RACE Trial, 2021
Cooperator: Jay Beckhusen
Floyd Ingram, County Extension Agent
Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
ST 4993 B3XF	1382	a	41.57	bc	4.8	a	1.13		32.0		83.7		53.82		745	a
NG 4936 B3XF	1361	a	40.8	cd	4.3	bc	1.16		30.2		83.5		54.07		735	a
DP 1646 B2XF	1334	a	43.5	a	4.6	ab	1.17		29.4		83.5		54.00		721	a
NG 5150 B3XF	1331	a	42.43	ab	4.6	ab	1.16		30.1		83.7		54.03		719	a
DG 3402 B3XF	1257	a	40.8	cd	4.2	c	1.16		31.6		83.9		54.28		683	a
ST 4550 GLTP	1204	a	40.67	cd	4.4	bc	1.17		30.5		84.7		54.22		653	a
DP 2020 B3XF	1169	a	39.5	de	4.3	c	1.21		29.8		83.8		54.08		632	a
DG H959 B3XF	897	b	38.7	e	4.2	c	1.18		32.5		83.6		54.45		488	b
ST 4993 B3XF	1382	a	41.57	bc	4.8	a	1.13		32.0		83.7		53.82		745	a
NG 4936 B3XF	1361	a	40.8	cd	4.3	bc	1.16		30.2		83.5		54.07		735	a
Mean	1242		40.996		4.4		1.17		30.8		83.8		54.12		672	
DP>F	0.0619		0.002		0.0185		0.1344		0.2846		0.782		0.5135		0.0784	
LSD (P=.10)	246.01		1.534		0.294		0.0399		2.39		1.28		0.5007		135.9	
STD DEV	171.06		1.067		0.205		0.0277		1.662		0.89		0.3481		94.5	
CV%	13.78		2.6		4.63		2.38		5.4		1.06		0.64		14.06	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.
 DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 22. Navarro County RACE Trial, 2021
Cooperator: Reed Farms
Andrew Lewis, County Extension Agent
Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 332 W3FE	1164	a	40.73	abc	4.0		1.15		29.5	cd	82.8		53.93		628	a
PHY 400 W3FE	1150	a	39.6	abc	3.9		1.17		31.4	ab	82.4		54.17		623	a
ST 4550 GLTP	1076	ab	42.1	a	4.4		1.13		32.9	a	83.4		54.13		582	ab
ST 4993 B3XF	996	bc	41.63	ab	4.4		1.12		31.0	bc	83.1		53.73		535	bc
NG 4936 B3XF	942	bc	38.93	abc	4.2		1.16		28.3	d	82.1		53.85		507	bc
DG 3402 B3XF	945	bc	38.93	abc	4.0		1.14		28.8	d	82.1		53.55		506	bc
DP 1646 B2XF	936	bc	39.23	abc	4.0		1.17		28.7	d	81.9		53.87		504	bc
NG 5150 B3XF	926	c	38.47	bc	4.1		1.17		29.3	cd	83.1		54.07		501	c
DG H959 B3XF	919	c	38.23	c	3.8		1.15		30.1	bcd	82.9		54.03		497	c
DP 2020 B3XF	864	c	38.47	bc	4.1		1.17		28.5	d	82.8		54.00		467	c
Mean	992		39.633		4.1		1.15		29.9		82.7		53.93		535	
P>F	0.0219		0.45		0.1256		0.1304		0.0074		0.8873		0.6454		0.0201	
LSD (P=.10)	145.12		3.322		0.3587		0.0341		1.885		1.859		0.5312		78.44	
STD DEV	102.49		2.346		0.2533		0.0241		1.332		1.313		0.3752		55.4	
CV%	10.33		5.92		6.2		2.09		4.46		1.59		0.7		10.36	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.
 DG= Dyna-Gro, DP=DeltaPine, FM=FiberMax, NG=NexGen, PHY=Phytogen, ST= Stoneville.

Table 23. Cooper County RACE Trial, 2021^{1,2}

Cooperator: Pat Pilgrim

David Drake, Extension Agent-IPM

Dale A. Mott, Ben McKnight - Texas A&M AgriLife Extension, College Station

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac)²	
Yield data For this Location Is expected Soon																
Mean																
P>F																
LSD (P=.10)																
STD DEV																
CV%																

¹ Indicates the location was irrigated

² Did suffer some early season Dicamba herbicide injury on the Enlist varieties which most likely had a negative effect on yield.

³ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

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

Table 24. Lower Rio Grande Valley Monster Cotton Variety Trial, 2021

Cooperator: Texas AgriScience LLC

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

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PX 1140A383-04	1612	a	41.8	a-d	4.9	c-i	1.20	bcd	35.5	b	84.5	a-d	53.85	a-d	868	a
PX 1150A450-04	1525	ab	40.5	a-e	4.9	c-j	1.14	h-o	34.0	c-h	84.5	a-d	54.29	ab	828	ab
PX 4B08 W3FE	1529	ab	41.9	abc	4.9	c-i	1.14	i-o	33.0	h-l	83.6	d-k	53.33	a-f	815	abc
PHY 400 W3FE	1452	abc	41.3	a-e	4.7	h-l	1.18	c-g	33.4	f-j	83.7	d-j	54.33	ab	789	a-d
PHY 332 W3FE	1370	bcd	40.2	c-f	4.6	j-m	1.20	abc	33.3	g-k	83.5	g-k	54.40	a	745	b-e
PHY 390 W3FE	1337	b-e	39.6	c-h	4.6	klm	1.20	bcd	34.4	b-g	83.8	c-j	54.41	a	727	b-f
ST 4550 GLTP	1330	b-e	42.8	a	4.8	e-k	1.17	d-i	33.9	c-h	84.0	c-i	54.10	abc	721	b-g
PHY 545 W3FE	1339	b-e	41.1	a-e	4.6	i-m	1.11	no	32.9	h-m	84.3	a-h	53.11	c-g	712	b-g
DP 1948 B3XF	1295	cde	40.2	b-f	4.7	h-m	1.23	a	34.6	b-f	84.0	c-i	54.43	a	705	c-g
DP 2020 B3XF	1297	cde	41.0	a-e	4.7	f-l	1.18	b-e	31.7	n	83.5	f-k	53.69	a-e	698	c-g
PX 1150A453-04	1269	c-f	39.9	c-f	4.9	d-j	1.15	e-l	36.9	a	84.4	a-f	53.75	a-d	683	d-g
DP 2012 B3XF	1254	c-f	40.2	b-f	4.7	h-m	1.16	e-k	33.5	e-j	83.6	d-k	54.28	abc	681	d-h
DP 1646 B2XF	1233	c-f	41.5	a-e	4.4	m	1.21	ab	31.7	mn	83.3	ijk	54.36	a	670	d-h
PHY 480 W3FE	1208	d-g	39.4	d-h	4.9	d-j	1.13	k-o	32.2	k-n	84.4	a-e	53.99	a-d	652	e-i
PX 1140A385-04	1238	c-f	41.6	a-e	5.0	a-e	1.11	o	35.1	bc	85.0	ab	52.53	e-h	652	e-i
SSG UA 222	1224	def	37.5	gh	5.0	b-g	1.21	ab	32.3	j-n	84.2	a-h	53.19	b-g	651	e-i
PX 1150A452-04	1182	d-h	41.1	a-e	4.5	lm	1.12	l-o	34.7	b-e	84.1	b-i	53.79	a-d	635	e-i
FM 1953 GLTP	1180	d-h	37.9	fgh	4.7	g-l	1.17	c-h	33.3	g-k	83.5	f-k	53.71	a-d	634	e-i
PHY 443 W3FE	1183	d-h	42.6	ab	4.8	e-k	1.12	mn	33.3	g-k	84.3	a-g	53.35	a-f	630	e-i
SSG UA 107	1155	d-i	40.0	c-f	4.7	g-l	1.15	f-m	31.8	lmn	83.6	e-k	53.96	a-d	624	f-i
ST 5091 B3XF	1152	d-j	40.8	a-e	4.6	klm	1.13	j-o	31.3	n	83.4	h-k	54.05	a-d	623	f-i
PX 1130A329-04	1164	d-h	42.0	abc	5.1	a-d	1.18	b-e	34.9	bcd	83.3	ijk	52.14	g-j	608	f-j
PHY 360 W3FE	1140	e-j	40.0	c-f	4.7	i-m	1.15	g-n	31.4	n	82.9	jk	53.19	b-g	605	g-k
NG 3195 B3XF	1063	f-k	40.0	c-f	4.9	b-h	1.13	j-o	31.5	n	83.8	c-j	52.91	d-g	561	h-l
FM 1730 GLTP	986	g-l	39.2	e-h	4.6	klm	1.16	e-k	33.7	d-h	84.3	a-g	54.36	a	536	i-l
NG 4190 B3XF	980	h-l	40.5	a-e	4.7	e-k	1.16	e-l	32.3	i-n	84.0	c-i	54.29	ab	532	i-l
NG 4936 B3XF	905	kl	39.8	c-h	4.6	i-m	1.18	b-f	31.4	n	84.1	b-i	54.28	abc	491	j-m

Table 24 continued.

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
NG 5150 B3XF	928	jkl	41.2	a-e	5.0	b-f	1.16	e-j	31.7	mn	83.3	ijk	52.41	f-i	486	klm
ST 4993 B3XF	932	i-l	40.2	c-f	5.2	abc	1.13	i-o	34.3	b-g	85.0	a	51.26	ij	479	lm
DP 1840 B3XF	864	kl	37.4	h	4.6	klm	1.18	b-g	33.5	e-i	82.7	k	54.30	ab	469	lmn
FM 2398 GLTP	785	lm	40.9	a-e	5.3	a	1.15	e-l	31.8	lmn	84.6	abc	51.66	hij	403	mn
AMX 20B037 B3XF	693	m	39.9	c-g	5.2	ab	1.14	h-o	35.3	b	85.0	ab	51.13	j	355	n
Mean	1181		40.4		4.8		1.16		33.3		83.9		53.53		633	
P>F	<0.0001		0.0529		<0.0001		<0.0001		<0.0001		0.0017		<0.0001		<0.0001	
LSD (P=.10)	224.41		2.418		0.271		0.033		1.248		0.912		1.165		120.62	
STD DEV	292.89		2.22		0.29		0.04		1.72		0.88		1.28		161.52	
CV%	24.79		5.49		6.03		3.45		5.16		1.05		2.39		25.52	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

AMX= Americot Experimental, DP=DeltaPine, DPX = DeltaPine Experimental, DG= DynaGro, DGX= DynaGro Experimental, FM=FiberMax, NG=NexGen, PHY=Phytogen, PX = Phytogen Experimental, SSG= Seed Source Genetics, ST= Stoneville

Table 25. Corpus Christi Monster Cotton Variety Trial, 2021
Cooperator: Texas A&M AgriLife Research and Extension Center, Corpus Christi, Texas
Dr. Josh McGinty, Clinton Livingston, and Rudy Alaniz, Texas A&M AgriLife Extension Service - Corpus Christi

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PX 1140A383-04	2258	ab	41.3	f-k	4.8	b-i	1.19	i-o	34.6	bcd	84.6	a-d	54.46	a	1230	a
PX 4B08 W3FE	2282	a	43.7	a	4.8	b-i	1.12	t	32.4	k-p	83.7	d-k	52.93	cde	1209	ab
DP 2020 B3XF	2137	abc	39.5	nop	4.7	d-l	1.22	c-i	31.8	n-q	83.5	f-l	53.70	abc	1149	abc
PHY 332 W3FE	2100	abc	39.9	mno	4.4	m-r	1.22	c-i	34.0	c-g	83.9	b-j	54.46	a	1144	abc
ST 5091 B3XF	2084	a-d	42.4	b-e	4.5	i-q	1.20	g-	31.0	qr	83.5	f-l	54.23	a	1130	a-d
PHY 480 W3FE	2090	a-d	40.4	k-n	4.3	n-r	1.14	rst	32.9	i-m	84.1	b-j	53.66	abc	1122	a-e
PHY 390 W3FE	2055	a-e	40.5	j-m	4.5	j-q	1.20	g-	34.3	b-e	83.9	b-j	54.40	a	1118	a-e
NG 3195 B3XF	2091	a-d	42.4	bcd	5.0	a-e	1.17	m-	31.7	opq	84.1	b-i	53.10	bcd	1114	a-e
PX 1130A329-04	2144	abc	42.8	abc	5.2	a	1.19	h-n	33.9	c-h	84.5	a-e	51.65	f	1107	a-e
DGX 14330 GLTP	2014	a-e	39.4	nop	4.7	e-l	1.24	abc	32.8	i-n	83.8	c-j	54.39	a	1096	a-e
DG 1464 GLTP	2012	a-e	40.8	i-m	4.9	a-f	1.24	b-e	32.4	j-p	83.6	e-l	53.74	abc	1083	a-f
PX 1150A450-04	1974	a-f	41.4	e-k	4.5	j-q	1.14	rst	33.2	f-k	84.0	b-j	54.24	a	1071	a-f
PX 1150A453-04	1965	a-f	41.7	d-i	4.6	h-p	1.18	l-p	37.2	a	84.5	a-e	53.85	abc	1060	a-f
DP 1948 B3XF	1932	a-g	40.7	i-m	4.2	rs	1.27	a	33.1	g-k	83.3	g-l	54.48	a	1053	a-f
DG H959 B3XF	1884	a-i	38.4	qrs	4.6	h-p	1.22	c-h	33.4	e-j	82.7	l	54.34	a	1024	a-g
PX 1140A385-04	1904	a-h	42.9	abc	4.8	b-i	1.15	p-s	35.2	b	85.3	a	53.75	abc	1022	a-g
DGX 20P25C B3XF	1876	b-i	41.9	c-h	4.3	qrs	1.24	bcd	32.6	j-o	83.6	e-l	54.41	a	1021	a-h
DG 3402 B3XF	1898	a-h	40.6	j-m	5.1	abc	1.18	k-o	31.6	opq	84.0	b-j	53.09	bcd	1006	b-i
PHY 360 W3FE	1857	b-i	40.6	j-m	4.7	e-l	1.17	n-r	31.0	qr	82.8	l	54.16	ab	1006	b-i
SSG UA 222	1865	b-i	37.9	s	4.8	b-i	1.20	g-l	31.4	pqr	84.2	b-g	53.73	abc	1003	b-i
PHY 545 W3FE	1843	c-i	42.1	b-f	4.3	o-s	1.14	rst	34.0	c-g	84.1	b-h	54.31	a	1001	b-i
ST 4550 GLTP	1887	a-i	43.0	ab	4.9	b-h	1.17	n-r	32.9	h-l	84.3	b-f	53.14	bcd	998	b-i
FM 1953 GLTP	1825	c-i	38.0	rs	4.4	l-r	1.19	h-n	32.4	k-p	83.2	h-l	54.34	a	992	b-i
PHY 400 W3FE	1814	c-i	41.5	d-j	4.7	d-l	1.21	f-l	34.5	bcd	84.3	b-f	54.44	a	987	c-i
PHY 443 W3FE	1798	c-i	41.0	g-l	4.5	k-q	1.16	o-r	34.9	bc	84.3	b-f	54.39	a	978	c-i
DGX 18502631C	1798	c-i	40.0	lmn	4.7	d-l	1.19	j-o	32.9	h-l	83.5	f-l	53.74	abc	966	c-i
DP 2012 B3XF	1686	d-j	40.1	lmn	4.8	c-k	1.19	h-n	32.2	k-p	84.3	b-f	54.36	a	917	d-j

Table 25 continued.

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DGX 20P04D B3XF	1670	e-j	40.8	i-m	4.6	h-p	1.21	d-j	34.0	c-g	83.9	b-j	54.45	a	910	e-j
DP 1646 B2XF	1601	f-k	41.7	d-i	4.6	h-o	1.25	ab	31.5	opq	83.2	jkl	54.33	a	870	f-k
NG 5150 B3XF	1574	f-k	41.0	h-l	4.9	b-h	1.20	g-l	31.7	opq	83.2	h-l	53.14	bcd	832	g-l
DGX 20P861D	1503	h-	41.2	f-k	4.2	rs	1.23	b-f	32.0	l-q	84.5	a-e	54.44	a	818	g-m
ST 4993 B3XF	1530	g-l	41.5	d-j	4.9	a-g	1.15	qrs	34.2	b-f	84.7	ab	53.14	bcd	809	g-n
FM 1730 GLTP	1491	i-m	39.4	n-q	4.6	f-m	1.20	g-l	33.8	d-i	84.7	abc	53.88	abc	804	h-n
FM 2398 GLTP	1523	h-l	41.5	d-j	5.0	a-d	1.19	i-o	31.9	m-q	83.7	d-k	52.16	def	794	i-n
SSG UA 107	1367	j-m	38.6	p-s	4.6	g-n	1.21	f-k	32.8	i-n	84.1	b-h	53.81	abc	736	j-n
PX 1150A452-04	1254	kl	42.0	c-g	4.3	qrs	1.13	st	34.4	b-e	84.3	b-f	54.24	a	680	k-n
DG 3215 B3XF	1233	kl	38.9	o-r	4.0	s	1.21	e-k	30.4	r	83.2	i-l	54.24	a	669	k-n
DP 1840 B3XF	1223	kl	38.5	p-s	4.3	p-s	1.23	b-g	32.5	j-o	82.8	kl	54.39	a	665	k-n
NG 4936 B3XF	1149	lm	38.5	p-s	4.5	k-q	1.21	f-l	31.4	pqr	83.7	d-k	53.76	abc	620	lmn
AMX 20B037 B3XF	1166	lm	41.5	d-j	5.1	ab	1.16	o-r	34.7	bcd	85.3	a	51.90	ef	603	mn
NG 4190 B3XF	1117	m	41.4	d-k	4.6	h-p	1.19	j-o	31.6	opq	83.9	b-j	53.76	abc	596	n
Mean	1768		40.8		4.6		1.19		32.9		83.9		53.83		951	
P>F	<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
LSD (P=.10)	405.54		1.032		0.301		0.029		1.026		0.905		1.077		217.58	
STD DEV	436.55		1.65		0.38		0.04		1.61		0.90		1.12		235.90	
CV%	24.70		4.04		8.20		3.43		4.89		1.07		2.09		24.79	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

AMX= Americot Experimental, DP=DeltaPine, DPX = DeltaPine Experimental, DG= DynaGro, DGX= DynaGro Experimental, FM=FiberMax, NG=NexGen, PHY=Phytogen, PX = Phytogen Experimental, SSG= Seed Source Genetics, ST= Stoneville

Table 26. Mid-Coast Monster Cotton Variety Trial, 2021

Cooperator: Danny May

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

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

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 400 W3FE	1250	a	43.7	cde	4.7	e-i	1.13	f-i	31.4	c-g	83.0	c-h	53.54	a-f	670	a
DGX 14330 GLTP	1229	abc	40.7	mn	4.4	klm	1.16	c-f	30.5	f-k	82.7	e-k	54.08	ab	665	ab
PHY 480 W3FE	1235	ab	42.5	g-k	4.4	klm	1.12	g-k	31.3	c-g	83.7	a-d	53.74	a-e	664	ab
DG 1464 GLTP	1209	a-d	42.7	e-k	4.7	e-h	1.20	ab	31.4	c-g	81.2	l	54.18	ab	655	abc
DP 2012 B3XF	1207	a-d	42.4	ijk	4.6	f-k	1.13	f-j	29.4	klm	82.4	e-k	53.79	a-e	649	a-d
NG 4190 B3XF	1203	a-e	41.8	kl	4.7	d-g	1.13	f-j	29.7	i-m	82.8	d-j	53.88	a-d	648	a-d
DP 1646 B2XF	1175	a-e	43.1	d-j	4.5	g-k	1.22	a	30.8	f-j	82.9	d-h	54.20	ab	637	a-d
DP 2020 B3XF	1179	a-e	40.6	mn	4.6	f-k	1.17	cde	30.3	g-k	82.4	e-k	53.94	a-d	636	a-d
PHY 390 W3FE	1173	a-e	43.5	c-f	4.4	h-k	1.14	d-h	31.0	d-h	82.5	e-k	54.06	ab	635	a-d
DG 20P28B B3XF	1189	a-e	43.5	c-g	4.9	bcd	1.14	e-i	30.9	e-h	82.9	d-i	52.60	ghi	627	a-e
ST 5091 B3XF	1139	a-f	42.3	ijk	4.6	f-k	1.13	g-k	27.9	n	82.0	h-l	53.46	b-h	609	a-f
PHY 360 W3FE	1128	a-f	43.3	c-i	4.4	ijk	1.14	f-i	28.7	mn	81.8	jkl	53.74	a-e	606	a-f
PX 1130A329-04	1131	a-f	45.3	a	4.7	c-f	1.14	e-i	31.7	c-f	82.5	e-k	53.51	a-g	606	a-f
PX 4B08 W3FE	1134	a-f	45.4	a	4.7	e-i	1.09	lm	31.3	d-g	82.9	d-i	53.08	d-i	602	a-f
PX 1140A383-04	1104	a-g	43.4	c-h	4.2	lmn	1.17	bcd	33.8	a	83.2	c-f	54.39	a	601	a-f
PHY 443 W3FE	1090	a-g	43.7	cde	4.4	j-m	1.11	i-l	32.1	b-e	83.4	b-e	53.90	a-d	588	a-g
NG 5150 B3XF	1097	a-g	42.7	e-k	4.7	def	1.12	g-k	28.9	lmn	81.8	kl	52.70	f-i	578	b-g
ST 4550 GLTP	1092	a-g	44.2	bc	4.9	b-e	1.11	jkl	30.9	e-i	83.1	c-g	52.89	e-i	578	b-g
ST 4990 B3XF	1069	c-g	39.3	o	4.6	f-k	1.14	d-h	29.6	klm	82.8	d-k	53.90	a-d	576	b-g
PHY 332 W3FE	1054	d-g	41.3	lm	4.0	n	1.19	abc	32.2	bcd	81.9	jkl	54.31	ab	573	c-g
PX 1140A385-04	1067	c-g	44.7	ab	4.8	c-f	1.10	kl	34.2	a	84.4	a	53.48	a-h	571	c-g
NG 3195 B3XF	1057	d-g	42.5	h-k	4.7	e-i	1.12	h-k	29.9	h-l	83.3	cde	53.69	a-e	567	c-g
FM 2398 GLTP	1084	b-g	43.2	c-j	5.0	bc	1.13	g-k	29.9	h-l	82.2	g-l	51.60	jk	559	d-h
ST 4993 B3XF	1046	d-h	42.9	e-j	5.1	ab	1.13	g-k	33.1	ab	84.3	ab	51.55	jk	539	e-h
PX 1150A450-04	986	fgh	42.6	f-k	4.7	d-g	1.15	d-h	33.9	a	83.0	c-h	54.16	ab	534	fgh
DG H959 B3XF	979	fgh	40.5	mn	4.6	f-k	1.15	d-g	31.2	d-g	81.9	i-l	54.04	abc	529	fgh
AMX 20B037 B3XF	1041	e-h	43.3	c-i	5.3	a	1.12	g-k	32.5	bc	84.0	abc	50.76	k	529	fgh

Table 26 continued.

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
PHY 545 W3FE	958	ghi	43.6	c-f	4.8	c-f	1.09	lm	31.0	d-h	82.2	f-l	52.19	ij	500	ghi
NG 4936 B3XF	882	hi	39.9	no	4.7	d-g	1.14	e-i	29.0	lmn	83.0	d-h	53.68	a-e	473	hi
DG 3422 B3XF	888	hi	40.7	mn	4.4	i-l	1.11	i-l	29.6	j-m	83.2	c-f	53.14	c-h	473	hi
PX 1150A453-04	799	i	42.2	jkl	4.6	f-j	1.09	lm	32.1	b-e	82.6	e-k	52.91	e-i	423	i
PX 1150A452-04	794	i	43.9	bcd	4.2	mn	1.06	m	31.2	d-g	82.1	h-l	52.58	hi	417	i
Mean	1083		42.7		4.6		1.13		31.0		82.8		53.36		579	
P>F	<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
LSD (P=.10)	164.79		1.033		0.250		0.028		1.214		1.010		0.918		90.22	
STD DEV	174.51		1.68		0.33		0.04		1.76		1.05		1.10		96.78	
CV%	16.11		3.94		7.20		3.35		5.68		1.27		2.07		16.73	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

AMX= Americot Experimental, DP=DeltaPine, DPX = DeltaPine Experimental, DG= DynaGro, DGX= DynaGro Experimental, FM=FiberMax, NG=NexGen, PHY=Phytogen, PX = Phytogen Experimental, SSG= Seed Source Genetics, ST= Stoneville

Table 27. Upper Gulf Coast Monster Cotton Variety Trial, 2021

Cooperator: Dean Hansen

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

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
DGX 20P861D	1659	a	45.8	g-k	5.2	c-h	1.22	b	31.3	i-m	84.8	b-f	51.95	b-g	862	a
PHY 400 W3FE	1423	ab	45.8	g-k	5.1	d-i	1.19	b-e	33.9	b-g	85.1	a-d	52.07	b-f	741	ab
PHY 480 W3FE	1417	ab	44.4	klm	5.4	bc	1.17	d-i	33.0	f-i	85.0	a-d	50.83	f-i	718	ab
PX 1140A383-04	1371	a-d	46.5	e-j	5.4	bcd	1.20	bc	34.1	b-f	85.9	a	51.12	e-i	700	abc
DG 20P28B B3XF	1385	abc	48.9	ab	5.5	ab	1.16	f-k	32.5	g-j	84.5	c-h	50.45	hi	699	abc
PX 1140A385-04	1360	a-d	47.5	a-h	5.7	a	1.13	kl	34.7	abc	85.7	ab	50.43	hi	686	bc
PHY 360 W3FE	1340	a-e	46.7	c-i	5.2	c-g	1.15	ijk	30.5	lm	83.4	i-l	51.07	e-i	685	b-e
PHY 390 W3FE	1290	b-f	47.1	b-i	5.1	d-i	1.16	e-j	32.1	h-k	85.0	a-e	52.46	bcd	679	bcd
PHY 443 W3FE	1303	b-f	47.6	a-g	5.2	cde	1.15	ijk	34.5	a-d	85.2	abc	51.55	c-h	672	b-e
DP 2012 B3XF	1242	b-g	43.8	l	4.9	ghi	1.19	bcd	31.2	j-m	83.6	i-l	53.06	b	658	b-e
NG 4190 B3XF	1263	b-g	46.6	c-i	5.3	b-e	1.17	c-i	30.7	lm	83.9	f-l	51.22	d-i	645	b-f
PHY 332 W3FE	1169	b-h	44.4	klm	4.9	i	1.20	bc	33.0	f-i	83.4	i-l	54.38	a	636	b-f
PX 1150A453-04	1222	b-g	48.3	a-d	5.5	ab	1.15	ijk	35.7	a	84.1	e-j	50.76	ghi	623	b-g
PX 1130A329-04	1217	b-g	48.5	abc	5.5	ab	1.17	d-i	33.2	d-h	84.7	c-f	50.46	hi	614	b-g
PX 4B08 W3FE	1214	b-g	47.9	a-f	5.4	bcd	1.11	l	31.8	i-l	83.6	i-l	50.43	hi	613	b-h
PX 1150A450-04	1171	b-h	45.4	i-l	5.3	b-e	1.17	d-i	34.1	b-f	85.0	a-e	51.02	e-i	598	b-i
ST 4550 GLTP	1171	b-h	48.1	a-f	5.5	ab	1.15	h-k	33.2	e-h	84.8	b-f	50.45	hi	591	b-i
PX 1150A452-04	1147	b-h	49.1	a	5.1	e-i	1.11	l	33.6	c-g	84.0	f-k	51.09	e-i	586	c-i
ST 4990 B3XF	1082	c-i	41.8	n	5.0	f-i	1.18	c-f	31.5	jkl	84.8	c-f	52.53	bc	568	c-j
NG 3195 B3XF	1084	c-i	45.8	h-k	5.2	c-f	1.15	g-k	31.9	i-l	84.3	d-i	51.50	c-h	559	c-j
DP 2020 B3XF	1050	d-j	45.4	i-l	4.9	i	1.19	b-e	30.7	lm	83.2	jkl	52.63	bc	552	c-j
PHY 545 W3FE	1035	e-j	48.2	a-e	5.2	c-f	1.15	ijk	33.2	e-h	85.2	abc	51.54	c-h	534	d-k
AMX 20B037 B3XF	982	e-j	46.5	c-j	5.0	e-i	1.15	h-k	34.7	a-e	85.0	a-f	52.43	b-e	518	c-k
DG H959 B3XF	999	f-j	42.6	mn	5.3	b-e	1.17	c-i	33.4	c-h	84.3	c-i	51.47	c-h	515	e-k
ST 5091 B3XF	964	g-j	46.7	d-i	5.1	e-i	1.16	g-k	30.0	m	83.1	kl	52.20	b-e	502	f-k
NG 5150 B3XF	953	g-j	45.5	ijk	5.2	c-f	1.18	c-h	30.8	klm	83.6	h-l	52.05	b-e	495	f-k
ST 4993 B3XF	956	g-j	48.2	a-e	5.7	a	1.14	jk	33.4	d-g	84.5	c-g	50.15	i	480	g-k

Table 27 continued.

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/Ac) ¹	
NG 4936 B3XF	860	hij	41.8	n	5.1	e-i	1.20	bc	31.1	j-m	84.2	d-j	52.67	bc	453	h-k
DP 1851 B3XF	842	ij	46.4	f-i	5.1	e-i	1.18	c-g	35.0	ab	85.2	abc	52.64	bc	443	ijk
DG 3422 B3XF	794	ij	44.7	jkl	5.0	e-i	1.16	g-k	31.2	j-m	83.7	g-l	52.89	b	419	jk
DP 1646 B2XF	800	ij	46.4	e-j	5.2	c-g	1.26	a	30.7	lm	83.0	l	52.05	b-f	417	jk
FM 2398 GLTP	747	j	47.1	b-i	5.7	a	1.16	f-k	31.1	j-m	84.8	b-f	50.33	hi	376	k
Mean	1141		46.3		5.2		1.16		32.6		84.4		51.62		588	
P>F	0.0003		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		0.0006	
LSD (P=.10)	334.44		1.717		0.237		0.030		1.283		1.011		1.190		172.74	
STD DEV	294.90		2.28		0.28		0.03		1.79		0.99		1.33		150.86	
CV%	25.86		4.93		5.34		2.98		5.49		1.18		2.58		25.64	

¹ Lint values were calculated using the 2021 Upland Cotton Loan Valuation Model from Cotton Incorporated.

AMX= Americot Experimental, DP=DeltaPine, DPX = DeltaPine Experimental, DG= DynaGro, DGX= DynaGro Experimental, FM=FiberMax, NG=NexGen, PHY=Phytogen, PX = Phytogen Experimental, SSG= Seed Source Genetics, ST= Stoneville



<http://cotton.tamu.edu>

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