COTTON PERFORMANCE TESTS

In the Texas High Plains

2020

The Texas A&M AgriLife Research and Extension Center at Lubbock/Halfway/Pecos – 2021

Technical Report
21-1

Texas A&M AgriLife Research/ Patrick Stover, Director

TEXAS A&M UNIVERSITY SYSTEM / COLLEGE STATION, TEXAS

TEXAS A&M AGRILIFE RESEARCH

Cotton Performance Tests in the Texas High Plains 2020[1/]

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TABLE OF CONTENTS

INTRODUCTION

Cotton performance tests were conducted during 2020 at the Texas A&M Agricultural Research and Extension Center at Lubbock (LREC) and Halfway, and the AG-CARES research farm at Lamesa. Tests were conducted for response to root-knot nematode at Lamesa, bacterial blight at LREC, and Verticillium wilt at Halfway. The 2020 test location had little discernible Verticillium wilt pressure. Response to bacterial blight infection only is reported for the bacterial blight test. The Uniform Variety Test includes the same entries at four locations; LREC irrigated, LREC dryland, AG-CARES irrigated, and AG-CARES low water. The entries are commercial or soon to be commercially available varieties. New varieties and strains, including potential new commercial varieties or breeding lines, were tested at LREC under furrow irrigated conditions. A late-planted test, including commercial varieties, was conducted at LREC under furrow-irrigated conditions. Soil types, planting dates, harvest dates, irrigation, and cultural practices for each test are in Table 1.

All tests were planted in a randomized complete block design with four replications, in 2-row plots, 30-40 ft long on 40 in centers. Relatively good soil moisture combined with favorable temperatures in early May allowed for timely planting and good initial emergence in all tests. Wind and blowing sand damaged tests at AG-CARES in late May and early June. Uniform variety trials were damaged less severely than the root-knot nematode test which had to be replanted late, in mid-June. Root-knot nematode pressure was lower than in previous years. Disease and insect pressure overall was light and heat unit accumulation through August was generally beneficial for crop development. Then, the first strong cold front of the season arrived in early September, followed by moderate, dry, open weather and an ice storm to close out October. Snow and ice resulted in modest storm loss, with some varieties affected more than others. Tests were harvested before any other significant weather events.

ACKNOWLEDGMENTS

Fiber properties were measured at the Fiber and Biopolymer Research Institute, Texas Tech University, with financial support from Texas A&M AgriLife Research Fiber Initiative. Plains Cotton Improvement Program and CSREES Hatch project TEX09297 supplement variety testing fees from participating companies. The Plains Cotton Improvement Committee facilitates this independent variety testing service and provides guidance for the variety testing strategy of the Texas A&M AgriLife Research Cotton Improvement Program at Lubbock. Planting, seed and field preparation, plot maintenance, harvest, sample ginning, and data collection were partially performed by student workers Trevor Abbo, Victoria Ficher, Dalton Findley, Peyton Ivie, Joshua Marriott, Sarah McLean, Baylee Owen, and Reagan Swinburn. Part-time student labor was curtailed in 2020 due to COVID19. Permanent staff of the breeding program contributed extra effort, especially manual weed control and sample harvesting so these tests could be conducted. Special acknowledgment for this effort is warranted for Carol Kelly, Andrea Maeda, Valerie Morgan, Monica Sheehan, Koy Stair, Leslie Wells, and Zane Wyatt. Bacterial blight, Verticillium wilt, and root-knot nematode ratings were conducted by the Texas A&M AgriLife Research plant pathology project at Lubbock under the supervision of Dr. Terry Wheeler.

GLOSSARY OF TABLE HEADINGS

Yield and Turnout

Yield - Pounds of lint harvested per acre.

Gin Turnout
Lint - Percentage of lint of the stripper-harvested cotton.
Seed - Percentage of seed of the stripper-harvested cotton.

Agronomic Properties - Determined from hand-snapped samples.

Percent Lint
Picked - Lint fraction of seed cotton.
Pulled - Lint fraction of burr cotton.

Boll Size - Weight, in grams, of seed cotton per boll.

Seed Index - Weight, in grams, of 100 fuzzy seed.

Lint Index - Weight, in grams, of lint from 100 seed (calculated).

Seed Per Boll - Average number of seed per boll (calculated).

Visual Properties

Maturity - Visual assessment of relative open bolls on a given date.

Storm Resistance - Visual rating from 1 (very loose boll type, considerable seed cotton loss) to 9 (very tight boll type, no seed cotton loss).

Height – Measured average plant height, in inches.

Disease

Rk - Number of root-knot nematodes in 500cc of soil.

LRK - Log transformation +1 of the Rk number, which is done to account for pressure in the field.

Wilt % - The percentage of plants with Verticillium wilt symptoms on a given day.

Statistical Analysis

Mean - The average value for the trait being observed.

c.v.% - Coefficient of variation. A relative measure of variation within a test, defined as the sample standard deviation expressed as a percentage of the sample mean.

LSD - Least significant difference. If the difference between two means exceeds this value, the two means are significantly different at the 0.05 probability level.

GLOSSARY OF TABLE HEADINGS

Fiber Properties - Measured by High Volume Instrument (HVI®)

Micronaire - A relative measure of fiber linear density (mass per unit length) determined by air permeability.

Length - An instrument measurement of fiber length, expressed in hundredths of an inch, approximates the classer's staple length.

Uniformity - A measure of the uniformity of fiber length in a sample, measured as the ratio of mean length to upper half mean length, expressed as a percentage.

Strength - The force required to rupture (or break) a fiber sample, expressed in grams per tex.

Elongation - The amount that a fiber sample will stretch prior to breakage. This is a measure of the deformation of fiber at rupture expressed as percent change in length based on the original fiber length.

Leaf Index [1/]- The visual estimate of the amount of cotton plant leaf material that remains in the lint after the ginning process, ranging from 1(low) to 7(high).

Rd - Degree of reflectance. This measures how light or dark the fiber sample is, expressed as a percentage. Lower Rd values indicate a grayer sample.

+b - Yellowness. This measures the degree of color pigmentation. Higher +b values indicate yellower samples.

Color Grade - A function of the Rd and +b of the fiber sample. The color grade indicates the quadrant of the Nickerson-Hunter cotton colorimeter diagram in which Rd and +b values intersect.[2/]

[1/]*Plot stripper used to harvest these tests is not equipped with a field cleaner. Experimental gin set-up may not always approximate Leaf Index values obtained at commercial gins.*

[2/]*Fiber quality determinations are made on samples from two reps. If the color grade from these two samples are identical, only one color grade is reported.*

Notes

Soil Type	Date Planted	Date Harvested	Production Information
	Lubbock Uniform Irrigated		
Olton Clay Loam	May 19	November 10	2 fertilizer applications 32Lbs/A pre 48Lbs/A post 3 herbicide applications (1PPI, 1 pre, 1 post) furrow irrigation 16.3 acre inches uniform furrow irrigation 16.3 acre inches nvst, late 1 harvest aid application
	Lubbock Late Planted Irrigated		
Olton Clay Loam	June 10	November 11	
	Lubbock New Varieties and Strains (NVST)		
Olton Clay Loam	May 28	November 11	
	Lubbock Uniform Water Limited		
Acuff Loam	May 26	October 16	2 fertilizer applications 1 pre, 1 post 3 herbicide application (1PPI, 1 pre, 1 post) 2 harvest aid applications 3.5 acre inches pre-irr. for rain simulation 10.6 inches rainfall in season
	Halfway Verticillium Wilt		
Pullman Clay Loam	May 18	November 9	fertilizer 32-0-0 11.25Gal/A 8 herbicide applications (1pre, 7 post) Pivot irr. 13.5 acre inches in season
	Lamesa AG-CARES Nematode Irrigated (RKN)		
Amarillo Fine Sandy Loam	June 16 replant	November 5	2 fertilizer applications 32Lbs/A N pre 96 Lbs/A post 1 herbicide application 11.4 acre inches in season (pivot) rkn 13.9 acre inches in season (drip) uniform 2 harvest aid applications
	Lamesa AG-CARES Uniform Irrigated		
Amarillo Fine Sandy Loam	May 15	November 3	
	Lamesa AG-CARES Uniform Water Limited		
Amarillo Fine Sandy Loam	May 15	November 3	2 fertilizer applications 32Lbs/A N pre 96 Lbs/A N in season 1 herbicide application 3.0 acre inches pre irr 5.9 acre inches in season 2 harvest aid applications

7

Table 2. Yield and agronomic property data from the irrigated uniform cotton variety performance test at Texas A&M AgriLife Research, Lubbock, 2020

						Agronomic Properties				% Open		
		% Turnout		% Lint		Boll	Seed	Lint	Seed per	Bolls	Storm	
Designation	Yield	Lint	Seed	Picked	Pulled	Size	Index	Index	Boll	13-Oct	Resistance	Height
PhytoGen PHY 332 W3FE	1601	25.0	33.6	41.0	31.5	5.6	10.1	9.2	24.7	75	6	32
PhytoGen PX5C45W3FE	1465	26.6	31.7	39.8	30.5	5.2	9.5	8.6	24.1	73	5	31
NexGen NG 4098 B3XF	1355	23.0	37.3	38.9	30.4	5.8	11.1	8.1	27.9	65	4	31
PhytoGen PHY 443 W3FE	1328	24.0	33.2	39.1	27.8	5.9	10.2	8.3	27.7	78	5	35
PhytoGen PHY 394 W3FE	1258	23.2	38.5	37.4	28.3	5.5	9.9	7.8	26.5	83	7	30
PhytoGen PHY 580 W3FE	1254	24.7	35.7	41.3	31.8	5.3	10.1	9.4	23.5	75	4	34
NexGen NG 3956 B3XF	1228	23.9	35.1	37.1	28.6	5.4	10.6	7.7	25.6	78	7	34
NexGen NG 4792 XF	1226	24.9	36.8	39.5	31.0	5.6	10.3	8.2	27.1	75	6	32
NexGen NG 3930 B3XF	1207	23.3	33.8	38.2	29.5	5.1	10.0	8.8	22.0	85	6	31
FiberMax FM 2022GL	1190	23.8	31.7	40.7	31.4	6.0	9.4	9.0	27.0	78	6	34
PhytoGen PX2C14W3FE	1121	20.0	36.3	39.2	28.2	5.4	10.5	7.9	27.1	85	7	31
PhytoGen PHY 210 W3FE	1110	23.2	31.0	38.6	31.4	5.4	10.2	8.6	24.2	75	7	24
PhytoGen PHY 430 W3FE	1109	24.4	32.3	40.4	30.5	5.5	9.8	8.9	25.0	75	7	29
FiberMax FM 2498GLT	1107	25.3	33.6	40.8	31.7	5.8	10.8	9.6	24.6	80	5	29
PhytoGen PHY 400 W3FE	1101	23.0	32.8	40.1	30.0	5.0	9.8	8.3	24.4	75	6	29
Seed Source Genetics SSG UA 222	1099	22.2	34.8	37.5	29.6	5.3	11.0	8.3	23.6	83	4	29
NexGen NG 3500 XF	1095	21.6	34.0	39.6	30.5	5.5	10.4	8.4	25.9	80	6	34
NexGen NG 4689 B2XF	1073	25.8	35.0	38.8	29.4	5.3	10.4	8.2	25.1	80	6	31
Stoneville ST 5610B3XF	1061	24.5	31.9	43.4	33.1	5.2	9.0	9.1	24.7	78	6	34
Deltapine DP 2044 B3XF	1057	22.1	35.1	38.0	30.2	5.8	11.0	8.3	26.7	73	6	32
Seed Source Genetics SSG UA 114	1053	24.6	34.5	37.7	28.9	5.4	10.7	8.5	23.7	83	5	28
PhytoGen PHY 480 W3FE	1039	22.0	30.3	38.8	30.1	5.1	10.1	8.7	22.8	83	6	31
FiberMax FM 1621GL	1029	20.8	31.4	40.7	32.3	5.7	10.5	10.2	22.9	70	6	30
NexGen NG 4936 B3XF	1005	25.2	33.4	42.6	33.0	4.9	9.7	8.6	24.3	85	5	31
Stoneville ST 5600B2XF	1003	22.0	34.2	42.1	32.5	5.5	9.8	8.9	26.0	80	5	29
Deltapine DP 1820 B3XF	1001	23.9	33.2	41.0	31.0	4.9	9.3	9.6	20.7	80	6	32
Brownfield Seed and Delinting 6X	986	22.4	36.7	36.3	23.0	6.0	11.4	7.9	27.4	83	5	32
Deltapine DP 2012 B3XF	979	21.9	33.3	37.4	32.2	5.1	8.7	7.6	25.2	83	6	33
Brownfield Seed and Delinting Ton Buster Elite	959	23.6	35.4	38.9	29.6	5.4	10.6	8.2	25.9	83	4	31
PhytoGen PHY 764 WRF	944	21.8	31.6	38.0	28.8	5.0	10.3	7.6	25.3	78	4	30

Table 2. cont.

Designation	Yield	% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm	
		Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	13-Oct	Resistance	Height
Stoneville ST 4550GLTP	938	23.1	30.9	43.7	37.0	5.1	9.3	9.1	24.6	85	6	35
Deltapine DP 1822 XF	935	20.0	33.4	37.8	30.1	5.3	10.8	8.8	22.7	83	6	32
PhytoGen PHY 500 W3FE	929	20.4	34.4	37.6	27.8	5.0	9.6	8.4	22.7	73	6	34
FiberMax FM 2398GLTP	898	23.4	31.9	40.8	30.6	5.2	9.9	9.4	22.8	78	6	28
Deltapine DP 1646 B2XF	890	22.3	29.4	43.0	33.8	5.0	9.3	8.9	24.0	80	5	30
NexGen NG 3640 XF	878	19.9	30.2	39.0	29.1	5.1	10.0	8.2	24.2	78	5	32
PhytoGen PHY 350 W3FE	869	23.2	33.1	37.8	29.9	4.8	10.3	8.3	22.1	80	5	31
NexGen NG 4050 XF	866	21.1	29.9	42.0	32.4	5.5	9.6	9.2	25.0	78	5	30
Tamcot 13S-03	866	18.9	28.4	38.9	29.8	5.3	10.0	8.0	25.6	80	6	29
Brownfield Seed and Delinting 9X	856	21.5	33.4	37.8	28.0	5.4	10.6	8.0	25.2	80	5	27
NexGen NG 5711 B3XF	850	23.7	32.4	38.9	30.5	4.7	8.9	8.1	22.7	78	6	31
DynaGro DG 3520 B3XF	840	17.3	31.7	37.1	28.8	5.0	11.9	8.2	22.8	78	6	31
FiberMax FM 1830GLT	837	23.0	31.6	41.4	31.2	4.8	10.6	8.8	22.5	73	6	31
PhytoGen PHY 250 W3FE	835	16.5	28.0	39.4	29.4	5.2	10.5	8.8	23.1	78	6	29
Tamcot 73	798	18.5	35.7	35.5	27.4	5.3	11.8	7.8	24.1	83	6	33
Stoneville ST 4990B3XF	797	22.6	31.4	39.4	30.3	5.1	9.2	7.7	26.1	73	5	33
NexGen NG 4777 B2XF	770	21.3	34.3	39.4	30.5	5.5	10.0	8.0	27.0	75	5	34
Deltapine DP 2020 B3XF	764	19.2	29.8	40.0	31.3	4.7	8.6	7.9	23.4	85	5	31
Stoneville ST 4480B3XF	695	19.6	30.6	39.8	29.8	4.2	9.1	7.3	23.0	85	6	29
Mean	1021	22.3	33.0	39.5	30.3	5.2	10.1	8.5	24.5	79	5	31
c.v.%	12.2	3.2	3.6	2.1	2.9	4.7	3.9	5.7	6.6	6.0	10.2	6.4
LSD 0.05	146	1.2	2.0	1.4	1.5	0.4	0.7	0.8	2.7	8	1	3

Table 2A. Fiber quality data from the irrigated uniform cotton variety performance test at Texas A&M AgriLife Research, Lubbock, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
PhytoGen PHY 332 W3FE	3.3	1.19	80.0	29.6	6.3	79.6	7.8	4	31-1
PhytoGen PX5C45W3FE	4.1	1.11	81.2	30.6	6.6	77.4	9.6	1	21-1,22-2
NexGen NG 4098 B3XF	3.6	1.19	80.6	32.5	6.2	74.7	9.2	3	32-1,41-3
PhytoGen PHY 443 W3FE	4.2	1.11	80.3	28.9	7.2	78.0	9.5	1	21-1,22-1
PhytoGen PHY 394 W3FE	3.6	1.16	81.5	31.3	6.3	79.1	8.7	2	21-1,31-3
PhytoGen PHY 580 W3FE	3.9	1.11	81.1	30.8	6.9	79.0	9.3	2	11-4,21-2
NexGen NG 3956 B3XF	3.8	1.14	80.7	29.2	6.2	80.3	8.8	2	21-1
NexGen NG 4792 XF	3.6	1.16	81.2	28.5	6.6	78.4	8.5	2	21-2,31-1
NexGen NG 3930 B3XF	3.8	1.15	80.2	29.6	5.9	79.4	8.3	3	21-2,31-1
FiberMax FM 2022GL	3.9	1.15	80.4	30.4	6.1	77.6	8.7	2	21-1,32-2
PhytoGen PX2C14W3FE	3.7	1.12	81.5	30.1	6.8	78.5	8.8	2	21-2
PhytoGen PHY 210 W3FE	4.0	1.13	82.8	32.1	6.4	78.3	8.7	2	21-2
PhytoGen PHY 430 W3FE	3.8	1.12	81.6	30.5	7.2	79.1	8.7	2	21-1,21-2
FiberMax FM 2498GLT	4.2	1.13	82.0	31.0	5.6	77.4	8.9	2	21-2,31-1
PhytoGen PHY 400 W3FE	3.7	1.16	80.6	29.7	7.3	79.1	8.6	2	21-2
Seed Source Genetics SSG UA 222	4.4	1.12	81.2	29.4	6.1	80.5	8.5	1	21-1
NexGen NG 3500 XF	3.9	1.12	81.8	30.4	6.5	76.8	10.0	2	21-3,22-1
NexGen NG 4689 B2XF	3.6	1.14	80.4	28.8	5.8	79.6	8.8	2	21-1,21-4
Stoneville ST 5610B3XF	4.2	1.11	81.4	30.5	7.1	79.2	8.9	3	21-1
Deltapine DP 2044 B3XF	3.5	1.10	81.5	30.3	6.7	77.2	9.5	3	22-2,31-1
Seed Source Genetics SSG UA 114	3.2	1.14	81.8	30.9	6.7	80.3	8.4	2	21-1
PhytoGen PHY 480 W3FE	4.0	1.12	81.0	29.9	6.6	78.8	8.7	2	21-1,31-1
FiberMax FM 1621GL	3.4	1.18	81.9	32.4	7.1	75.3	8.8	2	31-3,41-3
NexGen NG 4936 B3XF	4.0	1.13	81.0	29.2	6.5	77.9	9.2	2	22-1,31-1
Stoneville ST 5600B2XF	4.1	1.15	82.5	31.8	6.0	80.4	8.1	2	21-2
Deltapine DP 1820 B3XF	4.3	1.14	82.2	30.3	7.4	76.6	9.7	2	21-4,22-2
Brownfield Seed and Delinting 6X	4.3	1.15	81.9	30.2	7.1	78.4	8.4	2	21-2,31-1
Deltapine DP 2012 B3XF	4.1	1.12	81.8	30.2	6.8	79.3	8.3	2	21-1,31-1
Brownfield Seed and Delinting Ton Buster Elite	3.6	1.13	81.1	28.7	6.9	81.2	8.6	1	11-2,21-1
PhytoGen PHY 764 WRF	4.0	1.12	81.7	31.3	6.4	77.5	9.3	1	21-1,31-3

Table 2A. cont.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
Stoneville ST 4550GLTP	4.4	1.10	81.0	28.5	5.7	79.1	8.8	1	21-1,31-1
Deltapine DP 1822 XF	4.2	1.12	82.2	30.1	6.2	79.0	8.7	1	21-2
PhytoGen PHY 500 W3FE	3.9	1.14	80.6	29.9	6.6	75.9	10.0	1	22-1,32-1
FiberMax FM 2398GLTP	3.7	1.08	80.2	27.7	6.2	79.9	8.5	2	21-1,21-2
Deltapine DP 1646 B2XF	3.9	1.16	81.1	31.2	6.3	77.7	9.2	2	21-3,31-1
NexGen NG 3640 XF	4.0	1.11	80.2	29.4	5.3	77.4	9.9	1	21-3,22-1
PhytoGen PHY 350 W3FE	3.5	1.16	80.7	28.5	5.9	77.4	9.5	1	21-1,22-2
NexGen NG 4050 XF	3.8	1.10	80.4	28.7	6.9	77.1	9.8	2	21-3,22-2
Tamcot 13S-03	3.7	1.19	81.3	30.1	5.8	79.6	7.6	1	31-1
Brownfield Seed and Delinting 9X	3.9	1.14	80.5	28.6	7.0	80.5	9.1	2	11-2,21-1
NexGen NG 5711 B3XF	3.8	1.17	81.9	29.8	6.6	79.3	8.8	1	21-2,21-3
DynaGro DG 3520 B3XF	3.5	1.13	80.1	31.0	6.3	77.8	9.0	2	21-2,31-3
FiberMax FM 1830GLT	3.8	1.12	81.2	29.6	6.9	80.2	8.5	2	21-1,21-2
PhytoGen PHY 250 W3FE	4.2	1.17	81.0	31.8	6.0	79.0	7.9	2	31-1
Tamcot 73	3.3	1.18	80.9	32.5	6.4	78.1	9.6	1	21-3
Stoneville ST 4990B3XF	4.3	1.18	81.0	28.8	6.7	78.3	8.2	1	21-2,31-2
NexGen NG 4777 B2XF	3.6	1.16	81.5	30.7	6.5	78.4	8.7	2	21-2,32-1
Deltapine DP 2020 B3XF	3.6	1.14	81.5	30.0	7.2	76.7	9.3	1	31-1,32-1
Stoneville ST 4480B3XF	3.9	1.17	81.2	31.0	6.6	81.5	7.5	1	21-1,31-1
Mean	3.8	1.14	81.2	30.1	6.5	78.5	8.8	2	
c.v.%	8.0	2.1	0.9	3.6	6.0	2.2	6.9	40.7	
LSD 0.05	0.5	0.04	1.3	1.8	0.6	2.9	1.0	1	

Table 3. Yield and agronomic property data from the irrigated uniform cotton variety performance test at the AG-CARES farm, Lamesa, 2020.

		% Turnout		% Lint		Agronomic Properties				% Open	
Designation	Yield	Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	Bolls 30-Sep	Storm Resistance
PhytoGen PHY 394 W3FE	1317	24.7	27.6	39.9	28.1	4.0	9.3	8.8	18.3	58	6
PhytoGen PHY 443 W3FE	1252	26.0	32.7	40.3	28.3	4.0	9.3	8.8	18.4	58	4
NexGen NG 4098 B3XF	1251	24.8	35.1	39.5	29.7	4.9	10.9	8.5	22.9	58	4
PhytoGen PX5C45W3FE	1245	28.2	34.3	43.1	32.2	4.4	8.7	9.6	19.8	58	5
NexGen NG 3930 B3XF	1203	27.8	38.0	38.6	29.1	3.9	9.0	7.5	20.2	78	6
PhytoGen PHY 580 W3FE	1153	27.9	32.8	42.5	32.5	4.2	9.2	9.2	19.5	53	5
PhytoGen PHY 332 W3FE	1142	23.8	34.9	41.4	29.9	3.9	9.0	9.1	17.6	40	5
Deltapine DP 2012 B3XF	1140	29.4	37.8	40.1	30.1	3.8	8.4	7.8	19.5	73	4
Deltapine DP 2044 B3XF	1135	26.0	36.0	40.9	32.0	4.7	11.3	9.8	19.5	78	5
PhytoGen PHY 400 W3FE	1128	26.2	29.5	40.8	30.3	3.9	8.9	8.6	18.5	53	6
PhytoGen PHY 350 W3FE	1118	23.9	33.5	40.4	31.2	4.1	9.5	8.0	20.7	58	6
FiberMax FM 2022GL	1111	28.3	32.7	42.8	32.3	5.0	9.0	9.6	22.1	55	5
PhytoGen PHY 480 W3FE	1085	27.0	32.5	44.3	32.0	4.2	8.7	10.1	18.3	68	4
FiberMax FM 1621GL	1001	28.5	31.6	43.2	33.0	5.4	9.8	10.8	21.6	68	6
Seed Source Genetics SSG UA 222	993	27.8	38.3	39.3	30.5	4.5	10.8	8.3	21.1	68	3
FiberMax FM 2498GLT	973	28.0	34.0	41.7	31.5	4.8	10.5	9.6	20.5	60	5
FiberMax FM 2398GLTP	967	28.1	34.2	44.8	33.2	5.0	9.9	10.4	21.3	63	5
PhytoGen PHY 250 W3FE	959	23.5	32.8	39.6	27.5	3.8	9.1	8.6	17.4	80	6
NexGen NG 3956 B3XF	946	24.9	38.1	38.4	28.9	4.1	9.9	7.6	20.7	55	5
PhytoGen PHY 430 W3FE	928	25.7	32.7	40.5	29.2	4.1	8.9	8.7	19.0	50	5
PhytoGen PX2C14W3FE	925	23.3	31.3	39.0	27.3	4.2	9.0	7.5	21.7	65	6
PhytoGen PHY 764 WRF	902	22.1	33.5	35.9	27.2	4.0	10.6	7.4	19.4	40	2
DynaGro DG 3520 B3XF	881	24.9	35.3	37.9	28.8	4.2	11.7	8.7	18.3	48	5
NexGen NG 3500 XF	879	25.5	38.5	40.6	31.8	4.4	9.6	8.1	21.7	50	5
Brownfield Seed and Delinting 9X	872	24.7	36.8	38.5	28.1	4.2	10.2	8.4	19.6	65	5
Stoneville ST 5600B2XF	850	26.4	37.6	41.7	32.7	4.8	9.3	9.1	21.8	50	5
Seed Source Genetics SSG UA 114	846	26.3	38.1	37.9	28.5	4.6	11.7	9.2	19.4	70	3
Stoneville ST 5610B3XF	818	25.4	35.5	43.3	31.9	4.5	8.8	8.5	22.9	45	5
Brownfield Seed and Delinting Ton Buster Elite	816	23.6	38.1	35.9	27.0	4.3	10.3	7.2	21.4	48	5
NexGen NG 4792 XF	801	25.9	36.6	39.1	29.2	4.0	9.2	7.8	20.3	48	6

Table 3. cont.

Designation	Yield	% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm
		Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	30-Sep	Resistance
NexGen NG 4689 B2XF	788	23.8	36.2	37.7	27.9	4.2	9.3	7.5	20.9	45	6
PhytoGen PHY 210 W3FE	754	24.4	31.6	41.2	28.3	3.7	9.0	8.4	18.4	73	7
NexGen NG 3640 XF	747	24.3	36.2	41.2	31.1	4.1	9.2	8.4	20.0	73	5
Brownfield Seed and Delinting 6X	745	24.5	35.9	37.1	27.5	4.6	10.8	7.8	22.0	70	5
Deltapine DP 1822 XF	738	25.2	34.1	38.2	28.6	4.0	9.8	8.5	17.8	80	4
Deltapine DP 1646 B2XF	726	27.7	32.2	43.0	33.1	4.0	8.3	8.4	20.5	45	4
NexGen NG 4777 B2XF	715	21.3	35.4	39.1	28.4	3.9	9.3	7.1	21.5	40	6
Deltapine DP 2020 B3XF	702	24.0	33.5	40.6	30.8	4.5	8.9	8.4	22.0	75	5
Tamcot 13S-03	695	26.3	37.3	38.3	28.2	4.6	10.0	8.2	21.6	65	4
FiberMax FM 1830GLT	691	25.2	30.5	44.4	32.8	4.7	9.8	10.4	19.9	68	4
NexGen NG 5711 B3XF	680	27.4	35.7	39.4	30.6	4.0	8.5	7.5	20.9	48	6
Stoneville ST 4990B3XF	668	28.1	30.3	39.0	30.7	4.3	9.2	8.1	20.6	53	3
PhytoGen PHY 500 W3FE	666	21.7	30.1	41.1	29.1	3.9	8.2	9.2	17.2	53	6
Stoneville ST 4550GLTP	664	27.5	28.9	41.8	31.4	4.2	8.7	9.3	19.0	45	5
Deltapine DP 1820 B3XF	654	26.9	29.8	37.8	32.4	4.3	9.0	8.9	18.6	73	5
NexGen NG 4936 B3XF	607	25.0	29.5	37.2	28.4	4.4	9.1	7.7	21.6	50	4
NexGen NG 4050 XF	575	26.8	34.6	40.1	29.6	4.7	9.5	9.3	20.0	60	5
Tamcot 73	553	20.6	32.1	39.3	28.6	4.3	10.2	7.9	21.6	70	6
Stoneville ST 4480B3XF	432	23.2	34.0	38.1	27.5	3.4	9.0	7.6	17.2	43	5
Mean	881	25.5	34.0	40.1	30.0	4.3	9.5	8.5	20.1	59	5
c.v.%	16.9	3.3	2.7	1.5	2.4	5.7	5.1	6.0	8.0	16.9	13.4
LSD 0.05	202	1.4	1.5	1.0	1.2	0.4	0.8	0.9	2.7	17	1

Table 3A. Fiber quality data from the irrigated uniform cotton variety performance test at the AG-CARES farm, Lamesa, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
PhytoGen PHY 394 W3FE	4.6	1.14	80.6	29.9	5.5	78.0	8.7	3	31-1
PhytoGen PHY 443 W3FE	4.8	1.06	82.0	32.2	5.9	76.4	9.6	1	21-3,32-1
NexGen NG 4098 B3XF	4.5	1.15	81.1	33.1	5.8	76.9	8.8	4	31-1
PhytoGen PX5C45W3FE	4.6	1.06	81.8	30.5	6.5	77.7	9.5	2	21-3,21-4
NexGen NG 3930 B3XF	4.5	1.12	82.0	29.6	5.9	78.5	8.7	2	21-2,31-1
PhytoGen PHY 580 W3FE	4.5	1.07	82.0	30.7	6.3	78.4	9.3	1	21-1,21-3
PhytoGen PHY 332 W3FE	4.6	1.13	82.5	31.7	6.3	76.3	10.1	2	23-1,31-1
Deltapine DP 2012 B3XF	4.4	1.12	81.5	29.5	5.2	79.1	8.4	2	21-1,31-1
Deltapine DP 2044 B3XF	4.1	1.15	80.6	32.1	5.7	79.0	9.0	4	21-1
PhytoGen PHY 400 W3FE	4.8	1.09	80.7	30.5	5.8	78.7	8.4	3	21-2,31-1
PhytoGen PHY 350 W3FE	4.5	1.11	82.6	30.2	6.0	79.4	8.6	2	21-2
FiberMax FM 2022GL	4.5	1.07	81.7	31.8	5.8	76.5	9.4	2	21-4,31-3
PhytoGen PHY 480 W3FE	4.9	1.07	82.2	31.3	7.0	78.7	9.2	2	21-1,21-4
FiberMax FM 1621GL	4.8	1.08	81.7	30.7	5.2	78.1	8.4	3	31-1
Seed Source Genetics SSG UA 222	5.1	1.11	81.7	30.8	6.5	78.8	8.4	3	21-2,31-1
FiberMax FM 2498GLT	5.3	1.11	82.2	30.8	5.4	80.4	8.6	2	21-1
FiberMax FM 2398GLTP	5.0	1.08	81.1	28.9	5.6	79.6	8.5	1	21-1,21-4
PhytoGen PHY 250 W3FE	4.5	1.07	80.7	30.0	5.4	78.0	8.6	2	21-4,31-1
NexGen NG 3956 B3XF	4.5	1.10	81.7	29.9	6.3	77.1	9.1	3	21-4,31-3
PhytoGen PHY 430 W3FE	4.5	1.04	80.8	29.4	6.0	76.6	9.8	3	21-4,22-2
PhytoGen PX2C14W3FE	4.2	1.06	81.3	30.2	6.1	78.8	8.8	2	21-4,31-1
PhytoGen PHY 764 WRF	4.0	1.13	82.9	34.5	5.8	77.2	9.6	2	21-4,22-1
DynaGro DG 3520 B3XF	4.1	1.15	84.1	33.1	7.0	78.6	8.8	4	21-2,31-1
NexGen NG 3500 XF	4.6	1.08	82.8	32.9	6.0	76.1	9.9	2	23-2,31-1
Brownfield Seed and Delinting 9X	4.4	1.08	81.2	30.4	5.2	79.0	8.5	2	21-2,31-1
Stoneville ST 5600B2XF	4.7	1.14	82.2	31.9	6.2	75.8	9.8	3	22-2,31-1
Seed Source Genetics SSG UA 114	5.0	1.13	83.5	33.2	6.5	78.7	8.7	2	21-1,21-2
Stoneville ST 5610B3XF	4.3	1.09	81.1	31.5	6.1	78.3	9.6	2	21-1,22-1
Brownfield Seed and Delinting Ton Buster Elite	4.6	1.06	81.3	30.0	6.0	78.1	8.8	2	31-1
NexGen NG 4792 XF	4.5	1.08	82.4	32.8	6.3	75.7	10.2	2	22-1,22-2

Table 3A. cont.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
NexGen NG 4689 B2XF	4.6	1.06	81.2	29.9	5.1	77.7	9.6	1	21-1,22-1
PhytoGen PHY 210 W3FE	4.6	1.07	81.8	30.1	5.3	79.3	8.3	2	21-2,31-1
NexGen NG 3640 XF	4.6	1.09	82.3	32.5	6.4	77.0	10.0	2	22-1
Brownfield Seed and Delinting 6X	4.6	1.04	80.7	27.6	5.6	79.3	8.7	2	21-1,21-2
Deltapine DP 1822 XF	4.7	1.11	81.6	32.0	5.5	78.3	8.8	3	21-1,31-1
Deltapine DP 1646 B2XF	4.9	1.15	80.9	28.2	6.4	81.0	8.3	2	21-1,21-2
NexGen NG 4777 B2XF	4.2	1.06	80.5	28.1	5.0	76.9	9.9	1	22-1,22-2
Deltapine DP 2020 B3XF	4.4	1.11	81.0	28.9	5.2	80.4	8.8	1	11-2,21-1
Tamcot 13S-03	4.6	1.09	82.5	33.9	5.6	78.6	8.8	3	21-2
FiberMax FM 1830GLT	4.6	1.10	80.7	29.1	5.1	80.8	8.3	2	21-1,21-2
NexGen NG 5711 B3XF	4.5	1.12	81.8	30.8	6.2	79.0	9.3	1	21-1,21-3
Stoneville ST 4990B3XF	4.9	1.12	82.2	28.8	6.1	79.1	8.5	1	21-2
PhytoGen PHY 500 W3FE	4.0	1.08	81.3	31.5	5.7	78.1	9.3	3	21-2,22-1
Stoneville ST 4550GLTP	4.8	1.08	82.7	31.5	6.4	77.4	8.8	2	31-1
Deltapine DP 1820 B3XF	4.6	1.13	80.9	30.0	5.1	76.8	8.9	2	21-3,41-1
NexGen NG 4936 B3XF	4.3	1.13	82.8	29.5	6.2	77.3	9.0	3	21-2,31-1
NexGen NG 4050 XF	4.3	1.08	81.7	30.4	5.8	76.7	8.5	2	31-1
Tamcot 73	3.9	1.09	80.8	30.2	6.1	77.8	9.2	2	22-2,31-1
Stoneville ST 4480B3XF	4.4	1.09	79.8	28.3	5.3	81.6	7.3	2	21-2
Mean	4.5	1.09	81.6	30.7	5.8	79.2	8.9	2	
c.v. %	3.7	1.5	0.9	3.6	2.2	1.4	6.2	37.7	
LSD 0.05	0.3	0.03	1.3	1.9	0.2	1.8	0.9	1	

Table 4. Yield and agronomic property data from the water limited uniform cotton variety performance test at Texas A&M AgriLife Research, Lubbock, 2020.

		% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm	
Designation	Yield	Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	24-Sep	Resistance	Height
PhytoGen PHY 443 W3FE	732	30.9	27.0	42.5	30.6	5.0	9.1	8.7	23.2	80	28	4
FiberMax FM 2022GL	696	32.2	29.1	45.3	33.3	5.4	10.3	8.4	23.6	60	26	4
Seed Source Genetics SSG UA 222	672	31.6	33.4	40.4	31.7	5.1	8.9	10.0	22.8	78	23	3
PhytoGen PHY 430 W3FE	670	32.1	29.9	42.4	31.2	5.0	10.1	8.5	21.1	78	22	5
PhytoGen PHY 394 W3FE	648	28.0	31.1	41.0	29.5	5.0	9.6	9.1	21.0	68	23	6
PhytoGen PX5C45W3FE	641	32.2	30.6	45.0	32.7	4.6	11.4	8.6	18.0	60	26	3
NexGen NG 3500 XF	634	32.3	39.4	41.8	31.5	4.7	9.1	9.0	21.2	58	27	4
PhytoGen PHY 480 W3FE	633	28.5	27.6	43.4	31.4	4.6	10.0	8.6	19.8	70	27	5
PhytoGen PHY 350 W3FE	610	29.2	28.9	40.7	29.8	4.9	9.0	9.4	22.1	80	25	4
NexGen NG 3956 B3XF	605	29.1	33.3	39.3	29.6	5.1	8.1	9.0	24.7	75	29	5
PhytoGen PHY 332 W3FE	599	28.7	30.5	42.2	31.1	5.0	8.9	8.8	23.7	73	28	5
FiberMax FM 2498GLT	593	29.9	30.7	42.1	31.1	5.4	10.2	9.7	22.1	65	27	6
PhytoGen PHY 210 W3FE	588	30.7	28.0	39.8	28.3	4.6	8.3	8.9	21.9	85	25	7
NexGen NG 3930 B3XF	587	30.4	29.5	40.7	30.6	4.6	8.2	8.3	22.8	88	25	6
NexGen NG 4098 B3XF	587	29.1	34.3	38.7	30.3	5.5	8.2	10.0	25.7	55	26	4
Stoneville ST 4990B3XF	561	30.7	35.1	39.9	28.9	4.7	8.4	9.3	22.2	65	28	3
Deltapine DP 1822 XF	558	29.5	29.6	41.4	30.9	4.6	9.2	9.3	20.7	80	26	5
Stoneville ST 5610B3XF	557	30.0	29.9	44.1	32.0	4.8	10.0	8.4	21.4	65	24	4
FiberMax FM 1621GL	547	29.8	26.7	40.3	30.0	5.3	11.2	8.9	19.1	78	24	6
FiberMax FM 2398GLTP	547	31.9	31.1	44.2	32.4	5.2	9.4	9.1	24.3	53	26	5
NexGen NG 4689 B2XF	543	31.0	33.9	40.8	30.4	5.0	8.4	8.9	24.4	75	29	5
Seed Source Genetics SSG UA 114	543	28.4	35.3	38.7	29.3	5.2	8.2	9.7	24.5	83	26	3
Stoneville ST 4550GLTP	542	30.8	33.2	43.2	31.6	5.1	9.9	8.5	22.2	75	27	5
Deltapine DP 2044 B3XF	526	30.3	34.7	40.3	30.3	5.5	8.1	9.5	27.6	48	25	3
Brownfield Seed and Delinting 6X	524	33.1	35.7	36.8	27.2	5.2	7.6	10.1	25.2	80	24	6
PhytoGen PHY 250 W3FE	522	29.0	33.7	40.5	28.4	4.5	8.8	9.1	21.1	60	25	6
PhytoGen PHY 580 W3FE	515	30.1	25.5	44.6	32.8	4.6	10.2	8.4	20.1	53	27	5
NexGen NG 4777 B2XF	512	29.1	30.5	39.4	29.5	4.8	7.7	8.3	24.6	58	29	6
PhytoGen PX2C14W3FE	507	28.2	30.7	40.3	28.0	4.3	7.6	8.6	22.3	75	26	7
Tamcot 13S-03	501	26.9	32.4	39.1	29.3	4.9	8.7	9.5	22.2	75	24	6

Table 4. cont.

Designation	Yield	% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm	
		Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	24-Sep	Resistance	Height
PhytoGen PHY 400 W3FE	495	28.8	32.3	41.9	30.8	4.4	9.2	8.5	19.9	78	22	6
PhytoGen PHY 500 W3FE	489	25.9	25.6	43.0	30.3	4.1	11.6	8.4	15.1	55	27	5
Brownfield Seed and Delinting 9X	483	29.1	30.8	37.8	27.5	5.2	8.3	9.8	23.9	73	26	3
NexGen NG 4792 XF	483	26.7	36.1	41.2	31.2	4.7	8.5	9.0	22.9	68	26	4
Deltapine DP 1820 B3XF	477	33.6	26.7	43.0	32.6	4.5	9.7	8.6	19.6	70	28	5
NexGen NG 4050 XF	477	30.9	27.6	42.6	32.5	5.4	9.8	8.7	23.5	73	24	5
Stoneville ST 5600B2XF	474	31.9	33.6	43.0	32.6	5.3	9.7	9.1	23.3	50	26	4
NexGen NG 4936 B3XF	470	28.8	34.3	39.8	30.3	5.0	8.2	8.8	24.4	68	25	3
DynaGro DG 3520 B3XF	462	27.4	30.1	40.1	30.2	4.7	9.1	10.1	20.4	55	26	4
Brownfield Seed and Delinting Ton Buster Elite	440	29.3	34.9	35.9	26.6	4.9	7.2	10.0	24.3	78	23	5
Deltapine DP 2020 B3XF	433	28.5	33.5	41.2	30.2	4.4	8.5	8.2	21.3	75	25	5
NexGen NG 5711 B3XF	426	30.1	31.5	42.1	32.4	4.3	8.0	7.9	22.5	60	28	5
FiberMax FM 1830GLT	425	29.7	31.7	46.7	35.2	5.0	11.2	9.3	20.6	65	26	6
Deltapine DP 1646 B2XF	402	27.5	24.8	43.3	32.8	4.5	9.1	8.1	21.3	70	30	5
Stoneville ST 4480B3XF	402	28.1	31.3	41.0	29.8	4.0	7.9	8.8	21.1	75	26	5
Deltapine DP 2012 B3XF	399	27.3	32.4	41.7	31.1	4.5	8.9	8.1	21.1	85	27	5
Tamcot 73	390	26.2	38.2	39.4	28.7	4.7	7.8	9.6	23.4	78	21	4
PhytoGen PHY 764 WRF	375	24.6	33.0	39.5	29.1	4.8	7.9	9.3	24.1	68	27	3
NexGen NG 3640 XF	369	27.1	30.1	39.4	29.5	4.4	7.7	9.2	22.3	60	26	5
Mean	524	29.4	31.4	41.2	30.5	4.8	8.9	9.0	22.2	69	26	5
c.v.%	15.2	3.0	3.7	2.6	3.1	4.1	3.8	4.9	5.9	13.0	7.5	18.3
LSD 0.05	93	1.0	1.9	1.8	1.6	0.3	0.6	0.7	2.2	15	3	1

Table 4A. Fiber quality data from the water limited uniform cotton variety performance test at Texas A&M AgriLife Research, Lubbock, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
PhytoGen PHY 443 W3FE	4.3	1.04	78.7	26.8	5.6	79.6	8.6	2	21-1,21-2
FiberMax FM 2022GL	5.0	1.02	80.5	29.1	6.3	78.4	9.4	2	21-3
Seed Source Genetics SSG UA 222	4.5	1.13	80.5	32.4	6.1	79.2	8.6	2	21-2,31-1
PhytoGen PHY 430 W3FE	4.5	1.03	80.5	29.4	6.9	79.8	9.3	2	11-2,21-1
PhytoGen PHY 394 W3FE	4.5	1.06	81.3	27.4	6.0	79.3	9.1	2	11-2,21-2
PhytoGen PX5C45W3FE	4.9	1.01	80.4	28.0	6.6	80.0	9.3	1	11-1,21-1
NexGen NG 3500 XF	4.5	1.08	80.8	31.0	6.5	80.5	9.2	1	11-1,21-1
PhytoGen PHY 480 W3FE	4.6	1.07	79.9	27.4	5.7	79.9	8.8	1	21-1,21-2
PhytoGen PHY 350 W3FE	3.9	1.09	78.2	30.3	5.7	78.3	9.5	3	11-2,22-2
NexGen NG 3956 B3XF	4.3	1.03	79.7	29.3	6.1	80.0	8.9	2	11-2,21-2
PhytoGen PHY 332 W3FE	4.6	1.02	80.1	26.9	6.4	80.6	9.0	1	11-2,21-1
FiberMax FM 2498GLT	4.5	1.06	82.0	31.8	6.3	80.0	8.7	3	21-1
PhytoGen PHY 210 W3FE	4.6	1.03	81.8	28.4	7.1	78.3	9.4	3	21-3,21-4
NexGen NG 3930 B3XF	4.3	1.02	79.4	27.3	5.5	78.0	8.9	4	21-2,31-3
NexGen NG 4098 B3XF	4.8	1.10	80.9	29.7	6.8	80.0	8.9	1	21-1
Stoneville ST 4990B3XF	5.1	1.06	80.9	28.6	5.7	80.9	8.5	1	21-1,21-2
Deltapine DP 1822 XF	4.9	1.04	80.1	27.0	5.8	79.4	8.7	3	21-1,31-1
Stoneville ST 5610B3XF	4.5	1.06	80.4	28.2	5.4	81.5	8.8	1	11-2
FiberMax FM 1621GL	4.9	1.05	80.6	28.3	6.5	79.9	9.2	1	11-2,21-1
FiberMax FM 2398GLTP	4.3	1.00	79.7	27.2	6.5	78.3	9.9	2	11-4,21-3
NexGen NG 4689 B2XF	4.3	1.03	80.7	28.7	6.4	81.5	8.8	1	11-2
Seed Source Genetics SSG UA 114	3.7	1.05	80.3	30.7	5.9	80.7	8.6	2	11-2,21-2
Stoneville ST 4550GLTP	4.1	1.10	81.5	30.7	7.1	80.3	8.9	2	11-2,21-2
Deltapine DP 2044 B3XF	5.0	1.03	80.8	29.9	6.4	76.9	9.2	1	21-3,31-4
Brownfield Seed and Delinting 6X	4.8	1.03	79.3	27.9	5.6	80.4	8.7	2	11-2,21-1
PhytoGen PHY 250 W3FE	5.0	1.07	81.9	30.4	6.5	78.8	9.3	1	11-2,21-4
PhytoGen PHY 580 W3FE	4.7	1.07	80.8	29.5	6.8	79.2	9.2	2	21-1
NexGen NG 4777 B2XF	4.5	1.06	80.7	29.8	6.5	81.2	8.8	1	11-1,21-4
PhytoGen PX2C14W3FE	4.9	1.03	80.7	27.1	6.4	79.8	9.3	2	11-2,21-2
Tamcot 13S-03	4.7	1.01	80.9	30.7	6.4	78.3	9.7	1	11-4,21-3

Table 4A. cont.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
PhytoGen PHY 400 W3FE	4.9	1.01	80.3	26.8	5.5	79.2	9.4	2	11-2,21-3
PhytoGen PHY 500 W3FE	4.8	1.01	79.9	27.6	5.3	78.9	8.4	2	21-2,31-1
Brownfield Seed and Delinting 9X	4.8	1.04	81.8	31.1	6.8	78.4	9.7	2	11-4,21-3
NexGen NG 4792 XF	4.6	1.00	79.3	25.6	5.8	78.4	9.1	2	21-2,21-3
Deltapine DP 1820 B3XF	4.6	1.05	79.5	29.4	5.5	80.2	9.1	1	11-2,21-1
NexGen NG 4050 XF	4.7	1.09	78.8	27.8	6.7	79.6	8.8	2	21-1
Stoneville ST 5600B2XF	4.7	1.00	78.9	25.9	5.2	79.2	9.6	2	11-3,21-3
NexGen NG 4936 B3XF	4.4	1.06	78.9	25.7	5.6	81.8	9.0	1	11-1
DynaGro DG 3520 B3XF	4.7	1.07	80.7	31.5	5.8	80.9	8.7	1	21-1
Brownfield Seed and Delinting Ton Buster Elite	4.5	1.10	80.0	29.5	5.5	80.1	8.3	1	11-2,31-1
Deltapine DP 2020 B3XF	4.5	1.06	80.5	28.4	6.4	79.9	9.2	1	11-1,21-1
NexGen NG 5711 B3XF	4.7	1.11	81.3	28.5	6.7	81.5	8.3	1	11-2,21-1
FiberMax FM 1830GLT	4.3	1.05	80.1	29.5	5.7	79.6	8.5	2	21-1,31-1
Deltapine DP 1646 B2XF	4.6	1.04	80.8	29.3	7.0	80.6	9.3	1	11-1,21-1
Stoneville ST 4480B3XF	4.8	1.06	79.4	27.8	5.7	80.2	8.6	1	21-1,31-1
Deltapine DP 2012 B3XF	4.5	1.05	80.0	27.9	5.6	79.9	9.0	1	21-1
Tamcot 73	4.5	1.08	81.4	28.1	6.7	80.2	8.4	1	21-1,21-2
PhytoGen PHY 764 WRF	4.6	1.05	80.4	30.4	6.3	80.0	8.5	1	21-1,21-2
NexGen NG 3640 XF	4.3	1.07	80.6	29.3	7.1	79.8	9.4	1	11-2
Mean	4.6	1.05	80.3	28.7	6.1	79.8	8.9	1	
c.v.%	4.3	2.3	1.0	3.9	3.3	1.4	2.9	56.9	
LSD 0.05	0.3	0.04	1.3	1.9	0.3	1.9	0.4	1	

Table 5. Yield and agronomic property data from the water limited uniform cotton variety performance test at the AG-CARES farm, Lamesa, 2020.

		% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm	
Designation	Yield	Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	24-Sep	Resistance	Height
NexGen NG 4098 B3XF	723	24.4	32.8	39.9	29.8	4.4	9.1	7.9	22.7	65	4	22
PhytoGen PHY 394 W3FE	693	21.3	27.1	40.2	27.8	3.7	9.1	9.8	15.1	48	5	20
PhytoGen PHY 430 W3FE	654	25.1	25.3	40.2	29.2	4.0	7.9	8.5	18.8	63	4	22
PhytoGen PHY 332 W3FE	654	23.4	25.5	43.5	33.2	4.0	8.5	10.0	17.4	60	6	22
PhytoGen PHY 350 W3FE	647	22.7	27.5	38.2	27.9	3.8	8.7	9.2	15.9	73	5	22
PhytoGen PX5C45W3FE	628	22.5	23.8	42.5	30.6	3.6	8.5	10.1	15.3	60	6	22
PhytoGen PHY 443 W3FE	602	22.5	24.7	41.3	29.3	3.8	8.5	9.5	16.8	70	4	23
PhytoGen PHY 400 W3FE	596	22.1	24.3	41.4	30.6	3.5	8.3	8.4	16.9	53	5	18
DynaGro DG 3520 B3XF	591	23.1	33.0	38.0	28.1	3.7	11.1	8.9	15.7	53	4	20
FiberMax FM 2398GLTP	569	25.8	28.5	43.7	32.5	4.9	9.1	9.9	21.5	60	6	22
Brownfield Seed and Delinting 6X	568	23.0	33.6	36.9	26.9	4.2	10.0	7.4	21.0	65	5	24
FiberMax FM 2022GL	566	23.4	27.5	46.3	33.0	2.9	8.4	11.4	11.3	65	4	20
PhytoGen PHY 480 W3FE	565	22.1	23.0	41.8	29.8	3.8	8.4	9.7	16.4	53	4	22
FiberMax FM 2498GLT	550	25.3	26.5	40.3	29.6	4.6	9.9	9.4	20.0	35	5	24
Brownfield Seed and Delinting 9X	548	22.5	28.7	37.8	27.1	4.1	9.8	8.0	19.5	48	4	22
Deltapine DP 2044 B3XF	538	24.0	27.9	38.0	29.0	4.2	9.2	8.1	19.7	55	3	20
PhytoGen PHY 580 W3FE	507	23.0	24.0	44.3	32.2	3.7	8.4	9.7	17.1	43	3	21
NexGen NG 3956 B3XF	506	20.8	27.2	39.1	27.3	3.8	9.0	7.4	20.0	67	5	22
Seed Source Genetics SSG UA 222	502	23.7	30.2	37.6	29.2	4.1	10.0	7.9	19.5	68	2	20
NexGen NG 3930 B3XF	498	21.2	27.8	39.1	30.6	3.9	8.2	7.2	21.0	73	5	21
FiberMax FM 1621GL	489	23.3	26.9	39.9	29.3	4.7	9.3	9.7	19.2	65	6	24
NexGen NG 4689 B2XF	487	22.3	32.1	40.8	30.8	4.3	8.6	7.9	22.3	55	5	25
Brownfield Seed and Delinting Ton Buster Elite	474	22.9	33.2	36.8	27.6	4.1	9.4	7.0	21.7	53	4	22
Stoneville ST 5610B3XF	471	20.9	27.0	41.7	30.8	4.2	8.2	8.4	20.6	45	4	25
PhytoGen PHY 210 W3FE	460	20.5	23.3	36.4	24.5	3.4	8.9	7.8	15.8	83	7	19
PhytoGen PHY 250 W3FE	460	21.7	27.0	41.8	29.0	3.6	8.7	8.7	17.2	63	5	20
PhytoGen PHY 500 W3FE	451	23.7	27.6	41.2	27.9	3.3	8.0	7.7	17.7	48	5	23
PhytoGen PHY 764 WRF	450	22.3	23.0	37.4	27.6	3.5	9.6	7.6	17.0	43	3	23
NexGen NG 3640 XF	443	18.0	22.5	38.8	28.0	3.2	8.6	7.8	16.0	63	5	24
PhytoGen PX2C14W3FE	438	21.9	29.5	38.3	26.6	3.7	8.1	7.0	20.1	63	7	20

Table 5. cont.

Designation	Yield	% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm	
		Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	24-Sep	Resistance	Height
Seed Source Genetics SSG UA 114	434	21.3	28.3	39.1	29.0	4.6	9.7	7.6	23.3	75	2	23
Deltapine DP 1822 XF	431	22.4	27.9	37.3	27.2	3.5	9.6	7.7	16.8	78	5	25
NexGen NG 4777 B2XF	424	23.9	32.8	41.1	29.3	3.8	9.5	8.1	19.2	50	5	25
FiberMax FM 1830GLT	423	24.9	27.8	40.6	29.9	4.2	9.6	9.2	18.3	50	6	25
Deltapine DP 2012 B3XF	421	21.9	30.7	38.9	28.9	3.8	8.1	7.5	19.8	68	6	22
NexGen NG 3500 XF	421	21.1	28.6	41.4	30.4	3.9	8.8	8.1	19.8	48	5	26
Stoneville ST 4550GLTP	412	26.7	26.5	37.5	28.9	4.3	8.6	8.0	20.2	40	4	26
Stoneville ST 5600B2XF	393	22.1	22.9	39.0	28.8	4.3	9.0	8.2	20.5	45	4	24
Tamcot 73	385	22.3	35.3	36.8	26.2	3.6	8.9	6.9	19.4	78	5	22
Tamcot 13S-03	371	22.5	29.5	37.8	28.5	4.5	9.2	8.1	20.9	65	7	20
NexGen NG 4792 XF	346	23.0	30.3	42.5	32.4	4.0	8.6	8.8	19.0	40	5	21
Deltapine DP 2020 B3XF	340	21.4	29.0	39.1	27.8	3.7	8.4	7.8	18.4	68	5	24
Stoneville ST 4990B3XF	331	23.2	27.9	37.4	28.3	4.0	8.7	7.4	19.9	43	4	26
Deltapine DP 1646 B2XF	311	22.5	21.8	44.2	32.8	3.6	7.6	9.1	17.6	55	4	24
NexGen NG 4050 XF	310	24.4	22.7	39.9	28.2	4.2	9.8	9.5	17.6	63	5	21
NexGen NG 5711 B3XF	309	24.2	26.4	39.7	29.7	3.9	8.1	7.7	20.0	43	4	23
Stoneville ST 4480B3XF	294	20.9	32.1	35.9	25.4	3.2	8.7	6.9	16.7	45	4	21
Deltapine DP 1820 B3XF	190	23.3	32.1	39.8	27.9	3.4	8.4	8.6	15.7	73	5	25
NexGen NG 4936 B3XF	183	25.2	29.5	38.3	28.7	4.1	8.8	8.3	18.9	45	4	23
Mean	467	22.8	27.8	39.7	29.0	3.9	8.9	8.4	18.6	57	4	22
c.v.%	18.3	4.5	3.3	1.9	3.0	10.0	4.1	7.0	10.4	17.4	10.0	9.9
LSD 0.05	116	1.7	1.5	1.3	1.5	7.0	0.6	1.0	3.2	16	1	4

Table 5A. Fiber quality data from the water limited uniform cotton variety performance test at the AG-CARES farm, Lamesa, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
NexGen NG 4098 B3XF	4.7	1.12	79.6	29.1	5.5	77.1	8.6	3	31-1
PhytoGen PHY 394 W3FE	4.8	1.02	80.6	27.6	6.0	76.6	9.1	3	31-1,32-1
PhytoGen PHY 430 W3FE	4.4	1.11	79.9	32.4	5.6	77.0	8.4	4	31-1,31-2
PhytoGen PHY 332 W3FE	5.0	1.02	80.3	27.9	6.5	75.2	8.9	3	31-3,41-3
PhytoGen PHY 350 W3FE	4.4	1.08	79.4	26.9	5.7	78.1	9.1	2	21-1,21-2
PhytoGen PX5C45W3FE	4.8	1.01	79.8	28.4	6.2	77.9	9.1	2	31-1,31-3
PhytoGen PHY 443 W3FE	4.8	1.07	80.3	28.5	6.0	75.0	9.7	2	21-1
PhytoGen PHY 400 W3FE	4.1	1.09	80.2	28.8	5.4	79.1	9.2	2	21-1,21-3
DynaGro DG 3520 B3XF	4.2	1.09	78.7	29.7	5.5	76.3	8.8	4	31-2,31-3
FiberMax FM 2398GLTP	4.7	1.05	79.2	30.2	5.7	77.2	8.6	3	31-1
Brownfield Seed and Delinting 6X	4.6	1.07	81.1	29.3	5.8	77.3	8.5	2	31-1,31-2
FiberMax FM 2022GL	4.7	1.04	81.5	31.5	5.8	77.9	8.7	4	31-1
PhytoGen PHY 480 W3FE	4.9	1.07	81.8	30.1	6.7	77.5	9.2	3	21-3,21-4
FiberMax FM 2498GLT	5.1	1.07	80.5	29.9	5.1	76.7	7.9	5	31-1,41-1
Brownfield Seed and Delinting 9X	4.9	1.10	80.9	30.3	6.4	77.2	8.7	3	31-1,31-3
Deltapine DP 2044 B3XF	5.4	1.09	81.4	30.9	5.5	78.8	8.3	3	21-2,31-1
PhytoGen PHY 580 W3FE	5.4	1.07	80.7	28.8	5.5	78.6	8.7	2	21-2,31-1
NexGen NG 3956 B3XF	4.5	1.05	79.7	28.3	5.3	79.4	8.0	3	21-2,31-1
Seed Source Genetics SSG UA 222	4.5	1.07	80.4	28.8	6.0	75.6	9.3	5	31-3,32-1
NexGen NG 3930 B3XF	4.5	1.03	80.5	29.1	6.0	76.7	9.5	3	21-4,31-2
FiberMax FM 1621GL	4.3	1.03	79.7	27.9	6.2	79.8	8.6	1	21-1,21-2
NexGen NG 4689 B2XF	4.5	1.12	82.2	31.7	6.0	76.1	8.7	3	31-2,31-3
Brownfield Seed and Delinting Ton Buster Elite	4.5	1.14	83.2	31.3	7.1	78.3	8.3	4	31-1
Stoneville ST 5610B3XF	4.9	1.05	81.7	31.2	6.1	77.9	9.3	3	21-3,31-3
PhytoGen PHY 210 W3FE	4.8	1.06	79.5	29.0	5.5	78.0	8.4	2	21-2,31-2
PhytoGen PHY 250 W3FE	5.4	1.06	81.4	29.8	6.5	76.0	9.5	3	21-4,32-1
PhytoGen PHY 500 W3FE	5.0	1.09	82.4	30.9	6.2	77.4	8.5	3	31-1,31-3
PhytoGen PHY 764 WRF	4.3	1.09	82.3	30.2	6.1	79.9	8.9	2	21-1
NexGen NG 3640 XF	4.9	1.03	79.8	26.9	6.0	78.0	8.9	2	21-1,31-1
PhytoGen PX2C14W3FE	4.7	1.07	81.7	31.5	6.5	77.0	9.2	2	21-4,31-1

Table 5A. cont.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
Seed Source Genetics SSG UA 114	4.9	1.07	81.1	28.9	5.3	75.2	9.5	3	31-3,32-1
Deltapine DP 1822 XF	4.4	1.03	81.0	28.6	5.2	78.9	8.1	3	21-4,31-1
NexGen NG 4777 B2XF	5.1	1.05	81.2	31.4	6.3	76.4	9.9	2	21-4,22-2
FiberMax FM 1830GLT	4.7	1.07	80.5	27.8	5.6	77.3	8.7	3	21-2,31-1
Deltapine DP 2012 B3XF	4.7	1.08	81.1	30.5	5.4	78.5	8.2	4	31-1
NexGen NG 3500 XF	4.8	1.10	80.1	27.3	6.6	79.6	8.7	1	21-1,31-1
Stoneville ST 4550GLTP	4.5	1.05	79.8	28.4	5.1	77.2	9.0	2	21-4,31-2
Stoneville ST 5600B2XF	4.3	1.09	80.5	27.5	5.0	80.1	8.2	3	21-1,21-2
Tamcot 73	5.0	1.08	80.8	32.7	5.8	77.1	8.4	3	31-1,31-2
Tamcot 13S-03	4.7	1.10	80.7	29.1	5.2	80.7	8.2	1	21-1,21-2
NexGen NG 4792 XF	4.5	1.09	81.1	28.4	6.1	76.9	9.1	1	21-4,31-2
Deltapine DP 2020 B3XF	4.6	1.11	82.2	29.2	6.3	79.0	8.8	1	21-2,31-1
Stoneville ST 4990B3XF	4.3	1.06	81.5	31.3	5.7	79.6	8.2	2	21-2,31-1
Deltapine DP 1646 B2XF	4.8	1.08	81.8	31.0	6.3	78.3	9.0	2	21-2,21-4
NexGen NG 4050 XF	4.3	1.10	80.4	32.1	5.3	76.8	9.2	1	12-2,31-2
NexGen NG 5711 B3XF	4.2	1.10	80.8	28.4	5.3	79.6	9.0	2	21-1
Stoneville ST 4480B3XF	4.8	1.04	79.8	29.2	5.9	77.4	8.1	3	31-1,31-2
Deltapine DP 1820 B3XF	4.5	1.07	80.8	28.6	6.3	77.5	8.9	2	21-2,31-3
NexGen NG 4936 B3XF	4.6	1.08	78.6	27.6	5.4	81.4	7.3	2	31-1,31-2
Mean	4.7	1.07	80.7	29.4	5.8	77.7	8.7	2	
c.v.%	4.0	2.0	1.2	4.4	2.2	1.2	4.3	35.3	
LSD0.05	0.3	0.04	1.6	2.2	0.2	1.6	0.6	1	

Table 6. Yield summary over four locations of the uniform cotton variety performance tests conducted by Texas A&M AgriLife Research, Lubbock, 2020.

Designation	Overall Average	Lubbock Irr Rank	Lamesa Irr Rank	Lubbock dry Rank	Lamesa dry Rank
PhytoGen PHY 332 W3FE	999	1	7	11	4
PhytoGen PX5C45W3FE	995	2	4	6	6
NexGen NG 4098 B3XF	979	3	3	15	1
PhytoGen PHY 394 W3FE	979	5	1	5	2
PhytoGen PHY 443 W3FE	979	4	2	1	7
FiberMax FM 2022GL	891	10	12	2	12
NexGen NG 3930 B3XF	874	9	5	14	20
PhytoGen PHY 580 W3FE	857	6	6	27	17
PhytoGen PHY 430 W3FE	840	13	20	4	3
PhytoGen PHY 480 W3FE	831	22	13	8	13
PhytoGen PHY 400 W3FE	830	15	10	31	8
NexGen NG 3956 B3XF	821	7	19	10	18
Seed Source Genetics SSG UA 222	817	16	15	3	19
Deltapine DP 2044 B3XF	814	20	9	24	16
PhytoGen PHY 350 W3FE	811	38	11	9	5
FiberMax FM 2498GLT	806	14	16	12	14
FiberMax FM 1621GL	767	23	14	19	21
NexGen NG 3500 XF	757	17	24	7	36
PhytoGen PX2C14W3FE	748	11	21	29	30
FiberMax FM 2398GLTP	745	34	17	20	10
Deltapine DP 2012 B3XF	735	28	8	46	35
PhytoGen PHY 210 W3FE	728	12	32	13	25
Stoneville ST 5610B3XF	727	19	28	18	24
NexGen NG 4689 B2XF	723	18	31	21	22
Seed Source Genetics SSG UA 114	719	21	27	22	31
NexGen NG 4792 XF	714	8	30	34	41
Brownfield Seed and Delinting 6X	706	27	34	25	11
PhytoGen PHY 250 W3FE	694	45	18	26	26
DynaGro DG 3520 B3XF	694	43	23	39	9
Brownfield Seed and Delinting 9X	690	41	25	33	15
Stoneville ST 5600B2XF	680	25	26	37	38
Brownfield Seed and Delinting Ton Buster Elite	672	29	29	40	23
PhytoGen PHY 764 WRF	668	30	22	48	28
Deltapine DP 1822 XF	666	32	35	17	32
Stoneville ST 4550GLTP	639	31	44	23	37
PhytoGen PHY 500 W3FE	634	33	43	32	27
NexGen NG 3640 XF	609	37	33	49	29
Tamcot 13S-03	608	40	39	30	40
NexGen NG 4777 B2XF	605	48	37	28	33
FiberMax FM 1830GLT	594	44	40	43	34
Stoneville ST 4990B3XF	589	47	42	16	43
Deltapine DP 1646 B2XF	582	35	36	44	44
Deltapine DP 1820 B3XF	581	26	45	35	49
NexGen NG 4936 B3XF	566	24	47	38	50
NexGen NG 5711 B3XF	566	42	41	42	46
Deltapine DP 2020 B3XF	560	49	38	41	42
NexGen NG 4050 XF	557	39	48	36	45
Tamcot 73	532	46	49	47	39
Stoneville ST 4480B3XF	456	50	50	45	48

Notes

Table 7. Yield and agronomic property data from the irrigated late planted variety performance test at Texas A&M AgriLife Research, Lubbock, 2020.

		% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm	
Designation	Yield	Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	13-Oct	Resistance	Height
PhytoGen PHY 332 W3FE	1080	24.0	33.3	38.5	28.3	5.5	10.1	7.5	28.2	48	4	34
PhytoGen PX4B08W3FE	1071	24.1	28.1	39.5	29.5	4.8	8.9	7.7	24.6	53	5	34
PhytoGen PX2E05W4FE	1015	24.0	32.9	39.7	29.5	5.3	10.6	8.0	26.8	73	6	28
PhytoGen PX3E33W3FE	961	22.7	33.8	38.7	28.6	5.9	9.9	7.3	30.9	48	5	34
PhytoGen PX2D18W3FE	918	22.8	34.7	38.4	28.1	5.4	10.5	7.4	28.3	40	6	32
NexGen NG 3956 B3XF	810	23.0	38.1	35.8	28.0	5.4	9.8	6.5	29.5	63	6	36
Deltapine DP 1612 B2XF	799	23.0	31.7	37.5	29.1	5.2	9.4	7.3	26.4	75	4	28
NexGen NG 3930 B3XF	789	24.6	39.3	37.4	28.4	5.2	9.4	6.8	28.3	93	5	29
PhytoGen PHY 250 W3FE	786	24.5	33.0	35.8	26.0	5.2	10.3	7.0	26.5	68	5	32
PhytoGen PHY 443 W3FE	779	19.5	31.6	38.5	27.8	5.6	10.4	7.9	27.2	60	4	37
PhytoGen PX2C14W3FE	776	20.1	34.9	36.3	26.6	5.4	10.0	6.7	29.3	65	5	31
PhytoGen PHY 350 W3FE	749	21.4	36.3	35.9	27.0	5.1	10.3	7.3	24.8	60	4	34
PhytoGen PHY 400 W3FE	735	21.4	29.6	38.7	29.7	5.0	9.1	7.4	26.2	60	5	27
PhytoGen PHY 394 W3FE	720	19.9	28.2	36.9	27.5	5.5	10.1	7.8	26.1	30	5	27
PhytoGen PHY 210 W3FE	697	23.1	31.3	37.5	29.0	5.1	9.9	7.3	26.5	85	7	24
PhytoGen PHY 480 W3FE	688	22.1	30.9	38.1	27.9	5.0	9.4	7.3	26.0	60	4	29
NexGen NG 2982 B3XF	654	20.9	31.8	34.1	26.5	5.2	10.0	6.5	27.6	93	5	26
Deltapine DP 1908 B3XF	612	22.4	38.4	38.4	28.5	4.5	9.3	6.6	25.9	85	5	31
Deltapine DP 1822 XF	565	19.3	26.9	37.7	28.9	4.9	10.5	7.8	23.6	85	4	30
Deltapine DP 2115 B3XF	529	18.9	24.9	38.9	29.1	5.1	8.7	7.4	27.1	60	6	32
Mean	787	22.0	32.5	37.6	28.2	5.2	9.8	7.2	27.0	65	5	30
c.v.%	11.8	2.6	1.7	1.3	1.9	4.4	3.1	4.5	4.3	13.8	17.6	8.9
LSD 0.05	110	1.0	0.9	0.9	0.9	0.4	0.5	0.6	2.0	16	1	5

Table 7A. Fiber quality data from the late planted cotton variety performance test at Texas A&M AgriLife Research, Lubbock, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
PhytoGen PHY 332 W3FE	4.0	1.13	80.4	29.4	6.8	76.8	10.1	3	21-3,22-1
PhytoGen PX4B08W3FE	3.2	1.09	79.3	30.8	6.7	74.2	11.2	3	22-1,23-1
PhytoGen PX2E05W4FE	4.4	1.08	83.1	30.2	5.9	76.9	9.2	4	31-1,32-1
PhytoGen PX3E33W3FE	3.3	1.13	80.4	31.4	6.4	73.4	12.2	2	13-2,23-3
PhytoGen PX2D18W3FE	3.5	1.11	78.6	31.3	5.8	73.1	11.3	3	22-1,23-4
NexGen NG 3956 B3XF	3.5	1.12	81.4	30.1	6.7	77.8	9.8	3	21-1,22-1
Deltapine DP 1612 B2XF	4.2	1.15	81.8	31.3	7.4	74.8	10.5	3	22-2,32-1
NexGen NG 3930 B3XF	3.6	1.13	80.3	28.6	6.4	78.7	9.7	2	21-1,22-1
PhytoGen PHY 250 W3FE	3.7	1.12	80.5	30.5	5.7	76.3	10.1	2	21-3,22-2
PhytoGen PHY 443 W3FE	3.8	1.12	81.6	30.6	6.4	74.5	10.9	3	22-2,23-1
PhytoGen PX2C14W3FE	3.5	1.11	80.7	30.2	6.8	76.3	11.1	2	12-2,23-1
PhytoGen PHY 350 W3FE	3.5	1.12	81.3	30.3	6.5	76.9	9.9	3	21-3,22-2
PhytoGen PHY 400 W3FE	3.4	1.12	80.2	31.9	6.2	75.9	10.2	3	22-1,22-2
PhytoGen PHY 394 W3FE	3.4	1.12	79.7	30.6	5.9	71.5	11.8	3	23-2,33-3
PhytoGen PHY 210 W3FE	4.4	1.12	81.8	31.8	5.4	77.2	9.4	2	21-4,31-3
PhytoGen PHY 480 W3FE	3.8	1.12	81.6	29.7	7.1	75.8	9.9	3	22-1,32-1
NexGen NG 2982 B3XF	3.5	1.09	81.5	30.8	5.7	72.3	8.8	6	41-3
Deltapine DP 1908 B3XF	3.7	1.16	80.2	29.5	6.0	78.3	8.0	3	31-1,31-2
Deltapine DP 1822 XF	3.7	1.15	80.5	32.5	5.9	74.3	10.9	2	22-2
Deltapine DP 2115 B3XF	3.4	1.10	80.3	28.3	6.8	74.8	11.1	2	13-4,22-1
Mean	3.7	1.12	80.7	30.5	6.3	75.5	10.3	3	
c.v.%	6.5	1.8	1.0	2.8	2.5	2.4	7.6	24.5	
LSD 0.05	0.4	0.03	1.4	1.5	0.3	3.1	1.4	1	

Table 8. Yield and agronomic property data from the irrigated new variety and strains performance test at Texas A&M AgriLife Research, Lubbock, 2020.

				Agronomic Properties								
		% Turnout		% Lint		Boll	Seed	Lint	Seed per	% Open Bolls	Storm	
Designation	Yield	Lint	Seed	Picked	Pulled	Size	Index	Index	Boll	21-Oct	Resistance	Height
PhytoGen PX4B08W3FE	1261	26.4	29.1	41.2	30.2	4.6	9.7	9.9	20.0	75	5	37
PhytoGen PX2D18W3FE	1095	24.6	30.7	38.3	27.6	5.1	10.2	7.8	25.1	80	6	32
PhytoGen PX3E33W3FE	1088	24.5	31.7	40.5	29.4	5.6	9.5	7.8	29.2	78	7	36
Americot AMX 19A016B3XF	1075	27.5	38.2	38.4	30.6	5.8	9.9	7.2	31.0	78	7	31
PhytoGen PX5E34W3FE	1066	24.9	35.4	35.9	27.1	5.0	9.8	6.7	26.6	75	5	42
PhytoGen PX2E05W3FE	1045	23.1	27.4	39.4	28.9	5.3	10.0	7.7	27.1	85	7	28
PhytoGen PHY 332 W3FE	1027	22.2	30.9	35.9	26.4	5.5	9.7	7.3	27.1	80	6	38
Deltapine DP 2143 NR B3XF	1009	25.2	24.3	41.9	31.6	5.2	9.0	9.3	23.6	83	6	38
BASF BX 2194B3XF	990	23.9	34.6	39.2	30.2	5.8	10.6	8.1	28.3	78	6	35
PhytoGen PX5E28W3FE	974	22.8	33.1	38.2	28.4	5.1	9.3	7.3	26.4	80	6	43
Americot AMX 19A018B3XF	966	26.5	32.6	38.6	28.7	4.7	9.4	7.5	24.1	83	5	32
FiberMax FM 1730GLTP	936	28.0	33.5	41.0	31.6	5.1	9.0	8.7	24.1	88	6	29
PhytoGen PHY 443 W3FE	924	24.8	29.0	41.0	29.4	5.3	9.2	8.3	26.5	83	6	37
DynaGro DGX 130041 GLTP	921	24.0	32.8	36.5	28.1	5.7	9.4	7.7	27.3	88	7	32
Deltapine DP 2123 B3XF	893	22.9	31.8	38.0	31.3	5.8	9.7	7.9	27.6	85	6	33
Tamcot 73	892	22.7	36.5	35.1	26.5	5.5	10.9	7.2	26.8	85	6	33
PhytoGen PX2C14W3FE	888	22.1	30.4	36.7	27.3	4.8	9.5	6.8	25.8	83	7	35
Americot AMX 19A015B3XF	885	22.8	36.7	36.1	27.7	5.4	9.6	6.4	30.8	78	6	35
Brownfield Seed and Delinting 6X	885	23.9	34.8	40.3	30.9	5.8	11.0	8.3	27.9	85	7	34
Americot AMX 19A014B3XF	871	22.9	33.2	35.1	27.1	6.2	10.4	6.8	32.2	85	6	34
TAMULBB15-1-812M	869	24.5	33.8	38.2	28.3	5.1	10.0	8.2	23.6	85	6	32
Stoneville ST 4993B3XF	858	26.9	27.1	43.3	34.5	5.4	9.1	9.4	24.8	80	7	36
Tamcot G11	845	23.8	33.5	38.2	29.3	6.1	11.4	8.1	28.8	85	5	33
Bayer CropScience 19R132B3XF	840	24.7	25.0	44.7	33.7	5.3	9.1	10.1	23.7	83	7	35
Tamcot 13S03	837	25.2	32.1	33.3	25.0	5.7	10.6	6.9	27.6	83	6	29
Deltapine DP 2141 NR B3XF	821	21.9	23.6	40.3	29.9	5.3	9.5	8.6	24.9	80	5	38
PhytoGen PX5C45W3FE	820	25.5	27.2	39.7	29.9	5.2	9.2	7.8	26.6	75	6	34
Americot AMX 19B003B3XF	814	27.2	30.7	39.2	30.0	5.3	9.2	7.9	26.3	83	6	36
BASF BX 2116GLTP	804	21.7	35.9	38.6	29.3	5.6	11.7	8.4	25.5	83	5	32
Americot AMX 19B001B3XF	776	27.1	29.0	42.5	32.7	5.1	8.7	9.7	22.3	85	5	32

Table 8. cont.

Designation	Yield	% Turnout		Agronomic Properties						% Open Bolls	Storm	
				% Lint		Boll	Seed	Lint	Seed per			
		Lint	Seed	Picked	Pulled	Size	Index	Index	Boll	21-Oct	Resistance	Height
TAMULBB15-1-404M	739	22.6	30.6	37.0	28.0	5.8	10.3	7.9	27.0	80	6	33
Deltapine DP 2127 B3XF	728	26.3	29.9	42.3	31.6	5.6	10.0	9.0	26.2	83	5	36
Stoneville ST 5091B3XF	644	22.6	28.2	41.4	31.5	5.6	8.6	8.5	27.6	80	5	37
BASF BX 2192B3XF	632	21.4	31.9	41.1	30.5	4.7	8.8	7.9	24.5	80	5	33
DynaGro DGX 19008 B3XF	552	19.9	24.3	41.0	31.8	5.1	9.0	8.3	25.0	85	6	32
Bayer CropScience 19R237B3XF	498	21.0	21.4	39.4	29.0	4.8	8.9	8.1	23.4	83	5	33
Mean	882	24.1	30.8	39.1	29.5	5.3	9.7	8.0	26.2	82	6	34
c.v.%	14.2	2.3	3.3	1.8	2.6	3.3	4.0	6.6	6.8	4.5	15.1	6.9
LSD 0.05	147	0.9	1.7	1.2	1.3	0.3	0.6	0.9	3.0	6	1	4

Table 8A. Fiber quality data from the irrigated new varieties and strains cotton performance test at Texas A&M AgriLife Research, Lubbock, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
PhytoGen PX4B08W3FE	4.1	1.12	79.5	28.7	6.5	78.4	8.9	2	21-1,31-3
PhytoGen PX2D18W3FE	4.2	1.16	80.7	30.4	6.3	80.8	8.3	2	21-1,31-1
PhytoGen PX3E33W3FE	4.5	1.16	81.9	31.9	6.1	77.4	8.9	1	21-2
Americot AMX 19A016B3XF	4.3	1.07	80.1	27.5	5.8	79.6	8.3	2	21-2
PhytoGen PX5E34W3FE	4.2	1.09	81.0	29.6	7.1	76.9	9.0	2	31-3
PhytoGen PX2E05W3FE	3.5	1.11	79.6	28.0	6.0	79.6	8.6	3	21-1
PhytoGen PHY 332 W3FE	4.7	1.16	81.2	30.5	6.4	77.3	9.4	2	22-1,31-1
Deltapine DP 2143 NR B3XF	4.2	1.14	81.6	28.2	6.3	79.8	8.5	2	21-1,31-1
BASF BX 2194B3XF	4.0	1.18	80.0	29.5	6.3	81.2	7.7	2	21-1,21-2
PhytoGen PX5E28W3FE	3.7	1.21	80.5	34.3	5.8	75.0	9.3	3	31-1,32-1
Americot AMX 19A018B3XF	4.1	1.11	81.9	31.9	6.1	79.1	8.3	3	21-2,31-1
FiberMax FM 1730GLTP	4.1	1.11	79.9	27.7	6.3	79.9	8.3	2	21-1,21-2
PhytoGen PHY 443 W3FE	3.9	1.12	80.0	29.9	6.8	80.3	8.3	2	21-1,21-2
DynaGro DGX 130041 GLTP	4.3	1.17	81.8	32.6	6.2	79.4	7.9	3	21-2,31-1
Deltapine DP 2123 B3XF	4.4	1.12	80.8	30.2	6.0	79.5	8.7	1	21-1,21-4
Tamcot 73	3.7	1.17	80.5	30.2	6.4	78.5	8.9	2	21-2,21-4
PhytoGen PX2C14W3FE	4.7	1.13	80.3	28.5	6.2	79.3	8.8	2	21-1,21-2
Americot AMX 19A015B3XF	4.0	1.15	81.2	29.2	6.4	78.1	8.8	2	21-4,31-1
Brownfield Seed and Delinting 6X	4.2	1.13	79.7	28.8	5.8	80.1	8.3	2	21-1,21-2
Americot AMX 19A014B3XF	4.4	1.09	79.8	29.6	5.6	79.1	8.1	2	21-2,31-1
TAMULBB15-1-812M	4.0	1.13	81.5	29.8	6.7	78.7	7.9	2	21-2,41-1
Stoneville ST 4993B3XF	4.2	1.12	82.1	30.0	6.2	80.5	8.5	2	21-1
Tamcot G11	3.9	1.18	80.2	29.5	6.9	79.8	8.4	2	21-2
Bayer CropScience 19R132B3XF	3.6	1.15	80.0	28.4	5.7	78.9	8.4	2	31-1
Tamcot 13S03	4.0	1.12	79.8	31.1	6.3	78.8	8.9	2	21-1,21-4
Deltapine DP 2141 NR B3XF	4.6	1.10	81.0	29.9	6.6	81.5	8.4	1	11-2,21-1
PhytoGen PX5C45W3FE	4.3	1.10	79.8	28.4	6.7	80.1	8.8	2	21-1
Americot AMX 19B003B3XF	4.0	1.14	80.1	28.7	6.5	80.6	8.5	2	21-1
BASF BX 2116GLTP	4.5	1.10	81.6	28.6	6.4	79.3	8.0	2	21-2,31-1
Americot AMX 19B001B3XF	4.3	1.09	80.8	28.4	5.8	80.8	8.4	2	21-1

Table 8A. cont.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
TAMULBB15-1-404M	4.3	1.07	80.4	29.3	6.6	78.2	9.4	2	21-2,21-3
Deltapine DP 2127 B3XF	3.7	1.16	80.8	29.9	6.2	81.7	8.3	2	21-1
Stoneville ST 5091B3XF	4.5	1.15	80.9	30.9	6.5	78.0	9.4	2	21-3,21-4
BASF BX 2192B3XF	3.9	1.11	81.3	30.2	6.1	77.9	8.8	2	22-1,31-2
DynaGro DGX 19008 B3XF	3.7	1.14	80.4	29.3	6.6	78.8	8.8	2	21-1,21-2
Bayer CropScience 19R237B3XF	4.4	1.14	81.1	31.7	6.3	79.9	8.3	2	21-2
Mean	4.1	1.13	80.6	29.7	6.3	79.2	8.5	2	
c.v.%	10.6	3.8	1.3	7.3	8.6	2.0	8.3	54.5	
LSD 0.05	0.7	0.07	1.7	3.7	0.9	2.6	1.2	2	

Table 9. Yield and agronomic property data from the irrigated root-knot nematode cotton variety performance test at the AG-CARES farm, Lamesa, 2020.

		% Turnout		% Lint		Agronomic Properties				% Open			Nematode
Designation	Yield	Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	Bolls 14-Oct	Storm Resistance	Height	Rating RK
TAMULBB 17-4-116N	765	19.1	39.4	32.3	23.8	4.2	11.5	6.3	21.7	65	7	24	390
DynaGro DGX 19917 B3XF	752	21.0	37.4	28.0	20.5	4.8	11.0	5.0	26.9	15	5	29	1410
DynaGro DGX 19908 B3XF	742	22.2	31.4	36.7	27.2	4.6	9.2	6.5	26.0	33	6	23	180
PhytoGen PHY 480 W3FE	720	19.6	30.7	34.4	24.9	4.8	10.0	6.5	25.2	23	6	26	115
PhytoGen PHY 394 W3FE	708	19.6	29.6	34.3	23.2	4.4	9.7	6.8	22.4	25	6	21	90
PhytoGen PHY 350 W3FE	702	20.0	31.5	33.2	24.2	4.4	10.1	6.3	23.1	30	5	25	180
PhytoGen PHY 580 W3FE	702	22.5	29.9	37.8	27.0	4.7	10.0	7.2	24.7	15	5	27	0
PhytoGen PX4B08W3FE	688	23.0	25.4	37.9	27.1	3.9	7.9	7.4	19.8	38	5	20	0
BASF BX 2194B3XF	685	19.9	32.3	35.9	29.5	5.4	11.0	7.1	27.2	25	6	22	685
PhytoGen PX5C45W3FE	683	23.1	30.2	37.7	27.6	4.4	9.5	7.2	23.2	10	5	26	90
PhytoGen PHY 443 W3FE	682	18.9	26.4	35.6	24.1	4.7	9.6	6.7	25.4	25	5	26	0
Seed Source Genetics SSG UA 114	676	20.2	35.0	32.7	25.7	4.9	10.7	6.3	25.4	75	5	24	150
BASF BX 2116GLTP	665	20.1	37.3	32.4	24.3	4.9	12.0	6.5	24.5	18	6	24	780
FiberMax FM 1621GL	661	20.7	29.9	35.9	27.6	4.9	10.4	7.6	23.3	33	6	20	300
PhytoGen PX2E05W3FE	659	20.8	32.1	39.2	27.4	4.7	10.0	7.9	23.0	48	7	19	90
TAMULBB 17-4-114N	653	19.9	35.1	32.1	23.4	4.3	11.2	6.1	22.4	40	7	23	480
PhytoGen PHY 400 W3FE	622	19.1	30.3	37.4	26.6	4.5	9.6	7.1	23.9	25	6	21	210
PhytoGen PX2C14W3FE	618	19.2	32.9	32.1	25.8	5.2	10.1	5.6	29.9	33	6	23	175
PhytoGen PHY 332 W3FE	615	19.9	29.5	36.0	24.8	4.2	9.4	6.9	22.1	20	5	23	175
Stoneville ST 5600B2XF	614	21.3	32.8	33.8	26.7	5.5	9.9	6.2	29.7	10	5	28	160
Stoneville ST 5091 B3XF	609	25.2	32.7	38.3	28.4	4.7	9.2	7.1	25.5	25	6	28	120
TAMULBB 17-4-122N	595	18.9	39.7	30.5	23.6	4.7	11.3	5.7	25.3	63	7	22	120
PhytoGen PX3E33W3FE	593	19.4	30.4	34.5	23.2	4.6	9.4	6.1	26.2	18	6	22	0
PhytoGen PX2D18W3FE	579	21.2	32.4	35.4	24.7	4.3	9.1	6.2	24.4	25	7	22	0
Seed Source Genetics SSG UA 222	561	20.1	32.5	32.8	25.7	5.3	10.9	6.5	26.5	28	6	23	240
PhytoGen PX5E34W3FE	560	21.3	35.0	33.5	22.6	4.0	9.3	5.6	24.0	13	5	31	30
PhytoGen PX5E28W3FE	559	20.5	33.1	34.7	24.4	4.4	9.3	6.2	24.9	25	4	30	120
FiberMax FM 2202GL	552	23.4	32.4	36.0	26.0	5.2	9.6	7.0	26.9	25	5	24	450
TAMULBB 18-4-107N	548	19.1	34.3	32.7	23.6	5.1	11.6	6.3	26.4	20	6	23	60
FiberMax FM 1730GLTP	544	21.3	32.1	34.7	25.2	4.5	10.0	6.7	23.2	45	6	24	130

Table 9. cont.

Designation	Yield	% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm		Nematode Rating
		Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	14-Oct	Resistance	Height	RK
TAMULBB 19-8-115/215	542	20.0	35.4	31.5	23.3	4.9	11.4	6.8	22.6	40	5	25	540
Stoneville ST 4993B3XF	530	22.8	26.9	39.3	29.6	4.5	9.6	8.3	21.6	43	6	24	355
Deltapine DP 2143 NR B3XF	530	21.3	25.6	35.2	24.9	4.1	8.9	6.9	20.9	13	5	24	210
DynaGro DGX 20127B3XF	512	19.3	29.6	35.7	26.3	4.5	9.3	6.3	25.3	20	6	25	420
TAMULBB 18-4-213N	510	19.0	32.2	34.2	23.6	5.0	11.7	7.0	24.7	28	6	26	120
Deltapine DP 2141 NR B3XF	502	19.8	33.2	36.0	26.1	3.9	9.7	6.5	21.4	15	6	26	480
BASF BX 2192B3XF	457	20.7	26.0	32.9	23.6	4.4	9.1	5.8	24.8	10	5	27	90
PhytoGen PHY 500 W3FE	446	18.4	22.0	34.5	25.4	4.2	9.1	6.8	21.1	13	4	27	0
Mean	614	20.5	31.7	34.6	25.3	4.6	10.0	6.6	24.3	28	5	24	
c.v.%	13.4	3.3	3.5	1.7	2.5	5.0	3.7	4.1	6.1	31.2	12.3	8.4	prob>f0.224
LSD 0.05	97	1.1	1.9	1.0	1.1	0.4	0.6	0.5	2.5	15	1	0.3	

Table 9A. Fiber quality data from the irrigated nematode cotton variety performance test at the AG-CARES farm, Lamesa, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
TAMULBB 17-4-116N	3.0	1.15	81.3	32.2	5.8	79.4	9.7	2	11-2,12-1
DynaGro DGX 19917 B3XF	2.9	1.12	80.6	33.4	5.9	72.1	12.8	1	13-1,24-1
DynaGro DGX 19908 B3XF	2.8	1.08	80.6	29.9	6.5	75.9	11.9	2	13-1
PhytoGen PHY 480 W3FE	3.0	1.12	81.0	30.5	6.6	72.8	12.7	3	13-3,13-4
PhytoGen PHY 394 W3FE	2.9	1.11	78.9	30.0	5.7	73.2	11.7	3	22-1,23-3
PhytoGen PHY 350 W3FE	3.0	1.11	80.8	31.0	6.1	72.9	12.3	2	23-1,23-3
PhytoGen PHY 580 W3FE	3.1	1.07	80.6	30.1	6.4	72.1	13.7	3	13-3,24-1
PhytoGen PX4B08W3FE	3.5	1.03	80.9	30.4	6.0	74.1	12.6	2	13-3
BASF BX 2194B3XF	2.5	1.12	80.0	30.7	6.3	73.1	12.3	3	13-4,23-1
PhytoGen PX5C45W3FE	3.1	1.09	81.8	31.1	6.3	73.2	13.2	2	13-3,24-1
PhytoGen PHY 443 W3FE	3.3	1.08	81.5	31.9	5.9	70.2	13.8	2	24-1
Seed Source Genetics SSG UA 114	3.2	1.16	81.8	35.5	6.4	78.4	9.8	2	11-4,21-3
BASF BX 2116GLTP	2.7	1.11	80.7	29.5	5.5	75.6	11.8	1	12-4,13-1
FiberMax FM 1621GL	2.7	1.09	81.5	31.6	5.3	72.6	12.1	3	23-1,23-3
PhytoGen PX2E05W3FE	3.5	1.05	81.6	31.3	5.5	72.3	11.5	2	22-1,33-3
TAMULBB 17-4-114N	3.0	1.17	80.7	32.3	5.9	76.3	10.7	2	21-1,23-3
PhytoGen PHY 400 W3FE	2.6	1.11	78.8	31.8	5.9	76.1	11.1	3	13-2,22-1
PhytoGen PX2C14W3FE	2.8	1.06	80.0	30.7	6.4	75.3	12.0	2	13-1,13-2
PhytoGen PHY 332 W3FE	3.0	1.10	80.7	30.8	6.2	73.6	13.0	2	13-1,24-1
Stoneville ST 5600B2XF	3.1	1.08	79.7	30.8	6.6	70.3	14.0	2	24-1
Stoneville ST 5091 B3XF	3.2	1.11	80.7	28.8	5.5	76.5	11.2	2	12-1,12-2
TAMULBB 17-4-122N	3.3	1.13	80.4	30.8	5.7	80.2	9.3	3	11-2,21-1
PhytoGen PX3E33W3FE	2.7	1.07	79.0	30.0	6.0	72.6	13.1	1	13-3,13-4
PhytoGen PX2D18W3FE	2.9	1.09	79.8	32.1	5.5	74.6	11.9	2	13-1,23-1
Seed Source Genetics SSG UA 222	2.8	1.16	80.8	33.2	6.7	74.6	11.2	3	22-1,23-3
PhytoGen PX5E34W3FE	2.6	1.10	79.8	31.7	6.1	75.0	12.3	2	31-1,31-3
PhytoGen PX5E28W3FE	2.5	1.10	81.1	32.6	6.1	75.4	11.8	2	31-1,31-2
FiberMax FM 2202GL	2.9	1.08	81.8	34.4	5.9	72.4	12.0	3	23-1,23-4
TAMULBB 18-4-107N	2.9	1.09	79.9	30.0	5.3	69.5	12.9	3	23-1,24-4
FiberMax FM 1730GLTP	3.1	1.14	82.0	33.1	5.3	78.1	10.0	2	21-1,22-1

Table 9A. cont.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
TAMULBB 19-8-115/215	3.4	1.13	81.5	33.0	5.5	75.6	11.2	1	12-1,23-1
Stoneville ST 4993B3XF	3.4	1.09	81.9	32.3	6.2	75.9	11.7	1	12-1,13-4
Deltapine DP 2143 NR B3XF	3.5	1.14	80.9	32.3	5.7	72.5	13.5	3	13-3,24-1
DynaGro DGX 20127B3XF	3.0	1.08	80.4	28.6	6.1	74.4	13.2	1	13-1,24-1
TAMULBB 18-4-213N	2.9	1.13	82.9	34.5	6.4	72.1	12.3	2	23-1,23-3
Deltapine DP 2141 NR B3XF	3.0	1.12	80.7	30.4	5.7	72.0	13.5	2	13-3,24-1
BASF BX 2192B3XF	2.9	1.14	81.7	32.2	5.5	73.9	11.8	3	13-1,23-3
PhytoGen PHY 500 W3FE	2.8	1.06	79.2	30.2	5.7	71.5	13.5	2	13-4,24-1
Mean	3.0	1.10	80.7	31.4	5.9	74.1	12.1	2	
c.v.%	7.8	2.1	1.2	4.0	2.6	2.9	7.2	37.1	
LSD 0.05	0.4	0.04	1.7	2.1	0.3	3.6	1.5	1	

Table 10. Yield and agronomic property data from the irrigated Verticillium wilt cotton variety performance test at Texas A&M AgriLife Research, Halfway, 2020.

						Agronomic Properties				% Open				
		% Turnout		% Lint		Boll	Seed	Lint	Seed per	Bolls	Storm		% Wilt	Waller-
Designation	Yield	Lint	Seed	Picked	Pulled	Size	Index	Index	Boll	9-Oct	Resistance	Height	25-Aug	Duncan
PhytoGen PX2E05W3FE	880	26.1	36.1	39.3	28.3	4.9	9.7	7.5	25.3	80	6	26	18.9	f-l
Americot AMX 19A016B3XF	869	25.5	39.5	36.8	28.9	5.1	9.8	6.8	27.8	73	6	28	36.9	bcd
FiberMax FM 2202GL	778	26.2	31.9	42.3	31.4	5.6	8.7	8.4	28.5	45	5	30	21.3	e-l
Americot AMX 19A014B3XF	776	23.8	36.7	37.3	27.8	5.1	9.8	7.2	26.5	75	6	28	18.0	f-l
PhytoGen PHY 210 W3FE	759	24.2	33.3	38.1	27.1	4.8	9.7	7.8	23.6	68	6	23	28.4	d-i
NexGen NG 3500 XF	756	23.5	36.7	36.9	28.2	5.0	10.0	7.2	25.7	60	5	29	21.3	e-l
FiberMax FM 1621GL	753	24.8	30.5	38.4	28.7	5.6	9.6	8.1	26.6	58	6	26	30.5	c-g
PhytoGen PHY 332 W3FE	735	24.2	33.5	37.9	28.3	4.9	9.2	7.6	24.7	55	5	29	19.0	f-l
Deltapine DP 1612 B2XF	734	25.9	34.9	38.6	28.6	4.6	9.3	8.0	22.3	83	3	27	31.5	c-f
PhytoGen PX4B08W3FE	716	24.9	27.5	39.1	28.9	4.2	8.3	7.3	22.7	50	6	27	20.1	e-l
Brownfield Seed and Delinting 9X	713	21.6	39.2	36.4	26.9	5.3	10.3	7.1	26.8	63	4	30	16.2	h-m
PhytoGen PHY 250 W3FE	710	22.9	33.9	38.4	27.6	4.8	10.0	7.8	23.9	78	6	26	19.0	f-l
PhytoGen PX5C45W3FE	705	25.1	33.0	39.9	28.6	4.4	9.3	8.0	22.2	43	6	29	13.8	j-m
PhytoGen PX2D18W3FE	691	21.7	37.7	39.1	27.8	4.7	9.8	7.3	24.7	50	6	26	11.8	klm
BASF BX 2116GLTP	674	22.0	35.3	36.5	27.8	5.0	11.0	7.4	24.9	55	5	27	14.2	i-m
PhytoGen PHY 394 W3FE	673	20.5	34.3	36.6	26.7	5.0	9.9	7.5	24.6	53	5	27	19.0	f-l
FiberMax 2334GLT check	665	22.8	31.4	40.5	29.5	4.5	8.9	8.2	22.4	53	4	28	3.2	m
Seed Source Genetics SSG UA 222	664	24.6	35.6	36.9	28.6	5.0	10.2	7.3	24.7	65	4	27	30.6	c-g
PhytoGen PHY 443 W3FE	663	22.0	33.3	39.2	28.3	5.1	9.6	7.9	25.2	50	5	32	17.3	f-m
Americot AMX 19A015B3XF	662	20.8	39.4	33.0	24.9	5.0	9.7	5.8	28.2	60	6	29	30.6	c-g
NexGen NG 3930 B3XF	660	19.1	27.7	37.2	28.2	4.9	9.1	6.7	27.1	70	5	29	9.0	lm
PhytoGen PX3E33W3FE	658	22.0	30.3	36.9	26.8	5.0	9.2	6.7	27.3	33	6	30	20.2	e-l
Deltapine DP 1822 XF	648	21.1	33.0	38.8	29.5	4.8	10.4	8.1	22.9	60	5	31	17.4	f-m
NexGen NG 4689 B2XF	644	22.6	35.2	38.7	29.0	4.9	9.2	7.1	26.8	65	5	32	20.8	e-l
Deltapine DP 2022 B3XF	642	20.1	39.6	36.8	28.3	5.0	11.2	7.1	25.8	68	4	31	16.0	h-m
DynaGro DGX 130041 GLTP	640	23.4	31.9	38.0	28.8	5.2	9.8	8.2	24.1	70	6	25	20.3	e-l
PhytoGen PX2C14W3FE	635	20.8	38.6	36.5	26.2	4.8	9.4	6.3	27.7	48	6	27	17.1	g-m
DynaGro DGX 20127 B3XF	626	23.0	33.8	36.6	27.4	4.4	9.0	6.4	25.3	30	6	28	12.5	klm
Deltapine DP 1820 B3XF	616	24.4	35.2	41.4	30.6	4.4	9.1	8.2	22.6	60	5	28	19.9	e-l
Stoneville ST 4993B3XF	612	25.3	31.7	41.9	31.1	4.6	9.0	8.2	23.4	48	6	28	29.5	c-h

Table 10. cont.

Designation	Yield	% Turnout		% Lint		Agronomic Properties				% Open Bolls	Storm		% Wilt	Waller-
		Lint	Seed	Picked	Pulled	Boll Size	Seed Index	Lint Index	Seed per Boll	9-Oct	Resistance	Height	25-Aug	Duncan
FiberMax FM 1730GLTP	604	24.9	34.5	39.7	29.9	5.0	9.4	8.0	24.7	78	4	27	37.1	bcd
PhytoGen PX5E28W3FE	603	22.4	33.5	35.9	27.0	4.6	9.2	6.7	24.9	40	5	35	11.6	klm
Deltapine DP 2012 B3XF	590	22.7	31.6	40.0	29.7	4.3	8.5	7.1	23.8	60	4	29	16.6	g-m
PhytoGen PHY 350 W3FE	584	20.2	34.9	35.6	26.4	4.6	10.1	6.7	24.4	43	5	30	22.6	e-l
NexGen NG 4098 B3XF	583	21.0	35.8	36.1	27.2	5.3	10.6	7.3	26.1	40	5	27	14.9	i-m
Brownfield Seed and Delinting 6X	574	23.2	37.1	37.7	28.1	5.3	11.2	7.8	25.4	68	6	28	46.3	ab
NexGen NG 4777 B2XF	570	23.1	39.2	32.7	24.5	5.2	9.8	5.7	29.8	35	5	32	18.1	f-l
Americot AMX 19A018B3XF	563	22.0	33.8	37.9	28.8	4.2	9.1	6.9	23.4	68	5	29	24.1	d-k
Brownfield Seed and Delinting Ton Buster Elite	560	21.1	37.9	34.5	25.7	5.1	10.0	6.2	28.7	55	4	31	33.8	b-e
PhytoGen PHY 400 W3FE	549	22.7	29.8	39.9	29.7	4.4	8.6	7.3	23.7	75	5	25	13.4	klm
DynaGro DGX 19008 B3XF	547	23.0	31.7	39.8	29.1	4.1	8.6	7.6	21.7	78	4	25	27.7	d-j
BASF BX 2194B3XF	546	20.2	33.1	38.5	28.9	5.1	10.4	7.8	25.2	43	5	28	14.7	i-m
Seed Source Genetics SSG UA 114	533	20.9	37.0	35.1	26.5	5.0	9.7	6.4	27.7	70	3	28	30.5	c-g
BASF BX 2192B3XF	523	24.7	27.6	37.1	27.4	4.2	8.7	7.1	21.8	40	5	28	10.2	klm
Americot AMX 19B001B3XF	516	22.6	29.1	36.8	27.4	4.5	8.3	7.0	23.5	53	4	30	12.3	klm
Deltapine DP 2020 B3XF	497	20.5	30.8	37.2	27.6	4.4	8.7	6.8	24.0	58	5	29	17.3	f-m
Tamcot 13S03	496	21.1	32.5	36.8	27.7	5.2	10.4	7.6	25.2	73	4	25	42.7	abc
Americot AMX 19B003B3XF	480	18.4	34.7	36.5	27.6	4.4	8.8	6.4	24.8	25	5	30	8.7	lm
NexGen NG 4050 XF	475	19.4	32.1	39.1	29.1	5.3	9.7	8.3	25.1	35	6	27	9.8	lm
PhytoGen PX5E34W3FE	447	20.2	33.8	36.3	27.7	4.4	9.2	6.4	25.2	45	5	31	12.0	klm
Tamcot 73	408	19.5	34.7	31.9	25.8	5.1	10.9	7.0	23.6	63	4	27	55.5	a
Stoneville ST 5091B3XF	355	18.9	32.9	38.3	28.2	4.8	8.7	7.0	26.2	35	4	30	29.3	c-h
Mean	626	22.4	34.0	37.6	28.0	4.8	9.5	7.3	25.0	56	5	28	0.001	
c.v.%	10.1	3.4	3.2	1.8	2.8	3.8	2.6	6.3	5.7	19.3	10.9	5.6	14.2	
LSD 0.05	74	1.6	1.8	1.2	1.3	0.3	0.4	0.8	2.4	18	1	3		

Table 10A. Fiber quality data from the irrigated Verticillium wilt cotton variety performance test at Texas A&M AgriLife Research, Halfway, 2020.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
PhytoGen PX2E05W3FE	3.4	1.05	81.3	30.6	5.8	81.6	8.3	2	21-1
Americot AMX 19A016B3XF	2.8	1.07	79.8	26.4	7.4	82.1	8.6	2	11-1,11-2
FiberMax FM 2202GL	3.0	1.09	80.6	30.9	6.1	79.3	9.0	2	21-1
Americot AMX 19A014B3XF	2.9	1.07	78.5	27.2	6.8	81.8	8.5	3	11-1,21-1
PhytoGen PHY 210 W3FE	3.2	1.10	80.2	31.1	5.6	83.2	7.9	2	11-1,11-2
NexGen NG 3500 XF	3.2	1.07	80.4	28.7	6.3	80.7	8.8	1	11-1,21-1
FiberMax FM 1621GL	3.3	1.10	81.1	29.5	5.5	82.4	8.2	2	11-2
PhytoGen PHY 332 W3FE	3.2	1.12	79.6	28.5	6.4	80.4	9.1	1	11-2
Deltapine DP 1612 B2XF	3.2	1.11	80.1	30.8	7.1	80.4	8.6	2	11-1,31-1
PhytoGen PX4B08W3FE	3.5	1.04	79.1	27.8	6.5	80.4	8.4	3	21-1
Brownfield Seed and Delinting 9X	2.8	1.08	78.7	28.5	5.7	82.8	8.1	1	11-1,21-1
PhytoGen PHY 250 W3FE	3.1	1.11	79.9	29.9	5.5	83.6	7.7	2	11-2,21-1
PhytoGen PX5C45W3FE	2.7	1.08	79.3	27.4	6.5	80.3	9.3	2	11-2,11-3
PhytoGen PX2D18W3FE	2.6	1.10	78.3	29.3	5.7	82.1	8.2	3	21-1
BASF BX 2116GLTP	2.6	1.09	78.7	28.7	5.7	83.3	8.1	1	11-1,21-1
PhytoGen PHY 394 W3FE	2.5	1.13	77.9	28.2	5.9	81.2	8.1	4	21-1,21-2
FiberMax 2334GLT check	3.3	1.14	81.2	29.3	5.6	82.1	8.3	1	21-1
Seed Source Genetics SSG UA 222	2.8	1.12	79.4	28.4	7.2	78.2	8.2	3	21-1,41-1
PhytoGen PHY 443 W3FE	2.9	1.09	80.2	29.6	6.4	80.6	9.1	2	11-1,21-1
Americot AMX 19A015B3XF	2.3	1.12	78.5	28.6	7.2	81.8	8.1	2	21-1
NexGen NG 3930 B3XF	2.7	1.14	80.8	29.4	6.3	80.7	8.7	2	21-1
PhytoGen PX3E33W3FE	3.0	1.09	78.6	28.0	6.3	80.1	9.3	2	11-2,21-1
Deltapine DP 1822 XF	2.8	1.12	80.3	31.3	5.7	80.9	8.4	1	11-2,21-2
NexGen NG 4689 B2XF	3.1	1.05	79.3	28.1	5.2	80.8	8.9	1	11-1,21-1
Deltapine DP 2022 B3XF	3.0	1.09	79.9	27.8	5.5	81.3	7.5	3	21-2,31-1
DynaGro DGX 130041 GLTP	2.8	1.12	79.5	28.9	6.6	80.8	8.2	1	21-1,21-2
PhytoGen PX2C14W3FE	2.7	1.09	80.4	29.0	6.6	82.2	8.7	2	11-1
DynaGro DGX 20127 B3XF	2.7	1.09	77.8	26.8	6.2	80.9	9.9	1	11-1,11-3
Deltapine DP 1820 B3XF	3.4	1.16	80.0	29.8	5.8	81.7	8.6	1	11-1,21-1
Stoneville ST 4993B3XF	2.9	1.08	79.8	29.5	6.6	81.4	8.7	2	11-1,21-1

Table 10A. cont.

Designation	Micronaire	Length	Uniformity	Strength	Elongation	Rd	+b	Leaf	Color Grade
FiberMax FM 1730GLTP	3.2	1.16	81.6	32.1	5.6	82.5	7.5	1	21-1,21-2
PhytoGen PX5E28W3FE	2.8	1.11	80.6	30.2	6.3	81.7	8.2	1	21-1
Deltapine DP 2012 B3XF	2.7	1.09	79.3	27.6	5.6	82.5	8.8	2	11-1
PhytoGen PHY 350 W3FE	2.7	1.09	78.9	27.8	6.4	81.2	8.6	1	11-2,21-1
NexGen NG 4098 B3XF	2.6	1.14	79.0	31.2	6.1	79.8	8.7	3	21-1,21-2
Brownfield Seed and Delinting 6X	2.6	1.08	78.9	27.6	5.9	82.6	8.3	1	11-2
NexGen NG 4777 B2XF	2.8	1.08	79.0	28.7	5.4	81.4	9.3	1	11-1
Americot AMX 19A018B3XF	3.3	1.11	80.4	29.1	6.9	79.8	8.6	3	21-1,21-2
Brownfield Seed and Delinting Ton Buster Elite	3.0	1.10	79.2	27.2	6.0	80.5	8.9	1	11-1,21-2
PhytoGen PHY 400 W3FE	2.9	1.08	78.4	28.8	6.1	81.5	8.6	2	11-2,21-1
DynaGro DGX 19008 B3XF	2.9	1.12	79.1	27.4	5.5	80.1	8.4	3	21-2
BASF BX 2194B3XF	2.4	1.12	79.0	28.9	6.7	80.3	8.8	2	21-1,21-3
Seed Source Genetics SSG UA 114	2.9	1.11	82.3	30.3	6.8	80.5	8.2	2	21-1,31-1
BASF BX 2192B3XF	2.7	1.10	77.3	26.4	5.6	79.6	8.7	1	11-1,31-1
Americot AMX 19B001B3XF	2.7	1.11	80.1	28.9	5.8	82.4	8.5	2	11-1,11-2
Deltapine DP 2020 B3XF	2.8	1.12	80.1	27.3	5.7	82.0	8.8	1	11-1
Tamcot 13S03	2.6	1.09	79.5	29.8	5.9	79.7	8.5	2	21-1,31-1
Americot AMX 19B003B3XF	2.4	1.06	76.6	24.6	5.9	78.8	10.2	1	11-2,13-2
NexGen NG 4050 XF	2.6	1.10	79.4	29.6	6.6	80.1	8.7	3	21-1
PhytoGen PX5E34W3FE	2.6	1.13	80.1	30.7	6.3	80.8	8.6	3	21-1
Tamcot 73	2.3	1.11	79.2	29.1	6.5	78.9	9.1	2	21-1
Stoneville ST 5091B3XF	2.3	1.06	77.3	24.4	5.8	81.2	8.7	1	11-2,21-1
Mean	2.8	1.10	79.5	28.7	6.1	81.1	8.6	2	
c.v.%	8.5	1.6	0.9	3.5	3.2	1.4	5.2	43.7	
LSD 0.05	0.4	0.03	1.2	1.7	0.3	2.0	0.7	1	

Table 11. Results of the irrigated bacterial blight cotton variety screening at Texas A&M AgriLife Research, Lubbock, 2020.

Designation	Blight(%)	waller	Rating
Americot AMX 19A018B3XF	0.00	g	resistant
NexGen NG 3500 XF	0.00	g	resistant
NexGen NG 4098 B3XF	0.00	g	resistant
PhytoGen PX2D18W3FE	0.00	g	resistant
PhytoGen PX2E05W3FE	0.00	g	resistant
PhytoGen PX3E33W3FE	0.00	g	resistant
PhytoGen PX4B08W3FE	0.00	g	resistant
FiberMax FM 1730GLTP	1.25	fg	resistant
TAMULBB 16-2-507BB	2.50	fg	resistant
Bayer CropScience 19R132B3XF	5.00	efg	resistant
Brownfield Seed and Delinting 9X	6.25	efg	resistant
Stoneville ST 4993 B3XF	6.25	efg	resistant
FiberMax FM 1621GL	7.50	ef	resistant
FiberMax FM 2202GL	7.50	ef	resistant
Tamcot 13S03	11.25	e	partially resistant
BASF BX 2194B3XF	52.50	d	partially susceptible
Deltapine DP 2123 B3XF	55.00	d	partially susceptible
TAMULBB 15-3-1501BB	67.50	c	partially susceptible
NexGen NG 4936 B3XF	72.50	c	partially susceptible
Deltapine DP 2115 B3XF	86.25	b	moderately susceptible
Brownfield Seed and Delinting 6X	95.00	a	susceptible
Deltapine DP 2127 B3XF	95.00	a	susceptible
Brownfield Seed and Delinting Ton Buster Elite	97.50	a	susceptible
Bayer CropScience 19R237B3XF	98.75	a	susceptible
Deltapine DP 1747 B2XF check	98.75	a	susceptible
Tamcot 73	98.75	a	susceptible
Americot AMX 19A014B3XF	100.00	a	susceptible
Americot AMX 19A015B3XF	100.00	a	susceptible
Americot AMX 19A016B3XF	100.00	a	susceptible
Americot AMX 19B001B3XF	100.00	a	susceptible
Americot AMX 19B003B3XF	100.00	a	susceptible
BASF BX 2116GLTP	100.00	a	susceptible
BASF BX 2192B3XF	100.00	a	susceptible
Deltapine DP 2141 NR B3XF	100.00	a	susceptible
Deltapine DP 2143 NR B3XF	100.00	a	susceptible
Stoneville ST 5091 B3XF	100.00	a	susceptible
Stoneville ST 5600B2XF	100.00	a	susceptible

Prob>F	0.0001
MSD (0.05)	7.14

Notes

Table 12. Variety Index for the cotton performance tests conducted by Texas A&M AgriLife Research, Lubbock, 2020.

Designation page	Uniform OVT 9-23	Location Summary 24	Late Planted 26	New Varieties 28	Root-knot Nematode 32	Verticillium Wilt 36	Bacterial Blight 40
Americot AMX 19A014B3XF				*		*	*
Americot AMX 19A015B3XF				*		*	*
Americot AMX 19A016B3XF				*		*	*
Americot AMX 19A018B3XF				*		*	*
Americot AMX 19B001B3XF				*		*	*
Americot AMX 19B003B3XF				*		*	*
BASF BX 2116GLTP				*	*	*	*
BASF BX 2192B3XF				*	*	*	*
BASF BX 2194B3XF				*	*	*	*
Bayer CropScience 19R132B3XF				*			*
Bayer CropScience 19R237B3XF				*			*
Brownfield Seed and Delinting 6X	*	*		*		*	*
Brownfield Seed and Delinting 9X	*	*				*	*
Brownfield Seed and Delinting Ton Buster Elite	*	*				*	*
Deltapine DP 1612 B2XF			*			*	
Deltapine DP 1646 B2XF	*	*					
Deltapine DP 1747 B2XF							*
Deltapine DP 1820 B3XF	*	*				*	
Deltapine DP 1822 XF	*	*	*			*	
Deltapine DP 1908 B3XF			*				
Deltapine DP 2012 B3XF	*	*				*	
Deltapine DP 2020 B3XF	*	*				*	
Deltapine DP 2022 B3XF						*	
Deltapine DP 2044 B3XF	*	*					
Deltapine DP 2115 B3XF			*				*
Deltapine DP 2123 B3XF				*			*
Deltapine DP 2127 B3XF				*			*
Deltapine DP 2141 NR B3XF				*	*		*
Deltapine DP 2143 NR B3XF				*	*		*
DynaGro DG 3520 B3XF	*	*					
DynaGro DGX 130041 GLTP				*		*	
DynaGro DGX 19008 B3XF				*	*	*	
DynaGro DGX 19917 B3XF					*		
DynaGro DGX 20127B3XF					*	*	
FiberMax 2334GLT						*	
FiberMax FM 1621GL	*	*			*	*	*
FiberMax FM 1730GLTP				*	*	*	*
FiberMax FM 1830GLT	*	*					
FiberMax FM 2022GL	*	*			*	*	*
FiberMax FM 2398GLTP	*	*					
FiberMax FM 2498GLT	*	*					
NexGen NG 2982 B3XF			*				
NexGen NG 3500 XF	*	*				*	*
NexGen NG 3640 XF	*	*					
NexGen NG 3930 B3XF	*	*					
NexGen NG 3930 B3XF			*			*	
NexGen NG 3956 B3XF	*	*	*				
NexGen NG 4050 XF	*	*				*	
NexGen NG 4098 B3XF	*	*				*	*
NexGen NG 4689 B2XF	*	*				*	
NexGen NG 4777 B2XF	*	*				*	

Table 12. cont.

Designation page	Uniform OVT 9-23	Location Summary 24	Late Planted 26	New Varieties 28	Root-knot Nematode 32	Verticillium Wilt 36	Bacterial Blight 40
NexGen NG 4792 XF	*	*					
NexGen NG 4936 B3XF	*	*					*
NexGen NG 5711 B3XF	*	*					
PhytoGen PHY 210 W3FE	*	*	*			*	
PhytoGen PHY 250 W3FE	*	*	*			*	
PhytoGen PHY 332 W3FE	*	*	*	*	*	*	
PhytoGen PHY 350 W3FE	*	*	*		*	*	
PhytoGen PHY 394 W3FE	*	*	*		*	*	
PhytoGen PHY 400 W3FE	*	*	*		*	*	
PhytoGen PHY 430 W3FE	*	*					
PhytoGen PHY 443 W3FE	*	*					
PhytoGen PHY 443 W3FE			*	*	*	*	
PhytoGen PHY 480 W3FE	*	*	*		*		
PhytoGen PHY 500 W3FE	*	*			*		
PhytoGen PHY 580 W3FE	*	*			*		
PhytoGen PHY 764 WRF	*	*					
PhytoGen PX2C14W3FE	*	*	*	*	*	*	
PhytoGen PX2D18W3FE			*	*	*	*	*
PhytoGen PX2E05W3FE				*	*	*	*
PhytoGen PX3E33W3FE			*	*	*	*	*
PhytoGen PX4B08W3FE			*	*	*	*	*
PhytoGen PX5C45W3FE	*	*		*	*	*	
PhytoGen PX5E28W3FE				*	*	*	
PhytoGen PX5E34W3FE				*	*	*	
Seed Source Genetics SSG UA 114	*	*			*	*	
Seed Source Genetics SSG UA 222	*	*			*	*	
Stoneville ST 4480B3XF	*	*					
Stoneville ST 4550GLTP	*	*					
Stoneville ST 4990B3XF	*	*					
Stoneville ST 4993 B3XF				*	*	*	*
Stoneville ST 5091 B3XF				*	*	*	*
Stoneville ST 5600B2XF	*	*			*		*
Stoneville ST 5610B3XF	*	*					
Tamcot 13S03	*	*		*		*	*
Tamcot 73	*	*		*		*	*
Tamcot G11				*			
TAMULBB 15-1-404M				*			
TAMULBB 15-1-812M				*			
TAMULBB 15-3-1501BB							*
TAMULBB 16-2-507BB							*
TAMULBB 17-4-114N					*		
TAMULBB 17-4-116N					*		
TAMULBB 17-4-122N					*		
TAMULBB 18-4-107N					*		
TAMULBB 18-4-213N					*		
TAMULBB 19-8-115/215					*		