

# **TEXAS ROLLING PLAINS REPLICATED AGRONOMIC COTTON EVALUATION (RACE) TRIALS | 2017**



# TEXAS ROLLING PLAINS RACE TRIALS | 2017

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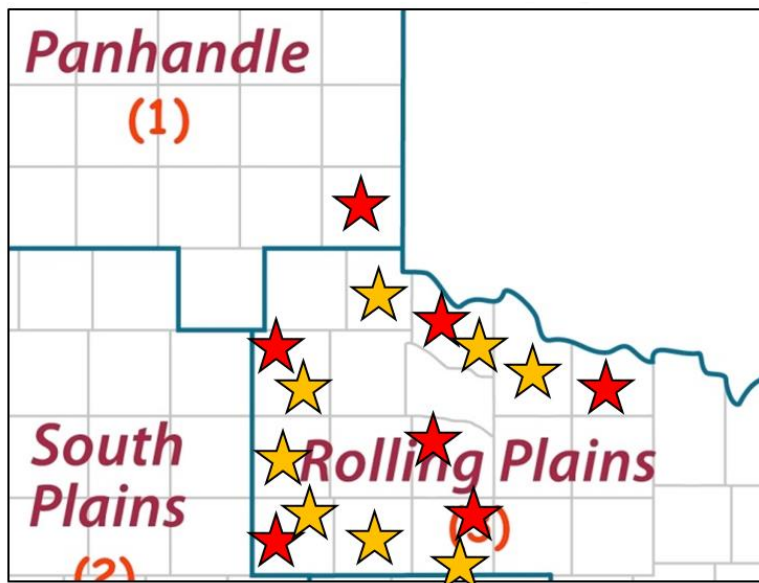
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## 2017 HIGHLIGHT

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 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. To assist Texas cotton producers in remaining competitive in the Rolling Plains, the Texas A&M AgriLife Extension Service Agronomy program has been conducting, large plot, on-farm, replicated variety trials since 2012. This approach provides a good foundation of information that can be utilized to assist farmers with the variety selection process. The results from the RACE trial are summarized in the Table 7 – Table 15.



**Figure 1. The 2017 RACE trial locations in the Rolling Plains of Texas. Red stars represent irrigated trials, while orange stars represent dryland trials.**

Planted acres in the Rolling Plains increased 15% compared to the average planted acres in 2015 and 2016. In-season precipitation during May to October varied widely across the trial sites from 16.7 in to 8.7 in. Overall, moisture received in 2017 moisture was two to six inches less compared to 2016. Therefore, many producers in the region suffered from lack of moisture in late May to June for planting. Storms during the last week of September flooded many cotton fields, which accelerated the infestation of late bacterial blight. Although the blight had minimum negative effects on final yields, some producers might have experienced difficulties at harvest due to scattered dead cotton plants. The first killing frost was one week earlier (27 October 2017) than the average first killing frost in the region, which was detrimental to the late-planted cotton. Despite the low moisture and early frost, cotton yields remained high in the Rolling Plains of Texas. There was minor herbicide damage at the Hardeman irrigated site and major herbicide damage at the Wichita irrigated site in July and August. However, both trials seemed to recover by the time of harvesting. Stand establishment was poor at the Childress dryland, Dickens dryland, and Stonewall dryland trials due to lack of moisture. Overall, planting date was critical, especially to dryland cotton production, to achieve high yield in the 2017 cotton growing season.

Tables 7-15 include the 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. This method consistently produces higher lint turnout percentages than would be common in a commercial gin. Consequently, higher turnouts equate to lint yields which are generally higher than area-wide commercial yields. 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. Values with same lower case letters (for example, a, b, and c) within a column

are not statistically different at a 90% confidence level. Loan values were calculated using the 2017 Upland Cotton Loan Valuation Model from Cotton Incorporated. Base loan value was set in 52 cents per pound.

### **Resources for Texas cotton production**

- General cotton production information for new cotton growers:  
<http://cotton.tamu.edu/index.html>
- Cotton variety trial results: <http://varietytesting.tamu.edu/cotton/>
- Cotton trial update in the Rolling Plains of Texas: Rolling Plains Agronomy Program Blog (<https://agrilife.org/txrollingplainsagronomy/>)

**Table 1. Variety characteristics/Highlights**

Below are the cotton variety characteristics and highlights that were included in the 2017 RACE trials and other common varieties planted in these regions. These cotton variety descriptions were provided by individual seed company representatives or publicly available information.

<b>Variety</b>	<b>Characteristics</b>
<b>Deltapine 1044B2RF</b>	Mid-full maturity, Semi-smooth leaf, Fit on dryland and limited irrigation, Very good Verticillium and Bacterial Blight resistance
<b>Deltapine 1219B2RF</b>	Early maturity variety, Semi-smooth leaf, Medium-tall plant height Broadly adapted across Texas
<b>Deltapine 1321B2RF</b>	Early/mid maturity, Medium-tall plant height Widely adapted to short-season environments and management
<b>Deltapine 1522B2XF</b>	Earl-Mid maturity, Semi-smooth, Tall height
<b>Deltapine 1549B2XF</b>	Full- season maturity, Semi-smooth Leaf Excellent performance under dryland and limited water situations
<b>Deltapine 1646B2XF</b>	Mid-full maturity, smooth leaf, medium –tall plant height
<b>FiberMax 1830GLT</b>	Early/medium maturity, TwinLink two-gene Bt protection against worm pests, Liberty and glyphosate herbicide-tolerant
<b>FiberMax 1900GLT</b>	Early/medium maturity, Widely adapted to full and limited irrigation production
<b>FiberMax 2007GLT</b>	Early-medium maturity, semi-smooth leaf, medium plant height
<b>FiberMax 2334GLT</b>	Medium maturity, Full tolerance to both Liberty and glyphosate herbicides, Moderate growth habit that can mature later in high-moisture and late-planted situations
<b>NexGen 3406B2XF</b>	Early-medium maturity, Semi-smooth leaf, medium plant height
<b>NexGen 3699B2XF</b>	Early-medium maturity, smooth leaf, medium-tall plant height
<b>NexGen 4545B2XF</b>	Medium maturity, Smooth leaf, Tall plant height Verticillium Wilt Tolerance
<b>NexGen 4689B2XF</b>	Medium maturity, smooth leaf, tall plant
<b>Phytogen 243WRF</b>	Early maturity, Semi-smooth leaf, Short-medium height
<b>Phytogen 300W3FE</b>	Early-mid maturity, semi-smooth leaf
<b>Phytogen 333WRF</b>	Early maturity, Hairy leaf, Dryland or irrigated conditions
<b>Phytogen 339WRF</b>	Indeterminate, very early maturing, Semi-smooth leaf, Tall plant height
<b>Phytogen 444WRF</b>	Mid-maturity, Smooth leaf and tighter in burr than other phytogen varieties
<b>Phytogen 490W3FE</b>	Mid-maturity, tall plant height, semi-smooth leaf
<b>Phytogen 499WRF</b>	Mid-maturity variety, Aggressive growth, Suited for dryland and irrigated fields, Larger seed size ~ 4,000 – 4,200 seed/lb.
<b>Stoneville 4747GLB2</b>	Early/Medium maturity, Full tolerance to both Liberty herbicide and glyphosate, Two Bt genes for effective management of major worm pests
<b>Stoneville 4946GLB2</b>	Medium maturity, Root-knot nematode tolerance, semi smooth leaf, medium height
<b>Stoneville 5517GLTP</b>	Early maturity, resistant to bacterial blight, medium height, smooth leaf

**Table 2. FIBER EVALUATION**

<b>Parameters</b>	<b>Definition</b>	<b>Degrees</b>
<b>Micronaire (Mic)</b>	Micronaire is a measurement of both fiber fineness and maturity.	Premium range: 3.7-4.2 Base range: 3.5-3.6 or 4.3-4.9 Discount range: 0-3.4 or >5.0
<b>Fiber length</b>	The average length of the longer half of the fibers.	Extra-long: >1.26 Long: 1.11-1.26 Medium: 0.99-1.10 Short: <0.99
<b>Fiber strength</b>	Fiber strength as measured on the High Volume Instrument is the force (in grams) required to break a bundle of fibers one - tex unit in mass.	Very strong: > 31 Strong: 29-30 Average: 26-28 Intermediate: 24-25 Weak: < 23
<b>Length uniformity (unif)</b>	Length uniformity index is the ratio between the "mean length" of the fibers and the "upper half mean length".	Very high: >85 High: 83-85 Intermediate: 80-82 Low: 77-79 Very low: <77

Source: "Classification of Upland Cotton" Adapted from Cotton Incorporated website (<http://www.cottoninc.com/fiber/quality/Classification-Of-Cotton/Classification-Upland-Cotton/>)

## BACKGROUND INFORMATION

**Table 3. Trial location, cooperators, planting date, harvesting date, plot size information of 2017 Texas A&M AgriLife Extension Service RACE trial**

County	Producer cooperators	County Extension Agents	Irri/dry	Planting date	Harvest date	Rows × width	Seeding Rate (seeds ac <sup>-1</sup> )	Seeds ft <sup>-1</sup>	Plot size (ac)
Childress	Cade Wyatt	Ryan Martin	D	6/15	12/14	8 rows × 40"	26000	2.0	0.51
Collingsworth	Rex Henard	Kenny Patterson	I	5/15	11/7	6 rows × 40"	45000	3.4	0.54
Dickens	Gary Myers	Thomas Boyle	D	5/26	12/22	6 rows × 40"	26000	2.0	1.15
Hardeman	TAMU	Justin Gilliam	D	6/28	NA	4 rows × 40"	52272	4.0	NA
Hardeman	TAMU	Justin Gilliam	I	5/25	11/6	4 rows × 40"	52272	4.0	0.16
Haskell	Steve Mcguire	Jason Westbrook	I	5/31	11/16	10 rows × 30"	42471	2.4	0.67
Haskell	Kregg Sanders	Jason Westbrook	D	6/17	1/13	6 rows × 40"	32670	2.5	0.75
Kent	Guy Walker	Brandon Cave	D	6/18	NA	8 rows × 40"	-	-	NA
Kent	Guy Walker	Brandon Cave	I	6/18	NA	8 rows × 40"	-	-	NA
Knox	TAMU	Jerry Coplen	I	6/15	NA	8 rows × 40"	-	-	NA
Motley	Josh Lee	Ryan Martin	D	6/2	NA	1 rows × 40"	40000	-	NA
Motley	Josh Lee	Ryan Martin	I	5/31	NA	1 row × 40"	39000	-	NA
Stonewall	Billy Kirk Meador	Cody Myers	D	6/9	1/9	1 rows × 40"	30000	2.3	0.008
Wichita	Dwayne Peirce	David Graf	I	5/30	12/21	1 rows × 30"	45000	2.6	0.0006
Wilbarger	Donald Shoppa	Langdon Reagan	D	6/9	12/15	8 rows × 40"	23000	1.8	0.51

## BACKGROUND INFORMATION CONTD.

Table 4. Background information of 2017 Texas A&M AgriLife Extension RACE Trials in the Rolling Plains

County		Soil map unit name*/soil texture	Precipitation received during May to October, 2017 (in)**
Childress	Dryland	Carey loam/ very fine sandy loam, silt loam, or loam	15.2
Collingsworth	Irrigated	Springer-heatly-blown-out land complex, Sandy	15.2
Dickens	Dryland	Abilene clay loam/ loam, silt loam, clay loam, silty clay loam	8.7
Hardeman	Irrigated	Abilene clay loam/ loam, silt loam, clay loam, silty clay loam	12.9
Haskell	Irrigated	Abilene clay loam/ loam, silt loam, clay loam, silty clay loam	16.4
Haskell	Dryland	Abilene clay loam/ loam, silt loam, clay loam, silty clay loam	16.4
Stonewall	Dryland	Quinlan-Rough broken land complex/mixed loam	12.9
Wichita	Irrigated	Clairemont silt loam	16.7
Wilbarger	Dryland	Tiptom loam	12.9

\*Soil map unit name was obtained from web soil survey. Soil texture is a representative soil texture of the soil map unit in A horizon.

\*\*Precipitation during May to October was obtained from the nearest weather station.



## VARIETY RANKING

Table 5. Irrigated trials: Variety ranking based on lint value (\$/ac) in the Rolling Plains, 2017

Entry	Collingsworth	Haskell	Hardeman	Wichita	AVG ranking
PHY490W3FE	6	1	1	1	2.3
FM1830GLT	1	4	3	4	3.0
PHY300W3FE	3	2	6	2	3.3
DP1646B2XF	4	8	2	3	4.3
NG4689B2XF	5	5	5	7	5.5
NG3699B2XF	7	3	8	5	5.8
DP1549B2XF	8	6	4	6	6.0
ST5517GLTP	2	7	7	8	6.0

Table 6. Dryland trials: Variety ranking based on lint value (\$/ac) in the Rolling Plains, 2017

Entry	Childress	Dickens	Haskell	Stonewall	Wilbarger	AVG ranking
DP1646B2XF	3	4	2	7	1	3.4
FM2334GLT	5	3	4	4	3	3.8
NG4689B2XF	1	5	3	3	7	3.8
PHY444WRF	7	6	1	1	5	4.0
PHY490W3FE	4	1	6	8	4	4.6
ST5517GLTP	2	7	8	2	6	5.0
DP1549B2XF	6	2	5	6	8	5.4
NG4601B2XF	8	8	7	5	2	6.0

# ON-FARM RACE TRIAL RESULTS

Table 7. Childress County RACE trial (dryland), 2017

Cooperator: Cade Wyatt

County Extension Agent: Ryan Martin

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* (\$/acre)	
NG4689B2XF	781	a	0.34	-	2.67	a	1.11	d	30.4	a	80	a	49.0	a	383	a
ST5517GLTP	572	b	0.30	-	2.40	bcd	1.12	d	28.8	abc	78	de	45.8	b	262	b
DP1646B2XF	463	bc	0.32	-	2.63	ab	1.20	a	29.5	ab	80	ab	47.6	ab	220	bc
PHY490W3FE	400	bc	0.27	-	2.47	a-d	1.09	d	27.8	cd	79	abc	45.7	b	183	bc
DP1549B2XF	384	bc	0.28	-	2.23	d	1.05	e	26.2	d	76	e	41.4	c	160	cd
FM2334GLT	349	c	0.32	-	2.37	cd	1.16	b	27.8	cd	78	cd	47.6	ab	164	c
PHY444WRF	336	c	0.31	-	2.27	cd	1.15	bc	28.2	bc	79	bcd	46.5	b	156	cd
NG4601B2XF	141	d	0.29	-	2.50	abc	1.12	cd	28.8	abc	79	abc	47.4	ab	69	d
<b>Mean</b>	<b>428</b>		<b>0.30</b>		<b>2.44</b>		<b>1.12</b>		<b>28.4</b>		<b>79</b>		<b>46.4</b>		<b>200</b>	
<b>CV %</b>	<b>30.6</b>		<b>15.3</b>		<b>7.1</b>		<b>1.7</b>		<b>4.0</b>		<b>1.0</b>		<b>3.6</b>		<b>32.1</b>	
<b>P&gt;F</b>	<b>0.002</b>		<b>0.6295</b>		<b>0.0695</b>		<b>&lt;.0001</b>		<b>0.0195</b>		<b>0.0018</b>		<b>0.0032</b>		<b>0.0018</b>	
<b>STD DEV</b>	<b>188</b>		<b>0.02</b>		<b>0.16</b>		<b>0.04</b>		<b>1.26</b>		<b>1.17</b>		<b>2.28</b>		<b>93</b>	

Note: Poor establishment due to lack of moisture.

**Table 8. Collingsworth County RACE trial (irrigated), 2017****Cooperator: Rex Henard****County Extension Agent: Kenny Patterson**

<b>Variety</b>	<b>Lint (Lbs/ac)</b>		<b>Gin TO (%)</b>		<b>Mic</b>		<b>Fiber Length (inch)</b>		<b>Strength (g/tex)</b>		<b>Unif</b>		<b>Loan Value (¢/lb)</b>		<b>Lint Value* (\$/acre)</b>	
<b>FM1830GLT</b>	1569	-	0.38	-	3.57	-	1.14	-	30.2	-	79	-	53.5	-	842	-
<b>ST5517GLTP</b>	1515	-	0.38	-	3.43	-	1.17	-	31.0	-	79	-	54.7	-	832	-
<b>PHY300W3FE</b>	1426	-	0.33	-	3.70	-	1.16	-	31.9	-	81	-	56.5	-	806	-
<b>NG4689B2XF</b>	1399	-	0.34	-	3.57	-	1.11	-	33.6	-	80	-	53.8	-	762	-
<b>DP1646B2XF</b>	1367	-	0.35	-	3.60	-	1.22	-	30.8	-	80	-	56.2	-	768	-
<b>NG3699B2XF</b>	1299	-	0.32	-	3.63	-	1.20	-	31.2	-	81	-	55.9	-	727	-
<b>PHY490W3FE</b>	1284	-	0.32	-	3.90	-	1.17	-	30.9	-	81	-	56.7	-	728	-
<b>DP1549B2XF</b>	1246	-	0.31	-	3.50	-	1.15	-	31.2	-	80	-	54.4	-	685	-
<b>Mean</b>	<b>1388</b>		<b>0.34</b>		<b>3.61</b>		<b>1.16</b>		<b>31.4</b>		<b>80</b>		<b>55.2</b>		<b>769</b>	
<b>CV %</b>	<b>20.1</b>		<b>18.3</b>		<b>8.4</b>		<b>4.8</b>		<b>4.2</b>		<b>1.1</b>		<b>5.4</b>		<b>23.0</b>	
<b>P&gt;F</b>	<b>0.821</b>		<b>0.791</b>		<b>0.709</b>		<b>0.396</b>		<b>0.159</b>		<b>0.126</b>		<b>0.799</b>		<b>0.947</b>	
<b>STD DEV</b>	<b>113</b>		<b>0.03</b>		<b>0.14</b>		<b>0.03</b>		<b>1.04</b>		<b>0.71</b>		<b>1.26</b>		<b>55</b>	

**Table 9. Dickens County RACE trial (Dryland), 2017**

**Cooperator: Gary Myers**

**County Extension Agent: Thomas Boyle**

<b>Variety</b>	<b>Lint (Lbs/ac)</b>		<b>Gin TO (%)</b>		<b>Mic</b>		<b>Fiber Length (inch)</b>		<b>Strength (g/tex)</b>		<b>Unif</b>		<b>Loan Value (¢/lb)</b>		<b>Lint Value* (\$/acre)</b>	
PHY490W3FE	423	a	0.35	b	3.77	bc	1.09	c	29.9	bcd	80	ab	51.6	a	219	a
DP1549B2XF	413	ab	0.34	b	3.43	d	1.08	c	29.0	d	79	c	50.3	ab	209	ab
FM2334GLT	391	abc	0.35	b	4.03	a	1.17	a	31.0	ab	81	a	52.9	a	207	ab
DP1646B2XF	371	abc	0.38	a	3.90	ab	1.17	a	29.5	cd	80	ab	52.4	a	195	abc
NG4689B2XF	370	abc	0.34	b	3.77	bc	1.09	c	30.5	abc	80	abc	49.8	ab	184	abc
PHY444WRF	333	bc	0.37	a	3.37	d	1.17	a	31.8	a	81	a	50.6	ab	168	bc
ST5517GLTP	315	c	0.32	c	3.33	d	1.11	bc	30.8	abc	79	bc	47.4	b	149	cd
NG4601B2XF	204	d	0.35	b	3.70	c	1.12	b	31.4	a	81	a	52.7	a	107	d
<b>Mean</b>	<b>352</b>		<b>0.35</b>		<b>3.66</b>		<b>1.12</b>		<b>30.5</b>		<b>80</b>		<b>51.0</b>		<b>180</b>	
<b>CV %</b>	<b>17.3</b>		<b>2.97</b>		<b>3.3</b>		<b>1.7</b>		<b>3.4</b>		<b>1.3</b>		<b>4.6</b>		<b>19.4</b>	
<b>P&gt;F</b>	<b>0.0134</b>		<b>0.0002</b>		<b>&lt;.0001</b>		<b>&lt;.0001</b>		<b>0.0634</b>		<b>0.1066</b>		<b>0.1531</b>		<b>0.0239</b>	
<b>STD DEV</b>	<b>70</b>		<b>0.02</b>		<b>0.26</b>		<b>0.04</b>		<b>0.96</b>		<b>0.90</b>		<b>1.84</b>		<b>37</b>	

Note: Poor establishment due to lack of moisture.

**Table 10. Hardeman County RACE trial (Irrigated), 2017**

**Cooperator: Texas A&M AgriLife**

**County Extension Agent: Justin Gilliam**

<b>Variety</b>	<b>Lint (Lbs/ac)</b>		<b>Gin TO (%)</b>		<b>Mic</b>		<b>Fiber Length (inch)</b>		<b>Strength (g/tex)</b>		<b>Unif</b>		<b>Loan Value (¢/lb)</b>		<b>Lint Value* (\$/acre)</b>	
PHY490W3FE	1554	a	0.29	bc	4.03	-	1.12	c	32.6	a	81.6	a	56.0	bc	871	a
NG4689B2XF	1401	ab	0.28	bcd	4.70	-	1.08	d	31.9	ab	80.6	ab	54.3	de	728	bc
DP1646B2XF	1395	ab	0.33	a	3.97	-	1.22	a	30.3	d	80.6	ab	57.7	a	804	ab
DP1549B2XF	1353	b	0.28	bcd	3.73	-	1.10	cd	31.8	ab	78.4	d	55.7	cd	754	bc
FM1830GLT	1347	b	0.30	b	4.43	-	1.19	ab	32.4	a	81.7	a	57.4	ab	773	ab
PHY300W3FE	1231	bc	0.26	cd	4.00	-	1.11	cd	30.6	cd	80.8	ab	53.7	e	661	c
ST5517GLTP	1136	c	0.27	bcd	4.00	-	1.12	c	31.3	bc	79.1	cd	55.5	cd	630	c
NG3699B2XF	1094	c	0.26	d	4.03	-	1.16	b	31.3	bc	79.8	bc	55.2	cd	605	c
<b>Mean</b>	<b>1314</b>		<b>0.28</b>		<b>4.11</b>		<b>1.14</b>		<b>31.5</b>		<b>80</b>		<b>55.7</b>		<b>728</b>	
<b>CV %</b>	<b>9.6</b>		<b>8.1</b>		<b>8.3</b>		<b>2.0</b>		<b>1.7</b>		<b>1.0</b>		<b>1.8</b>		<b>10.6</b>	
<b>P&gt;F</b>	<b>0.0094</b>		<b>0.05</b>		<b>0.1955</b>		<b>&lt;.0001</b>		<b>0.0013</b>		<b>0.0023</b>		<b>0.0056</b>		<b>0.0123</b>	
<b>STD DEV</b>	<b>152</b>		<b>0.02</b>		<b>0.30</b>		<b>0.05</b>		<b>0.80</b>		<b>1.15</b>		<b>1.36</b>		<b>91</b>	

Note: Minor 2,4-D damage during July and August.

**Table 11. Haskell County RACE trial (Irrigated), 2017**

**Cooperator: Steve Mcguire**

**County Extension Agent: Jason Westbrook**

<b>Variety</b>	<b>Lint (Lbs/ac)</b>		<b>Gin TO (%)</b>		<b>Mic</b>		<b>Fiber Length (inch)</b>		<b>Strength (g/tex)</b>		<b>Unif</b>		<b>Loan Value (¢/lb)</b>		<b>Lint Value* (\$/acre)</b>	
PHY490W3FE	1451	a	0.41	a	3.67	bc	1.16	bc	31.1	-	80	ab	54.1	a	782	-
PHY300W3FE	1394	a	0.37	ab	3.53	cd	1.15	bc	30.1	-	80	bc	51.4	b	717	-
NG3699B2XF	1301	ab	0.34	bcd	3.63	c	1.18	b	30.6	-	79	bc	54.2	a	705	-
FM1830GLT	1274	abc	0.37	ab	3.87	a	1.23	a	32.3	-	81	a	55.2	a	704	-
DP1549B2XF	1248	abc	0.35	bc	3.17	e	1.11	d	30.7	-	79	c	50.1	b	627	-
NG4689B2XF	1240	abc	0.32	bcd	3.83	ab	1.14	c	30.5	-	80	ab	54.1	a	670	-
ST5517GLTP	1097	bc	0.29	d	3.43	d	1.14	cd	30.9	-	79	bc	54.3	a	596	-
DP1646B2XF	1066	c	0.30	cd	3.60	cd	1.15	bcd	30.3	-	78	c	53.1	a	545	-
<b>Mean</b>	<b>1259</b>		<b>0.34</b>		<b>3.59</b>		<b>1.16</b>		<b>30.8</b>		<b>79</b>		<b>53.3</b>		<b>668</b>	
<b>CV %</b>	<b>12.6</b>		<b>10.2</b>		<b>3.7</b>		<b>2.15</b>		<b>2.6</b>		<b>1.2</b>		<b>3.2</b>		<b>13.6</b>	
<b>P&gt;F</b>	<b>0.116</b>		<b>0.016</b>		<b>0.001</b>		<b>0.003</b>		<b>0.129</b>		<b>0.035</b>		<b>0.044</b>		<b>0.252</b>	
<b>STD DEV</b>	<b>132</b>		<b>0.04</b>		<b>0.22</b>		<b>0.04</b>		<b>0.68</b>		<b>1.00</b>		<b>1.70</b>		<b>76</b>	

**Table 12. Haskell County RACE trial (Dryland), 2017**

**Cooperator: Kregg Sanders**

**County Extension Agent: NA**

<b>Variety</b>	<b>Lint (Lbs/ac)</b>		<b>Gin TO (%)</b>		<b>Mic</b>		<b>Fiber Length (inch)</b>		<b>Strength (g/tex)</b>		<b>Unif</b>		<b>Loan Value (¢/lb)</b>		<b>Lint Value* (\$/acre)</b>	
<b>PHY444WRF</b>	593	a	0.42	a	3.60	c	1.14	a	30.2	-	80	a	55.0	a	326	a
<b>NG4689B2XF</b>	557	ab	0.37	cd	4.17	a	1.04	b	28.5	-	79	b	50.6	d	282	abc
<b>DP1646B2XF</b>	539	abc	0.41	a	4.13	a	1.14	a	28.3	-	80	ab	54.1	ab	292	ab
<b>DP1549B2XF</b>	498	bcd	0.37	cde	3.77	bc	1.04	b	28.3	-	78	c	50.3	d	250	bcd
<b>PHY490W3FE</b>	473	cd	0.35	de	4.00	ab	1.06	b	30.0	-	80	a	51.5	cd	244	cd
<b>FM2334GLT</b>	473	cd	0.40	ab	4.20	a	1.11	a	29.7	-	80	ab	53.6	abc	253	bcd
<b>NG4601B2XF</b>	439	d	0.38	bc	4.27	a	1.06	b	29.4	-	80	ab	51.1	cd	224	d
<b>ST5517GLTP</b>	433	d	0.34	e	3.67	c	1.06	b	29.4	-	78	c	51.7	bcd	224	d
<b>Mean</b>	<b>501</b>		<b>0.38</b>		<b>3.98</b>		<b>1.08</b>		<b>29.2</b>		<b>79</b>		<b>52.2</b>		<b>262</b>	
<b>CV</b>	<b>10.8</b>		<b>4.83</b>		<b>5.3</b>		<b>2.4</b>		<b>3.6</b>		<b>0.9</b>		<b>3.5</b>		<b>11.8</b>	
<b>P</b>	<b>0.0240</b>		<b>0.0007</b>		<b>0.0075</b>		<b>0.0004</b>		<b>0.2227</b>		<b>0.0018</b>		<b>0.0454</b>		<b>0.0137</b>	
<b>Std</b>	<b>58</b>		<b>0.03</b>		<b>0.26</b>		<b>0.04</b>		<b>0.77</b>		<b>0.99</b>		<b>1.76</b>		<b>35</b>	

**Table 13. Stonewall County RACE trial (Dryland), 2017**

**Cooperator: Billy Kirk Meador**

**County Extension Agent: Cody Myers**

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* (\$/acre)	
PHY444WRF	802	-	0.30	-	4.30	abc	1.16	a	30.3	abc	82	a	56.5	-	454	-
NG4689B2XF	801	-	0.27	-	4.63	a	1.09	ed	28.6	c	81	b	53.6	-	429	-
FM2334GLT	772	-	0.27	-	4.43	ab	1.13	abc	30.4	abc	81	b	55.0	-	426	-
ST5517GLTP	772	-	0.27	-	4.07	c	1.11	cd	31.4	ab	80	b	55.7	-	431	-
DP1549B2XF	706	-	0.28	-	4.00	c	1.07	e	28.3	c	78	c	52.8	-	374	-
NG4601B2XF	701	-	0.25	-	4.20	bc	1.13	bc	32.4	a	81	ab	54.8	-	391	-
DP1646B2XF	635	-	0.27	-	4.10	bc	1.15	ab	30.0	bc	80	b	55.2	-	353	-
PHY490W3FE	612	-	0.23	-	3.97	c	1.09	ed	31.5	ab	80	b	54.1	-	334	-
<b>Mean</b>	<b>725</b>		<b>0.27</b>		<b>4.21</b>		<b>1.12</b>		<b>30.4</b>		<b>81</b>		<b>54.7</b>		<b>399</b>	
<b>CV</b>	<b>21.8</b>		<b>12.5</b>		<b>5.6</b>		<b>1.9</b>		<b>5.3</b>		<b>1.0</b>		<b>3.1</b>		<b>23.8</b>	
<b>P</b>	<b>0.7081</b>		<b>0.4559</b>		<b>0.0422</b>		<b>0.001</b>		<b>0.0862</b>		<b>0.0066</b>		<b>0.2739</b>		<b>0.7431</b>	
<b>Std</b>	<b>74</b>		<b>0.02</b>		<b>0.23</b>		<b>0.03</b>		<b>1.41</b>		<b>1.06</b>		<b>1.18</b>		<b>43</b>	

Note: Plots were hand-harvested.



**Table 14. Wichita County RACE trial (Irrigated), 2017**

**Cooperator: Dwayne Peirce**

**County Extension Agent: David Graf**

<b>Variety</b>	<b>Lint (Lbs/ac)</b>		<b>Gin TO (%)</b>		<b>Mic</b>		<b>Fiber Length (inch)</b>		<b>Strength (g/tex)</b>		<b>Unif</b>		<b>Loan Value (¢/lb)</b>		<b>Lint Value* (\$/acre)</b>	
<b>PHY490W3FE</b>	2507	-	0.28	c	4.20	ab	1.15	de	32.2	a	82	-	55.7	abc	1397	-
<b>PHY300W3FE</b>	2429	-	0.29	bc	4.43	a	1.16	d	29.9	bcd	81	-	54.6	bc	1328	-
<b>DP1646B2XF</b>	2290	-	0.31	a	3.80	d	1.25	a	29.4	d	82	-	56.2	a	1283	-
<b>FM1830GLT</b>	2152	-	0.31	a	3.83	cd	1.24	ab	31.0	ab	81	-	57.1	a	1229	-
<b>DP1549B2XF</b>	2059	-	0.30	ab	3.40	e	1.22	bc	30.8	bc	80	-	54.3	c	1120	-
<b>NG3699B2XF</b>	2034	-	0.28	c	3.90	bcd	1.20	c	30.4	bcd	81	-	55.8	ab	1132	-
<b>NG4689B2XF</b>	1857	-	0.29	bc	4.17	abc	1.12	e	31.1	ab	81	-	56.3	a	1047	-
<b>ST5517GLTP</b>	1786	-	0.29	bc	3.90	bcd	1.15	de	29.6	cd	80	-	56.0	ab	1001	-
<b>Mean</b>	<b>2139</b>		<b>0.29</b>		<b>3.95</b>		<b>1.18</b>		<b>30.5</b>		<b>81</b>		<b>55.7</b>		<b>1192</b>	
<b>CV</b>	<b>17.6</b>		<b>3.4</b>		<b>6.2</b>		<b>1.9</b>		<b>3.0</b>		<b>0.9</b>		<b>1.8</b>		<b>17.6</b>	
<b>P</b>	<b>0.2792</b>		<b>0.0085</b>		<b>0.0058</b>		<b>0.0023</b>		<b>0.0037</b>		<b>0.0915</b>		<b>0.0691</b>		<b>0.3064</b>	
<b>Std</b>	<b>257</b>		<b>0.01</b>		<b>0.31</b>		<b>0.05</b>		<b>0.93</b>		<b>0.64</b>		<b>0.91</b>		<b>140</b>	

Note: Plots were hand-harvested. Severe 2,4-D damage on the plots in July.

**Table 15. Wilbarger County RACE trial (Dryland), 2017**

**Cooperator: Donald Shoppa**

**County Extension Agent: Langdon Reagan**

<b>Variety</b>	<b>Lint (Lbs/ac)</b>		<b>Gin TO (%)</b>		<b>Mic</b>		<b>Fiber Length (inch)</b>		<b>Strength (g/tex)</b>		<b>Unif</b>		<b>Loan Value (¢/lb)</b>		<b>Lint Value* (\$/acre)</b>	
DP1646B2XF	1213	-	0.38	a	4.07	abc	1.20	a	29.8	c	80	bc	57.2	a	694	-
NG4601B2XF	1064	-	0.34	cd	4.03	bcd	1.09	c	31.2	abc	80	c	55.3	ab	587	-
DP1549B2XF	972	-	0.32	e	3.27	f	1.04	d	30.6	bc	78	d	48.7	c	473	-
FM2334GLT	969	-	0.36	ab	4.23	ab	1.15	b	30.0	c	80	abc	55.9	ab	539	-
PHY490W3FE	957	-	0.35	bcd	3.87	cd	1.10	c	31.9	ab	81	a	55.3	ab	534	-
PHY444WRF	947	-	0.36	bc	3.50	ef	1.18	a	32.2	a	81	a	55.1	b	524	-
ST5517GLTP	945	-	0.33	de	3.77	de	1.10	c	30.6	bc	78	d	54.3	b	513	-
NG4689B2XF	913	-	0.35	bcd	4.33	a	1.09	c	31.5	ab	81	ab	54.5	b	494	-
<b>Mean</b>	<b>998</b>		<b>0.35</b>		<b>3.88</b>		<b>1.12</b>		<b>31.0</b>		<b>80</b>		<b>54.5</b>		<b>545</b>	
<b>CV</b>	<b>17.6</b>		<b>3.8</b>		<b>4.9</b>		<b>1.5</b>		<b>3.2</b>		<b>0.6</b>		<b>2.5</b>		<b>20.0</b>	
<b>P</b>	<b>0.522</b>		<b>0.0043</b>		<b>0.0001</b>		<b>&lt;.0001</b>		<b>0.086</b>		<b>&lt;.0001</b>		<b>0.0001</b>		<b>0.3607</b>	
<b>Std</b>	<b>97</b>		<b>0.02</b>		<b>0.36</b>		<b>0.05</b>		<b>0.88</b>		<b>1.17</b>		<b>2.52</b>		<b>69</b>	



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