SCS-2019-02

TEXAS ROLLING PLAINS REPLICATED AGRONOMIC COTTON EVALUATION (RACE) TRIALS | 2018

Department of
Soil and Crop Sciences
Texas A&M AgriLife
Extension Service

TEXAS ROLLING PLAINS RACE TRIALS | 2018

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ACKNOWLEDGEMENTS

Appreciation is expressed to **the producer cooperators** who provided their land, equipment, and time to assist in preparation, planting, field management, and harvesting of these plots throughout the year. All cooperators are listed in Table 3. We would like to extend our appreciation to **Cotton Incorporated** through the **Texas State Support Committee**, **Americot/NexGen**, **Bayer CropScience**, **Delta Pine, and Phytogen Cottonseed** for their partial funding of these trials.

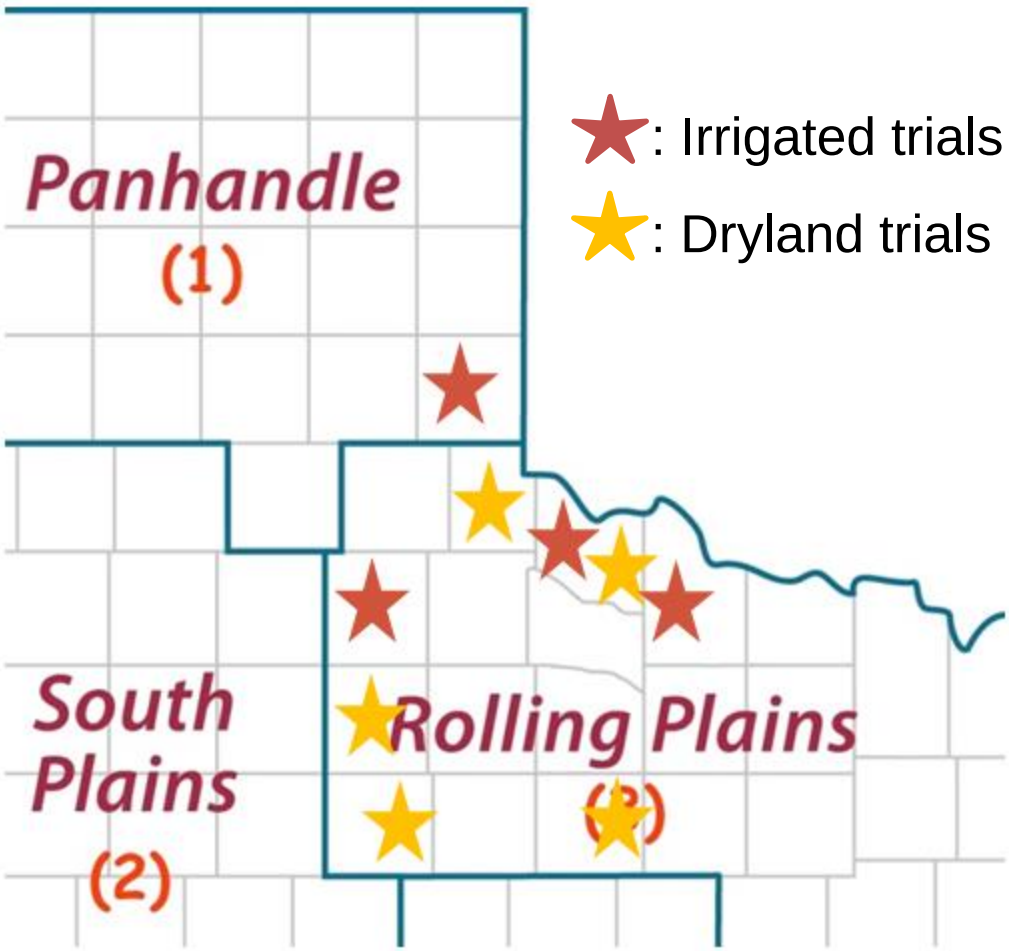
2018 HIGHLIGHT

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 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.

Planted acres increased to 1.3 million acres in 2018 from 1.1 million acres in 2017 in the Rolling Plains; however, harvested acres decreased to 639,000 acres from 1 million acres in 2017 due partially to unfavorable weather during the 2018 season. Winter drought of 2017 severly affected the planting conditions in the 2018 season. Dry weather continued until September across the Rolling Plains. Excessively wet conditions started near the end of September and continued to November, which delayed harvesting of cotton beyond the optimal timing in many locations. Cotton producers in the Rolling Plains expericend a challenging growing season with both extreme drought and wet conditions within a single growing season.

To assist Texas cotton producers in remaining competitive in the Rolling Plains, the Texas A&M AgriLife Extension Service Agronomy program has conducted, large plot, on-farm, replicated variety trials since 2012. This approach provides a reliable source of information to assist farmers with the variety selection process. Nine replicated agronomic cotton evaluation (RACE) trials and two Monster Trials were planted in 2018; however, we were able to harvest only five RACE trial locations and one monster trial locations. Mean irrigated location yields for the 2018 RACE trials ranged from 1937 lb/ac for the Collingsworth trial location to 582 lb/ac for the Wilbarger trial site, while mean dryland location yields ranged from 513 lb/ac at the Dickens County trial site to 348 lb/ac at the Hardeman County trial site.

TEXAS A&M AGRILIFE EXTENSION



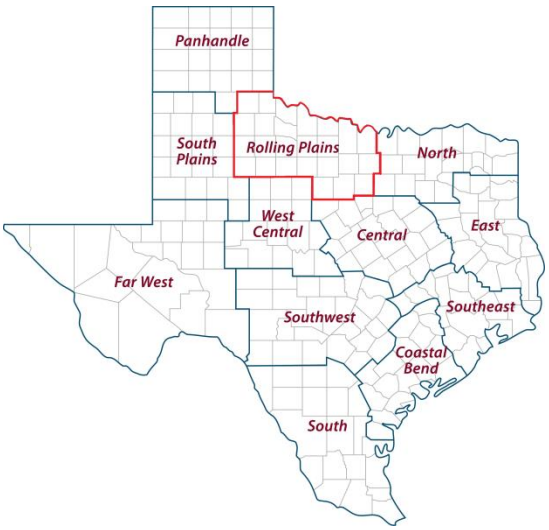


FIG 1. 2018 ROLLING PLAINS RACE TRIAL LOCATIONS

In addition to the RACE trials, a Monster cotton variety trial was conducted in 2018 at the Chillicothe Research Station. These trials are conducted as small plot variety evaluations and include a larger number of both commercially-available and experimental cotton varieties. Lint samples from all locations were ginned with a 10-saw table-top gin with no lint cleaner. 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 color and leaf grades of 41-4, because an accurate estimate of leaf and color grades 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. Non-statistical significance is represented as "NS" and indicates no differences among the varieties within the data column at a 90% confidence level.

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: Rolng Plains Agronomy Program Blog (https://agrilife.org/txrollingplainsagronomy/)

TEXAS A&M AGRILIFE EXTENSION

Table 1. Variety characteristics/Highlights

Below are the cotton variety characteristics and highlights that were included in the 2018 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.

Variety	Characteristics
Deltapine 1219B2RF	Early maturity variety, Semi-smooth leaf, Medium-tall plant height Broadly adapted across Texas
Deltapine 1321B2RF	Early/mid maturity, Medium-tall plant height Widely adapted to short-season environments and management
Deltapine 1522B2XF	Earl-Mid maturity, Semi-smooth, Tall height
Deltapine 1549B2XF	Full- season maturity, Semi-smooth Leaf Excellent performance under dryland and limited water situations
Deltapine 1646B2XF	Mid-full maturity, smooth leaf, medium –tall plant height
FiberMax 1900GLT	Early/medium maturity, Widely adapted to full and limited irrigation production
FiberMax 2007GLT	Early-medium maturity, semi-smooth leaf, medium plant height
FiberMax 2574GLT	Mid full maturity, resistant to bacterial blight, smooth leafm, med to tall
Fiber Max 2498 GLT	Mid maturity, resistant to bacterial blight, semi-smooth leaf, med to tall
NexGen 3406B2XF	Early-medium maturity, Semi-smooth leaf, medium plant height
NexGen 3699B2XF	Early-medium maturity, smooth leaf, medium-tall plant height
NexGen 4545B2XF	Medium maturity, Smooth leaf, Tall plant height Verticillium Wilt Tolerance
NexGen 4689B2XF	Medium maturity, smooth leaf, tall plant
NexGen 4777B2XF	Mid maturity, verticillium wilt tolerance, tall, bacterial blight tolerance
Phytogen 243WRF	Early maturity, Semi-smooth leaf, Short-medium height
Phytogen 300W3FE	Early-mid maturity, semi-smooth leaf
Phytogen 333WRF	Early maturity, Hairy leaf, Dryland or irrigated conditions
Phytogen 339WRF	Indeterminate, very early maturing, Semi-smooth leaf, Tall plant height
Phytogen 440W3FE	Mid maturity, smooth leaf
Phytogen 444WRF	Mid-maturity, Smooth leaf and tighter in burr than other phytogen varieties
Phytogen 480W3FE	Mid maturity, root-knot nematode resistance
Phytogen 490W3FE	Mid-maturity, tall plant height, semi-smooth leaf
Phytogen 499WRF	Mid-maturity variety, Aggressive growth, Suited for dryland and irrigated fields, Larger seed size ~ 4,000 – 4,200 seed/lb.
Stoneville 4747GLB2	Early/Medium maturity, Full tolerance to both Liberty herbicide and glyphosate, Two Bt genes for effective management of major worm pests
Stoneville 4946GLB2	Medium maturity, Root-knot nematode tolerance, semi smooth leaf, medium height
Stoneville 5122GLT	Early mid maturity, Verticillium wilt tolerance, smooth leaf
Stoneville 5517GLTP	Early maturity, resistant to bacterial blight, medium height, smooth leaf

Table 2. FIBER EVALUATION

Parameters	Definition	Range
Micronaire (Mic)	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
Fiber length	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
Fiber strength	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
Length uniformity (unif)	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, cooperator, planting date, harvesting date, and plot size information of 2018 Texas A&M AgriLife Extension Service RACE trial

County	Producer cooperators	County Extension Agents	Irri/ dry	Planting date	Harvest date	Rows × spacing	Seeding Rate (seeds ac^{-1})	Seeds ft^{-1}	Plot size (ac)
Childress	Cade Wyatt	Ryan Martin	D	6/1			Abandoned		
Collingsworth	Rex Henard	Kenny Patterson	I	5/9	11/5	6 rows × 40”	45000	3.4	1.1
Dickens	Gary Myers	Cody Myers	D	6/5	12/4	6 rows × 40”	26000	2.0	1.4
Hardeman	TAMU	Justin Gilliam	D	5/30	11/15	4 rows × 40”	52272	4.0	0.1
Hardeman	TAMU	Justin Gilliam	I	5/10	11/19	4 rows × 40”	52272	4.0	0.2
Haskell	Kregg Sanders	Jerry Coplen	D	6/15			Abandoned		
Kent	Guy Walker	Brandon Cave	D	6/15			Abandoned		
Motley	Josh Lee	Taylor Chapa	I	5/31			Abandoned		
Wilbarger	TAMU	Langdon Reagan	I	5/24	12/5	4 rows × 40”	45000	2.6	0.1
Wilbarger	ABONDONED	Langdon Reagan	D	5/24			Abandoned		
Monster	TAMU	TAMU	I	5/29	11/30	4 rows × 40”	52272	4.0	0.0046
Monster	TAMU	TAMU	D	5/28	11/26	4 rows × 40”	52272	4.0	0.0046

Table 4. Background information of 2018 Texas A&M AgriLife Extension RACE Trials in the Rolling Plains

County		Soil map unit name*/soil texture
Collingsworth	Irrigated	Springer-heatly-blown-out land complex, Sandy
Dickens	Dryland	Abilene clay loam/ loam, silt loam, clay loam, silty clay loam
Hardeman	Irrigated/Dryland	Abilene clay loam/ loam, silt loam, clay loam, silty clay loam
Wilbarger	Irrigated	Miles fine sandy loam

*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.

VARIETY RANKING

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

Ranking	Collingsworth	Hardeman	Wilbarger
1	FM2498GLT	PHY440W3FE	PHY480W3FE
2	PHY440W3FE	DP1646B2XF	DP1646B2XF
3	NG4689B2XF	PHY480W3FE	PHY440W3FE
4	ST5122GLT	DP1522B2XF	NG4689B2XF
5	PHY480W3FE	FM2498GLT	DP1522B2XF
6	NG4777B2XF	ST5122GLT	ST5122GLT
7		NG4689B2XF	FM2498GLT
8		NG4777B2XF	NG4777B2XF

*2,4-D symptom was observed in Hardeman co.

Table 6. Average lint yield, turnout, loan and lint values for irrigated trials in the 2018 Rolling Plains RACE trial

Variety	Lint (Lbs/ac)		Gin TO (%)		Loan value		Lint value	
DP1646B2XF	885	ab	0.44	a	53	a	474	a
PHY480W3FE	923	a	0.42	abc	51	ab	467	a
PHY440W3FE	883	ab	0.43	ab	52	a	460	a
DP1522B2XF	762	cd	0.42	bc	52	a	397	b
FM2498GLT	798	bcd	0.43	ab	48	bc	388	b
ST5122GLT	815	bc	0.43	ab	47	c	385	b
NG4689B2XF	743	cd	0.43	ab	48	bc	355	bc
NG4777B2XF	697	d	0.41	c	46	c	322	c
Mean	813		0.43		50		406	
CV %	8.9		3.0		4.4		9.9	
P>F	0.0212		0.1111		0.0097		0.0026	
STD DEV	79		0.01		3		56	

*Values in Collingsworth co. were not included due to lack of uniform entry in the site.

*2,4-D symptom was observed in Hardeman co.

*Samples were ginned with a tabletop gin without a lint cleaner; therefore, turnout values are higher than samples processed with a conventional gin.

Table 7. Dryland trials: Variety ranking based on lint value ($/ac) in the Rolling Plains

Ranking	Hardeman	Dickens
1	PHY480W3FE	ST5517GLTP
2	DP1522B2XF	NG4545B2XF
3	DP1549B2XF	PHY480W3FE
4	NG4545B2XF	DP1549B2XF
5	NG4689B2XF	FM2574GLT
6	FM2574GLT	PHY440W3FE
7	ST5517GLTP	NG4689B2XF
8	PHY440W3FE	DP1522B2XF

*2,4-D symptom was observed in Hardeman co.

Table 8. Average lint yield, turnout, loan and lint values for irrigated trials in the 2018 Rolling Plains RACE trial

Variety	Lint (Lbs/ac)		Gin TO (%)		Loan value		Lint value	
PHY480W3FE	455	a	0.42	b	49	a	223	a
DP1549B2XF	470	a	0.43	b	45	a	214	a
FM2574GLT	416	a	0.43	ab	50	a	211	a
NG4545B2XF	427	a	0.43	b	48	a	207	a
ST5517GLTP	413	a	0.42	b	48	a	200	a
NG4689B2XF	421	a	0.43	b	47	a	199	a
DP1522B2XF	406	a	0.45	a	49	a	198	a
PHY440W3FE	381	a	0.39	c	50	a	191	a
Mean	424		0.42		48		205	
CV %	8.9		3.7		4.3		9.6	
P>F	NS		0.033		NS		NS	
STD DEV	28		0.02		2		10	

*2,4-D symptom was observed in Hardeman co.

*No significant differences among all varieties.

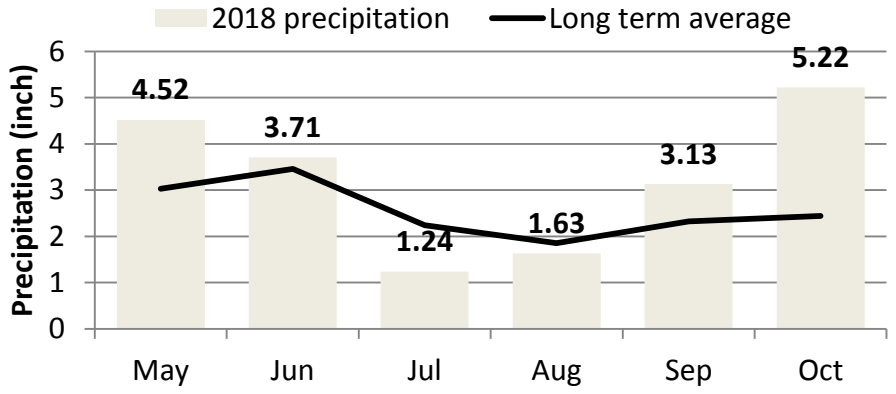
*Samples were ginned with a tabletop gin without a lint cleaner; therefore, turnout values are higher than samples processed with a conventional gin.

ON-FARM RACE TRIAL RESULTS

Collingsworth County RACE trial (irrigated), 2018
Cooperator: Rex Henard
County Extension Agent: Kenny Patterson

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* ($/acre)	
FM2498GLT	2081	a	0.40	a	3.9	ab	1.20	a	30.2	b	82	b	52	a	1081	a
PHY440W3FE	2138	a	0.40	ab	3.1	d	1.19	ab	32.1	a	80	c	50	a	1061	a
NG4689B2XF	1816	c	0.39	abc	4.1	a	1.15	d	32.7	a	82	ab	53	a	958	a
ST5122GLT	1887	bc	0.40	ab	3.5	c	1.14	d	28.5	c	80	c	50	a	946	a
PHY480W3FE	2051	ab	0.38	bc	3.0	d	1.17	c	30.1	b	83	a	46	a	942	a
NG4777B2XF	1649	d	0.37	c	3.6	bc	1.18	bc	32.0	a	82	b	54	a	882	a
Mean	1937		0.39		3.6		1.2		30.9		82		51		978	
CV %	5.8		3.1		6.3		0.8		2.7		1.0		7.0		9.8	
P>F	0.0025		0.091		0.001		<.0001		0.0008		0.0046		NS		NS	
STD DEV	186		0.01		0.4		0.02		1.6		1		3		77	

Note: Irrigation levels were high at Collingswort (Pivot), medium at Hardeman (In-furrow), and low at Wilbarger (Pivot) co. *Samples were ginned with a tabletop gin without a lint cleaner; therefore, turnout values are higher than samples processed with a conventional gin.



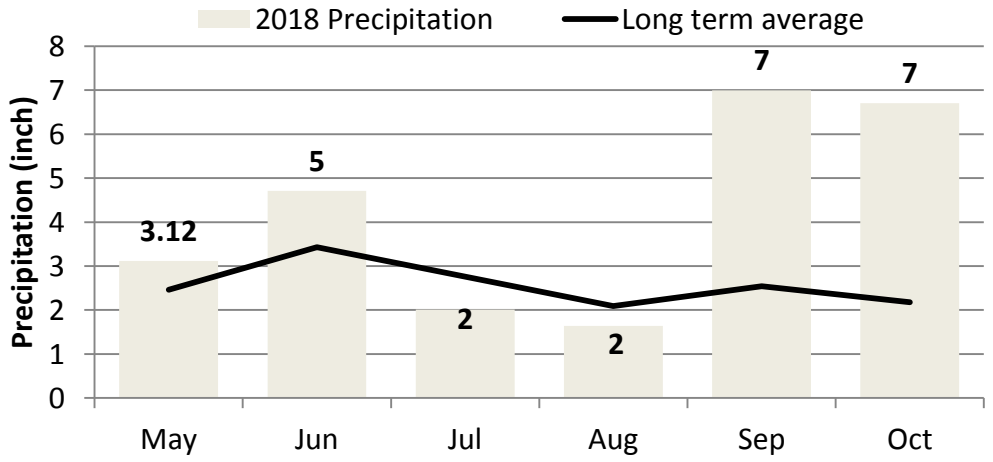
Dickens County RACE trial (Dryland), 2018

Cooperator: Gary Myers

County Extension Agent: Cody Myers and Thomas Boyle

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* ($/acre)	
ST5517GLTP	583	a	0.41	a	4.4	bc	1.07	bc	31.1	a	79	ab	52	a	303	a
NG4545B2XF	524	ab	0.39	a	4.7	ab	1.07	bc	29.2	bc	81	a	52	a	271	ab
PHY480W3FE	533	ab	0.40	a	4.1	cd	1.08	b	28.2	c	81	a	50	a	269	ab
DP1549B2XF	553	a	0.39	a	3.9	d	1.04	bc	26.2	d	78	b	48	a	267	ab
FM2574GLT	490	bc	0.41	a	4.4	bc	1.12	a	30.8	a	80	ab	54	a	263	b
PHY440W3FE	486	bc	0.35	a	4.0	cd	1.10	ab	29.4	b	78	b	51	a	245	bc
NG4689B2XF	484	bc	0.41	a	5.0	a	1.08	b	30.8	a	81	a	48	a	231	c
DP1522B2XF	455	c	0.42	a	4.8	ab	1.04	c	28.1	c	79	ab	50	a	228	c
Mean	513		0.40		4.4		1.07		29.2		80		51		259	
CV %	7.0		6.8		5.8		2.1		2.6		1.5		4.9		8.2	
P>F	0.0523		NS		0.0057		0.0306		0.0004		0.0989		NS		0.0587	
STD DEV	42		0.02		0.4		0.03		1.7		1		2		24	

*Samples were ginned with a tabletop gin without a lint cleaner; therefore, turnout values are higher than samples processed with a conventional gin.



Hardeman County RACE trial (Irrigated), 2018

Cooperator: Texas A&M AgriLife

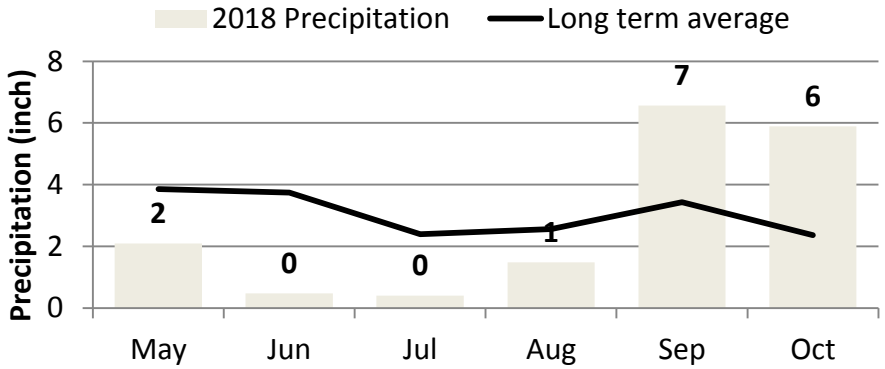
County Extension Agent: Justin Gilliam

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* ($/acre)	
PHY440W3FE	1168	a	0.44	ab	4.6	cd	1.11	b	32.7	a	81	abc	52	ab	611	a
DP1646B2XF	1084	ab	0.45	a	4.4	d	1.17	a	30.4	b	81	ab	54	a	587	a
PHY480W3FE	1085	ab	0.42	b	4.8	bc	1.08	bcd	29.7	bc	82	a	50	bcd	546	a
DP1522B2XF	1015	b	0.41	b	4.6	cd	1.11	b	29.4	bc	82	a	53	ab	542	a
FM2498GLT	1059	ab	0.44	ab	5.2	a	1.10	bc	29.0	bc	81	bcd	51	bc	535	ab
ST5122GLT	1088	ab	0.44	ab	4.6	cd	1.04	de	27.6	c	80	d	48	cde	527	ab
NG4689B2XF	998	bc	0.43	ab	5.2	a	1.01	e	28.0	c	80	bcd	46	e	454	bc
NG4777B2XF	862	c	0.41	b	5.0	ab	1.06	cd	27.9	c	80	cd	47	de	406	c
Mean	1045		0.43		4.8		1.09		29.3		81		50		526	
CV %	9.2		4.3		4.2		2.7		4.9		0.9		4.6		11.3	
P>F	0.0587		NS		0.0008		0.0003		0.0125		0.0207		0.0043		0.0158	
STD DEV	90		0.01		0.3		0.05		1.7		1		3		67	

Note: 2,4-D symptom was observed in Hardeman co.

Irrigation levels were high at Collingsworth (Pivot), medium at Hardeman (In-furrow), and low at Wilbarger (Pivot) co.

*Samples were ginned with a tabletop gin without a lint cleaner; therefore, turnout values are higher than samples processed with a conventional gin.



Hardeman County RACE trial (Dryland), 2018

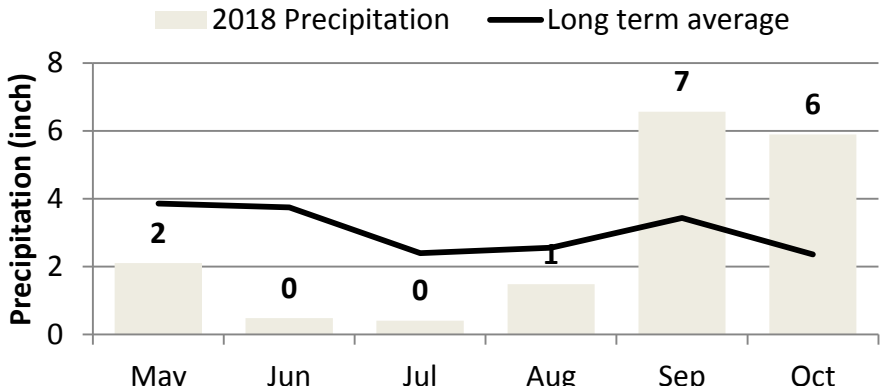
Cooperator: Texas A&M AgriLife

County Extension Agent: Justin Gilliam

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* ($/acre)	
PHY480W3FE	376	a	0.44	bc	4.3	cd	1.03	ab	27.6	ab	80	ab	47	a	177	a
DP1522B2XF	362	a	0.47	a	4.7	a	1.03	ab	27.7	ab	81	a	48	a	175	a
DP1549B2XF	393	a	0.44	bc	4.4	bcd	0.98	c	24.6	c	77	d	44	a	172	a
NG4545B2XF	366	a	0.43	bc	4.5	abc	1.01	bc	25.9	bc	80	ab	46	a	170	a
NG4689B2XF	359	a	0.43	bc	4.4	bc	1.01	bc	26.1	abc	79	bc	46	a	167	a
FM2574GLT	342	a	0.45	b	4.6	ab	1.05	ab	26.1	abc	79	c	47	a	160	a
ST5517GLTP	308	a	0.42	c	4.2	de	1.02	ab	26.1	bc	79	c	46	a	140	a
PHY440W3FE	275	a	0.43	bc	4.1	e	1.05	a	28.2	a	79	bc	50	a	138	a
Mean	348		0.44		4.4		1.02		26.5		79		47		162	
CV %	20.0		3.3		3.3		2.5		5.5		1.0		8.2		20.0	
P>F	NS		0.0258		0.0031		0.0907		0.1314		0.0037		NS		NS	
STD DEV	39		0.01		0.2		0.02		1.2		1		2		15	

Note: 2,4-D symptom was observed in Hardeman co.

*Samples were ginned with a tabletop gin without a lint cleaner; therefore, turnout values are higher than samples processed with a conventional gin.

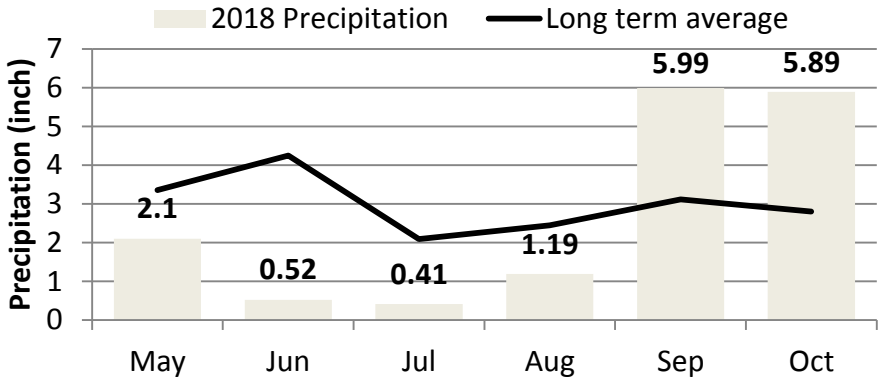


Wilbarger County RACE trial (Irrigated), 2018
Cooperator: Texas A&M AgriLife
County Extension Agent: Langdon Reagan

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* ($/acre)	
PHY480W3FE	761	a	0.43	a	4.8	a	1.06	bc	29.1	a	81	a	51	a	388	a
DP1646B2XF	687	a	0.44	a	4.9	a	1.09	ab	27.4	a	79	cd	52	a	362	a
PHY440W3FE	597	a	0.43	a	4.4	a	1.11	a	30.6	a	79	cd	52	a	308	a
NG4689B2XF	488	a	0.43	a	4.7	a	1.08	ab	29.4	a	80	bc	51	a	256	a
DP1522B2XF	508	a	0.42	a	5.0	a	1.07	ab	28.1	a	81	ab	50	a	251	a
ST5122GLT	541	a	0.42	a	4.6	a	1.00	d	28.5	a	78	ab	45	a	244	a
FM2498GLT	537	a	0.43	a	4.9	a	1.08	ab	30.1	a	81	ab	45	a	241	a
NG4777B2XF	533	a	0.39	b	4.9	a	1.02	cd	26.7	a	78	d	46	a	239	a
Mean	582		0.42		4.8		1.06		28.7		80		49		286	
CV %	24.0		3.6		7.0		3.4		7.6		1.0		8.1		24.8	
P>F	NS		0.0891		NS		0.023		NS		0.0018		NS		NS	
STD DEV	95		0.01		0.2		0.04		1.3		1		3		60	

Note: Irrigation levels were high at Collingswort (Pivot), medium at Hardeman (In-furrow), and low at Wilbarger (Pivot) co.

*Samples were ginned with a tabletop gin without a lint cleaner; therefore, turnout values are higher than samples processed with a conventional gin.



MONSTER TRIAL-Irrigated

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* ($/acre)	
PHY480 W3FE	2132	a	0.36	a	4.4	a	1.15	ab	31	bc	83	a	54.2	a	1155	a
PHY490 W3FE	1808	a	0.34	a	4.6	a	1.13	b	33	a	83	a	54.2	a	980	a
PHY350 W3FE	1763	a	0.37	a	4.6	a	1.14	b	30	bc	83	a	51.6	a	907	a
PHY320 W3FE	1763	a	0.32	a	4.3	a	1.12	b	30	bc	83	a	50.1	a	885	a
PHY300 W3FE	1451	a	0.32	a	4.3	a	1.12	b	29	c	82	a	51.1	a	742	a
PHY440 W3FE	1279	a	0.31	a	3.9	a	1.20	a	31	ab	82	a	53.5	a	693	a
Mean	1699		0.34		4.3		1.15		31		82		52.4		894	
CV %	24.4		8.1		11.0		3.0		4.8		1.1		6.3		26.3	
P>F	NS		NS		NS		0.1045		0.0505		NS		NS		NS	
STD DEV	299		0.02		0.3		0.03		2		1		1.8		167	

Note: 2,4-D symptom was observed in the trial site in Hardeman co.

MONSTER TRIAL-Dryland

Variety	Lint (Lbs/ac)		Gin TO (%)		Mic		Fiber Length (inch)		Strength (g/tex)		Unif		Loan Value (¢/lb)		Lint Value* ($/acre)	
PHY440 W3FE	644	a	0.36	a	4.5	a	1.04	a	27	a	81	a	48.0	a	309	a
BX1952B2XF	561	a	0.37	ab	4.4	a	1.05	a	26	a	80	a	49.2	a	276	a
ST5517GLTP	525	a	0.37	a	4.6	a	1.05	a	28	a	80	a	50.8	a	266	a
PHY490 W3FE	538	a	0.34	b	4.5	a	1.05	a	27	a	79	a	48.0	a	259	a
FM2498GLT	510	a	0.35	ab	4.5	a	1.06	a	28	a	80	a	49.6	a	252	a
BX1951NRB2XF	483	a	0.35	ab	4.4	a	1.07	a	28	a	80	a	50.8	a	246	a
PHY300 W3FE	495	a	0.33	b	4.3	a	1.04	a	26	a	80	a	48.3	a	240	a
PHY350 W3FE	447	a	0.34	b	4.2	a	1.07	a	27	a	80	a	49.4	a	223	a
PHY480 W3FE	467	a	0.34	b	4.6	a	1.05	a	28	a	81	a	45.4	a	216	a
FM2574GLT	422	a	0.35	ab	4.6	a	1.05	a	27	a	80	a	47.9	a	201	a
PHY320 W3FE	384	a	0.33	b	4.7	a	1.07	a	27	a	79	a	46.8	a	178	a
Mean	498		0.35		4.5		1.05		27		80		48.5		242	
CV %	19.0		4.4		5.5		3.2		5.1		1.4		7.5		22.0	
P>F	NS		0.0369		NS		NS		NS		NS		NS		NS	
STD DEV	71		0.01		0.1		0.01		1		1		1.6		37	

Note: 2,4-D symptom was observed in the trial site in Hardeman co.

*There was no statistical varietal differences in lint values

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