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2022 Cotton Variety Testing and On-Farm Results



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General Information

The official cotton variety testing program (OVT) evaluates the performance of commercial and experimental cotton varieties. Varieties were tested at four non-irrigated locations during 2022. All locations were planted using a two row Seed Research Equipment Solutions Classic Aire planter. All locations were harvested using a 4-row commercial cotton picker modified to simultaneously collect two 2-row cotton plots in an automatic weigh system fit with two electronic scales. The 2022 OVT received 41 entries from five seed companies. Each company was charged an entry fee for each hybrid per location entered.

Statistical Analyses

To determine yield differences among varieties at each location the authors have incorporated some basic statistics in the tables. The primary tool for determining the differences among varieties is the LSD (least significant difference) (0.1) value listed at the bottom of the column in the tables. When the difference between varieties is larger than the LSD value, then the varieties can be considered different; however, when the difference between varieties is less than the LSD value these varieties cannot be considered different.

Relative Yield

When varieties are grown at multiple locations, each having differing yield potential, a comparison of absolute yield (lint yields) could bias variety comparisons to favor one variety over another. The purpose of the cotton OVT program is to evaluate varieties on genetic yield potential and fiber quality traits and not on differences in environmental conditions where they were tested.

To standardize absolute yields so comparisons can be made across locations, relative yields were calculated. Relative yields were calculated by taking individual plot yields and dividing by the highest average yield for a variety within each location:

$$\text{Relative Yield} = \frac{\text{Plot Yield}}{\text{Highest Avg. Yield}}$$

Relative yields for each plot were then averaged to calculate the average relative yield for a variety at a given location. The highest relative yield possible at each location is 1.00 and is equal to 100%.

Variety Selection

Selecting the appropriate variety for your given environment is the most important decision a cotton producer will face during the growing season. Producers should take notice that variety performance depends heavily on environmental conditions at the site where the variety is grown. For this reason, decisions should not be made using a variety's performance at a single location in a given year. Averages across locations should be evaluated carefully and relative yields give insights to where the variety ranks compared to the top yielding variety in that given environment. Varieties which consistently rank near the top in relative yield across years and locations have a higher yield stability. More stable varieties minimize yield fluctuations due to environmental conditions, but do not guarantee the maximum achievable yield level under every environmental condition.

Lint Quality Discounts

Lint quality discounts are based on the 2022 USDA discount table and calculated using the Cotton Incorporated 2022 Loan Calculator for upland cotton. These values do not reflect actual discounts given during the Fall of 2022. Premiums and discounts are reported in points per pound.

2022 Agronomic Inputs for Locations

(Rates on a per acre basis)

Suffolk, VA - Tidewater AREC Location OVT Trial

Planted:	May 19, 2022
Harvested:	Nov. 3, 2022
Population:	43,560 plants/acre
Fertilizer:	166 lb. of Potash on March 27, 2022 30 lb. N ac ⁻¹ in UAN32 + 11-37-0 blend in 2x2 band on May 19, 2022 80 lb. N ac ⁻¹ as 24-0-0-3S dribbled on July, 1, 2022 2 qt. Boron on July, 1, 2022
PGR:	3 fl. oz. Mepstar 6X on Jul. 17, 2022 2.5 fl. oz. Mepstar 6X on August 12, 2022
Herbicide:	2 pt. 2,4-D Amine on April 4, 2022 1 qt. Roundup [®] and 2 oz. Valor [®] on Apr. 11, 2022 1 pt. Prowl [®] , 1 qt. Cotoran 4L [®] and 1 qt. Roundup [®] on May 19, 2022 1 qt. Roundup [®] and 1 pt. Dual II Magnum [®] on June 13, 2022
Insecticide:	8 oz. Orthene [®] 97 on June 7, 2022 2 oz. Transform [®] and 8 fl. oz. Diamond [®] on Jul. 12, 2022 12 fl. oz. Besiege [®] and 8 fl. oz. Bidrin on Jul. 29, 2022
Harvest Aid:	32 oz. Finish 6 Pro [®] , 6 fl. oz. Folex [®] , 3 fl. oz. FreeFall SC [®] on Oct. 7, 2022
Plot Size:	2 rows 35' x 36" 4 replications
Soil Type	Eunola and Dragston
Cooperator:	Karl Jones

Southampton Co., VA- Drake Farm OVT Trial

Planted:	June 6, 2022
Harvested:	Nov. 14, 2022
Population:	43,560 plants/acre
Fertilizer:	200 lb ac ⁻¹ K ₂ O preplant broadcast May 3, 2022 30 lb N ac ⁻¹ , 40 lb P ₂ O ₅ ac ⁻¹ , and 10 lb S ac ⁻¹ in UAN32, 11-37-0, and 12-0-0-26S Blend in 2x2 band on June 1, 2022 80 lbs. N per acre 24-0-0-3S at 1 st square growth stage 2 qts. 10% Boron at 1 st square growth stage applied with nitrogen
PGR:	16 fl. oz. Veto [®] on Jul. 16, 2022 12 fl. oz. Veto [®] on Aug. 18, 2022
Herbicide:	1 qt. 2,4-D Amine 4, 3 fl. oz., 1 qt. Roundup PowerMAX, 2 oz. Valor SX on April 6, 2022 32 fl. oz. Liberty on June 7, 2022 24 fl. oz. Envy Six MAX on Aug. 18, 2022
Insecticide:	8 oz./lb. Livid 90 Prill [®] on June 7, 2022 2 fl. oz. Transform WG [®] on Jul. 16, 2022 8 oz./lb. Livid 90 Prill [®] , 6.4 oz. Reveal [®] on Aug. 11, 2022 8 oz./lb. Livid 90 Prill [®] , 6.4 oz. Reveal [®] on Aug. 18, 2022
Harvest Aids:	32 oz. Finish 6 Pro [®] , 6 fl. oz. Folex 6 EC [®] , 3 oz. Dropp SC [®] , 8 oz. Prep [®] on Oct. 15, 2022
Plot Size:	2 rows 35' x 36" 4 replications
Soil Type	Uchee, Slagle and Emporia
Cooperator:	Matt Drake

Sussex Co., VA- Everett Farm OVT Trial

Planted:	June 3, 2022
Harvested:	Nov. 18, 2022
Population:	43,560 plants/acre
Fertilizer:	30 lb N ac ⁻¹ , 40 lb P ₂ O ₅ ac ⁻¹ , and 10 lb S ac ⁻¹ in UAN32, 11-37-0, and 12-0-0-26S Blend in 2x2 band on June 3, 2022 80 lbs. N per acre 24-0-0-3S at 1 st square growth stage 2 qts. 10% Boron at 1 st square growth stage applied with nitrogen
PGR:	6 fl. oz. Mep 42 [®] at matchhead square growth stage 24 fl. oz. Mep 42 [®] at early bloom growth stage
Herbicide:	26 fl. oz. Roundup PowerMAX [®] 3, 8 fl. oz. dicamba, 2.5 oz. Valor SX [®] in April 3 pts. Sequence [®] at 1 st POST application 28 fl. oz. Liberty [®] at 2 nd POST application
Insecticide:	8 oz. Acephate [®] at 1 st true leaf 1.5 oz. Transform [®] plus 1.5 fl. oz. Admire Pro [®] during early bloom
Harvest Aids:	32 fl. oz. Finish [®] , 6 fl. oz. Tribufos, and 3.2 fl. oz. Dropp [®]
Plot Size:	2 rows 35' x 36" 4 replications
Soil Type	Slagle and Emporia + Slagle
Cooperator:	Lewis and M.L. Everett

Isle of Wight Co., VA- Butler Farm OVT Trial

Planted:	May 20, 2022
Harvested:	Oct. 28, 2022
Population:	43,560 plants/acre
Fertilizer:	300 lb/acre 10-14-26-6S on May 1, 2022 30 gal of 24-0-0-3S on Jun. 2, 2022 4 fl. oz. 10% Boric acid on Jul. 11, 2022 4 fl. oz. 10% Boric acid on Aug. 3, 2022
PGR:	8 oz. Mepex [®] on Jul. 11, 2022 8 oz. Mepex [®] on Aug. 3, 2022
Herbicide:	1.3 pt. Prowl [®] on May 1, 2022 1 pt. Cotoran [®] on May 21, 2022 1.5 pt. Roundup [®] on Jun. 8, 2022 1 qt. Roundup [®] on Jul. 11, 2022
Insecticide:	4 oz. Acephate 97 [®] on Jun. 8, 2022 9 fl. oz Diamond [®] , 6 oz. Acephate 97 [®] on Jul. 11, 2022 6 fl. oz. Bifenthrin [®] , 6 oz. Acephate 97 [®] on Aug. 3, 2022
Harvest Aids:	1.5 qts. Setup 6 [®] , 8 fl. oz. Def [®] , 3 fl. oz. Klean-Pik [®]
Plot Size:	2 rows 35' x 36" 4 replications
Soil Type	Slagle and Yemassee
Cooperator:	Thomas and Greg Butler

On-Farm Variety Trials

Table 1: Planting and Harvest Date for County On-Farm Trials

County	Cooperator	Planting Date	Harvest Date
Isle of Wight (IOW)	Thomas and Greg Butler	5/20/22	10/27/22
Suffolk (SUFF)	Mike Ellis	5/29/22	11/22/22
Southampton #1 (SHC 1)	Brian and Adam Darden	6/1/22	11/18/22
Southampton #2 (SHC 2)	Wesley Barnes	5/17/22	10/27/22
Surry (SUR)	Clay and Jameson Lowe	5/17/2022	11/22/22
Sussex (SUX)	Jared Webb	5/19/22	11/9/22

Agronomic Yield Data for 2022 OVT

Table 2: Relative yields for varieties entered at all locations in the 2022 Official Variety Testing (OVT) Program

Trt. No.	Variety	TAREC [†]	IOW	SHC	SUX	Avg. Relative Yield
1	DP** 1646 B2XF	0.97	0.88	0.75	0.79	0.85
2	DP 2012 B3XF	0.85	0.95	0.85	0.73	0.84
3	DP 2020 B3XF	0.82	0.80	0.78	0.78	0.80
4	DP 2038 B3XF	0.92	0.86	0.90	0.79	0.87
5	DP 2115 B3XF	0.87	0.88	0.92	0.86	0.88
6	DP 2127 B3XF	0.98	0.81	0.73	0.77	0.82
7	DP 2141NR B3XF	0.87	0.69	0.79	0.74	0.77
8	DP 2239 B3XF	0.90	0.92	0.75	0.67	0.81
9	20R733B3XF*	0.89	0.83	0.94	0.82	0.87
10	21R618B3XF*	0.84	0.85	0.71	0.78	0.80
11	21R622B3XF*	1.00	0.89	0.77	0.95	0.90
12	NG 3195 B3XF	0.89	0.90	0.83	0.98	0.90
13	NG 3299 B3XF	0.93	0.75	0.85	0.92	0.86
14	ST 4550GLTP	0.96	1.00	0.73	0.92	0.90
15	ST 4595B3XF	0.87	0.87	0.78	0.92	0.86
16	ST 4990B3XF	0.79	0.78	0.86	0.92	0.84
17	ST 5091B3XF	0.93	0.86	0.85	0.93	0.89
18	BX 2392B3XF*	0.87	0.80	0.77	0.64	0.77
19	BX 2394B3XF*	0.86	0.82	0.80	0.78	0.82
20	BX 2396B3XF*	0.95	0.66	0.67	0.71	0.75
21	BX 2398B3XF*	0.75	0.69	0.62	0.62	0.67
22	PHY 332 W3FE	0.88	0.84	0.85	0.93	0.87
23	PHY 360 W3FE	0.81	0.79	0.87	0.87	0.83
24	PHY 400 W3FE	0.89	0.87	1.00	0.89	0.91
25	PHY 411 W3FE	0.94	0.86	0.89	0.86	0.89
26	PHY 443 W3FE	0.90	0.82	0.85	0.89	0.87
27	PX 1130B333-04 W3FE*	0.76	0.81	0.84	0.82	0.81
28	PX 1130B336-04 W3FE*	0.86	0.72	0.89	0.81	0.82
29	PHY 415 W3FE	0.80	0.83	0.84	0.90	0.84
30	PX 1140A385-04 W3FE*	0.85	0.81	0.83	0.76	0.81
31	PX 1140B373-04 W3FE*	0.92	0.75	0.91	0.76	0.84
32	PX 1150A450-04 W3FE*	0.87	0.80	0.79	1.00	0.86
33	PX 1150B437-04 W3FE*	0.84	0.67	0.84	0.71	0.76
34	DG 3456 B3XF	0.77	0.81	0.78	0.99	0.84
35	DG 3570 B3XF	0.91	0.88	0.76	0.91	0.87
36	DG 3535 B3XF	0.86	0.79	0.69	0.78	0.78
37	DG 3511 B3XF	0.87	0.82	0.72	0.86	0.82
38	DG 3519 B3XF	0.82	0.83	0.79	0.92	0.84
39	PHY 764WRF	0.65	-	-	-	-
40	DG 3520B3XF	0.77	-	-	-	-
41	FM 1830GLT	0.68	-	-	-	-
42	NG 4936B3XF	0.83	-	-	-	-
	Trial Avg.	0.86	0.82	0.81	0.83	0.83
	Standard Error	0.05	0.06	0.08	0.1	-
	Minimum RY	0.65	0.66	0.62	0.62	-

[†]TAREC = Tidewater Agricultural Research and Extension Center (Suffolk, VA), IOW = Isle of Wight County, VA, SHC = Southampton County, VA, and SUX = Sussex County, VA

* Indicates the variety is an experimental line and not available commercially.

**PHY = PhytoGen, Corteva Agriscience; DP = DeltaPine, Bayer Cropscience; NG = NexGen, Americot/NexGen; ST = Stoneville, BASF

Table 3: Two-year (2021-2022) relative yield averages for varieties tested each year

Seed Company	Variety	Avg. Relative Yield
Bayer	DP 2038 B3XF	0.92
BASF	ST 4550GLTP	0.91
Americot	NG 3299 B3XF	0.90
Corteva	PHY 400 W3FE	0.90
Corteva	PHY 411W3FE	0.90
BASF	ST 4595 B3XF	0.89
BASF	ST 5091B3XF	0.89
Bayer	DP 2115 B3XF	0.88
Corteva	PHY 360 W3FE	0.87
Bayer	DP 1646 B2XF	0.87
Corteva	PHY 443 W3FE	0.87
Bayer	DP 2012 B3XF	0.87
Corteva	PHY 415 W3FE	0.87
Bayer	DP 2239 B3XF	0.86
Americot	NG 3195 B3XF	0.86
Bayer	DP 2127 B3XF	0.86
Bayer	DP 2020 B3XF	0.86
BASF	ST 4990B3XF	0.85
Nutrien	DG 3535 B3XF	0.85
Corteva	PHY 332 W3FE	0.85
Nutrien	DG 3456 B3XF	0.84
Bayer	DP 2141NR B3XF	0.81
Nutrien	DG 3570 B3XF	0.81
Average		0.87

Table 4: Three-year (2020-2022) relative yield averages for varieties tested each year

Seed Company	Variety	Avg. Relative Yield
Bayer	DP 2038 B3XF	0.92
Bayer	DP 2115 B3XF	0.91
BASF	ST 4550GLTP	0.90
BASF	ST 5091 B3XF	0.88
Corteva	PHY 400 W3FE	0.88
Corteva	PHY 411W3FE	0.87
Corteva	PHY 443 W3FE	0.86
Bayer	DP 1646 B2XF	0.86
Americot	NG 3195 B3XF	0.86
Bayer	DP 2012 B3XF	0.85
BASF	ST 4990B3XF	0.85
Nutrien	DG 3456 B3XF	0.85
Bayer	DP 2020 B3XF	0.84
Nutrien	DG 3570 B3XF	0.83
Corteva	PHY 360 W3FE	0.82
Corteva	PHY 332 W3FE	0.81
Nutrien	DG 3535 B3XF	0.80
Mean		0.86

Table 5: Lint yield and lint percentage of varieties tested during 2022 at the four OVT locations

Entry No.	Variety [¶]	TAREC [†]		SHC		SUX		IOW		Avg. Lint Yield lb/ac	Avg. Turnout (%)
		Lint Yld. (lb/ac)	Turnout (%)	Lint Yld. (lb/ac)	Turnout (%)	Lint Yld. (lb/ac)	Turnout (%)	Lint Yld. (lb/ac)	Turnout (%)		
1	DP** 1646 B2XF	2,511	50.6	960	40.1	959	44.9	1,539	45.4	1,492	45.3
2	DP 2012 B3XF	2,210	44.5	1,090	40.3	882	43.0	1,663	45.1	1,461	43.2
3	DP 2020 B3XF	2,124	43.2	1,006	38.4	951	41.5	1,397	42.4	1,369	41.4
4	DP 2038 B3XF	2,390	49.6	1,159	46.8	959	48.7	1,498	48.3	1,501	48.3
5	DP 2115 B3XF	2,256	46.7	1,189	43.6	1,048	46.4	1,531	45.5	1,506	45.5
6	DP 2127 B3XF	2,533	47.5	943	42.6	933	46.0	1,417	47.3	1,457	45.9
7	DP 2141NR B3XF	2,248	44.1	1,016	43.2	899	45.3	1,198	45.3	1,340	44.5
8	DP 2239 B3XF	2,326	46.5	961	43.3	819	48.5	1,613	46.3	1,430	46.2
9	DP 2333 B3XF	2,300	47.7	1,205	43.4	996	45.0	1,447	47.1	1,487	45.8
10	21R618B3XF*	2,186	44.7	920	44.0	950	45.7	1,481	46.0	1,384	45.1
11	21R622B3XF*	2,596	45.9	988	40.4	1,158	44.1	1,558	45.5	1,575	44.0
12	NG 3195 B3XF	2,299	45.5	1,072	41.5	1,195	42.4	1,564	44.4	1,532	43.4
13	NG 3299 B3XF	2,405	46.5	1,094	41.7	1,122	45.0	1,315	45.7	1,484	44.7
14	ST 4550GLTP	2,485	46.6	935	41.0	1,122	45.4	1,747	46.6	1,572	44.9
15	ST 4595B3XF	2,247	45.8	1,005	40.4	1,121	45.0	1,513	46.4	1,471	44.4
16	ST 4990B3XF	2,045	42.0	1,112	38.0	1,117	40.4	1,356	42.1	1,408	40.6
17	ST 5091B3XF	2,422	44.8	1,092	40.2	1,129	45.0	1,503	44.4	1,536	43.6
18	BX 2392B3XF*	2,269	45.8	995	44.0	775	43.2	1,406	45.2	1,361	44.6
19	BX 2394B3XF*	2,239	43.2	1,033	42.9	947	45.2	1,438	43.3	1,414	43.7
20	BX 2396B3XF*	2,453	46.0	862	43.5	865	45.0	1,147	45.7	1,332	45.1
21	BX 2398B3XF*	1,943	42.6	795	36.6	754	43.7	1,205	43.4	1,174	41.6
22	PHY 332 W3FE	2,295	43.4	1,094	38.9	1,127	45.0	1,462	42.7	1,494	42.5
23	PHY 360 W3FE	2,098	44.5	1,125	41.9	1,053	45.8	1,381	43.7	1,414	43.9
24	PHY 400 W3FE	2,305	44.8	1,287	43.0	1,087	47.1	1,514	44.1	1,548	44.7
25	PHY 411 W3FE	2,442	46.1	1,151	44.5	1,050	46.8	1,502	46.0	1,536	45.8
26	PHY 443 W3FE	2,339	44.0	1,090	44.5	1,087	45.5	1,433	44.2	1,487	44.5

27	PX 1130B333-04 W3FE*	1,965	44.6	1,082	39.9	996	47.1	1,408	43.2	1,363	43.7
28	PX 1130B336-04 W3FE*	2,225	45.3	1,151	40.5	982	45.5	1,262	42.5	1,405	43.4
29	PHY 415 W3FE	2,081	43.3	1,086	45.9	1,088	44.1	1,443	43.7	1,424	44.2
30	PX 1140A385-04 W3FE*	2,205	47.5	1,070	43.9	923	48.3	1,410	45.1	1,402	46.2
31	PX 1140B373-04 W3FE*	2,398	46.3	1,177	44.1	927	48.1	1,306	43.0	1,452	45.4
32	PX 1150A450-04 W3FE*	2,253	45.6	1,020	42.2	1,215	48.6	1,389	44.7	1,469	45.3
33	PX 1150B437-04 W3FE*	2,181	43.7	1,078	40.7	862	44.2	1,168	43.1	1,322	42.9
34	DG 3456 B3XF	1,993	45.6	1,002	42.6	1,198	44.1	1,414	45.7	1,402	44.5
35	DG 3570 B3XF	2,373	46.2	981	38.8	1,104	42.6	1,535	44.3	1,498	43.0
36	DG 3535 B3XF	2,228	42.9	890	41.8	952	41.0	1,373	44.8	1,361	42.6
37	DG 3511 B3XF	2,263	46.6	927	39.9	1,044	45.6	1,427	46.1	1,415	44.5
38	DG 3519 B3XF	2,116	40.9	1,010	41.5	1,118	45.3	1,450	44.2	1,424	43.0
39	PHY 764WRF	1,687	41.4	-	-	-	-	-	-	-	-
40	DG 3520B3XF	1,995	41.2	-	-	-	-	-	-	-	-
41	FM 1830GLT	1,768	42.1	-	-	-	-	-	-	-	-
42	NG 4936B3XF	2,155	41.3	-	-	-	-	-	-	-	-
Trial Avg.		2,235	44.9	1,043	41.9	1,014	45.1	1,432	44.8	1,440	44.3
Standard Error		126	0.7	107	1.2	111	1.1	109	0.4	-	-
Max		2,596	50.6	1,287	46.8	1,215	48.7	1,747	48.3	1,575	48.3
Min		1,687	40.9	795	36.6	754	40.4	1,147	42.1	1,174	40.6

†TAREC = Tidewater Agricultural Research and Extension Center (Suffolk, VA), IOW = Isle of Wight County, VA, SHC = Southampton County, VA, and SUX = Sussex County, VA

* Indicates the variety is an experimental line and not available commercially.

**PHY = PhytoGen, Corteva Agriscience; DP = DeltaPine, Bayer Cropscience; NG = NexGen, Americot/NexGen; ST = Stoneville, BASF

Table 6: Lint yield and lint percent of varieties from the six 2022 On-Farm trial locations

Variety	Locations [†]												Average	
	IOW		SHC-1		SHC-2		SUF		SUR		SUX		Lint Yield	Turnout
	<i>Lint Yield</i> (lb/ac)	<i>Turnout</i> %	<i>Lint Yield</i> (lb/ac)	<i>Turnout</i> %	<i>Lint Yield</i> (lb/ac)	<i>Turnout</i> %	<i>Lint Yield</i> (lb/ac)	<i>Turnout</i> %	<i>Lint Yield</i> (lb/ac)	<i>Turnout</i> %	<i>Lint Yield</i> (lb/ac)	<i>Turnout</i> %	(lb/ac)	%
ST* 4595 B3XF	1,477	46.6	1,510	46.6	1,807	46.8	1,578	45.7	1,779	41.6	1,568	47.5	1,620	45.8
NG 3195 B3XF	1,507	44.2	1,499	45.2	1,662	45.1	1,446	44.9	1,794	46.7	1,506	45.9	1,569	45.3
DG 3456 B3XF	1,556	46.6	1,545	45.9	1,546	46.7	1,542	46.2	1,616	43.1	1,510	46.7	1,552	45.9
ST 5091 B3XF	1,524	44.8	1,462	45.5	1,660	44.4	1,649	45.5	1,490	42.1	1,487	45.5	1,545	44.6
PHY 400 W3FE	1,342	43.3	1,485	46.0	1,430	48.4	1,455	46.3	1,764	44.7	1,724	47.3	1,533	46.0
DP 2038 B3XF	1,517	48.1	1,563	49.7	1,601	50.2	1,459	50.6	1,642	46.7	1,395	49.8	1,529	49.2
DP 2115 B3XF	1,333	44.2	1,558	47.9	1,347	45.3	1,682	47.5	1,855	46.7	1,299	46.7	1,512	46.4
NG 3299 B3XF	1,303	44.0	1,520	46.2	1,528	45.5	1,648	46.2	1,598	42.9	1,393	46.2	1,498	45.2
PHY 443 W3FE	1,400	43.2	1,467	45.5	1,483	45.9	1,509	45.5	1,584	45.3	1,459	47.0	1,484	45.4
PHY 360 W3FE	1,330	43.5	1,543	45.0	1,367	44.3	1,545	45.2	1,650	44.1	1,382	46.4	1,469	44.8
DP 2239 B3XF	1,383	44.6	1,348	46.7	1,454	47.1	1,537	46.0	1,619	45.3	1,405	48.4	1,458	46.4
DG 3570 B3XF	1,371	39.9	1,473	44.1	1,129	42.7	1,370	44.2	1,384	42.5	1,476	44.9	1,367	43.1
Average	1,420	44.0	1,498	46.0	1,501	46.0	1,535	46.0	1,648	44.0	1,467	47.0	-	-

[†]TAREC = IOW = Isle of Wight County, VA, SHC-1 = Southampton-Darden, SHC-2 = Southampton- Barnes, SUF = Suffolk City, SUR = Surry County, and SUX = Sussex County, VA
^{*}PHY = PhytoGen, Corteva Agriscience; DP = DeltaPine, Bayer Cropscience; NG = NexGen, Americot/NexGen; ST = Stoneville, BASF

Table 7: Lint quality and associated 2022 scheduled discounts for top 10 varieties in relative yield at the Tidewater AREC OVT location (excluding unreleased experimental lines)

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str	Uni	Staple/ Color	TOTAL
DP 1646 B2XF	38	4.8	31.6	86.2	31	0	30	20	420	470
DP 2038 B3XF	39	5.0	32.3	86.0	31	0	30	20	455	505
DP 2127 B3XF	39	4.5	32.5	85.1	31	0	30	20	420	470
DP 2239 B3XF	39	4.7	32.4	86.1	21	0	30	20	455	505
NG 3299 B3XF	39	4.5	34.1	86.4	31	0	40	20	420	480
ST 4550 GLTP	40	4.5	33.1	85.8	31	0	40	20	420	480
ST 5091 B3XF	38	4.9	32.7	86.1	31	0	30	20	420	470
PHY 411 W3FE	39	4.4	32.9	86.8	31	0	30	20	455	505
PHY 443 W3FE	39	4.5	31.4	85.3	31	0	30	20	455	505
DG 3570 B3XF	40	4.6	30.7	85.7	31	0	15	20	455	490
Mean	39	4.6	32.4	86.0	30.0	0	31	20	438	488

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 8: Lint quality and associated 2022 scheduled discounts for top 10 varieties in relative yield at the Southampton Co.- Drake Farm OVT location (excluding unreleased experimental lines)

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
DP 2038 B3XF	36	5.3	31.3	83.3	31	-390	30	10	390	40
DP 2115 B3XF	37	5.0	31.2	85.9	31	-235	30	20	410	225
NG 3299 B3XF	39	4.9	34.3	86.4	31	0	40	20	455	515
ST 4990 B3XF	39	4.6	30.4	85.8	31	0	15	20	455	490
ST 5091 B3XF	38	4.6	30.6	84.2	31	0	15	15	455	485
PHY 332 W3FE	40	4.9	34.2	87.2	31	0	40	20	455	515
PHY 360 W3FE	38	5.0	31.2	84.5	41	-235	30	15	215	25
PHY 400 W3FE	39	4.6	35.3	85.2	31	0	40	20	455	515
PHY 411 W3FE	36	5.0	32.5	85.2	41	-235	30	20	185	0
PHY 443 W3FE	37	5.2	35.1	86.3	31	-235	40	20	445	270
Mean	38	4.9	32.6	85.4	33.0	-133	31	18	392	308

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 9: Lint quality and associated 2022 scheduled discounts for top 10 varieties in relative yield at the Sussex Co.- Everett Farm OVT location (excluding unreleased experimental lines)

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
NG 3195 B3XF	38	4.4	32.2	85.3	31	0	30	20	455	505
NG 3299 B3XF	36	5.0	31.7	85.4	31	0	30	20	390	440
ST 4550 GLTP	37	4.6	32.4	84.9	31	0	30	15	445	490
ST 4595 B3XF	37	4.8	30.3	83.4	21	0	15	10	495	520
ST 4990 B3XF	38	4.3	31.1	85.1	31	0	30	20	455	505
ST 5091 B3XF	36	4.6	29.0	82.2	21	0	5	5	440	450
PHY 332 W3FE	37	4.6	32.6	83.9	31	0	30	10	445	485
DG 3456 B3XF	37	4.3	28.7	83.2	21	5	0	10	495	510
DG 3570 B3XF	37	4.6	29.6	85.2	31	0	5	20	445	470
DG 3519 B3XF	36	4.4	31.5	83.8	31	0	30	10	390	430
Mean	37	4.5	30.9	84.2	28.0	1	21	14	446	481

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 10: Lint quality and associated 2022 scheduled discounts for top 10 varieties in relative yield at the Isle of Wight Co.- Butler Farm OVT location (excluding unreleased experimental lines)

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str	Uni	Staple/ Color	TOTAL
DP 1646 B2XF	38	4.9	34.6	86.2	31	0	40	20	455	515
DP 2012 B3XF	40	4.5	32.9	86.6	31	0	30	20	455	505
DP 2115 B3XF	37	4.6	31.7	85.5	41	0	30	20	200	250
DP 2239 B3XF	36	4.9	34.0	85.8	31	0	40	20	390	450
NG 3195 B3XF	38	4.4	33.2	85.5	31	0	40	20	455	515
ST 4550 GLTP	37	4.3	33.4	84.5	31	0	40	15	445	500
ST 4595 B3XF	38	4.7	33.8	84.5	31	0	40	15	455	510
ST 5091 B3XF	37	4.8	33.1	85.8	31	0	40	20	445	505
PHY 400 W3FE	38	4.6	33.6	86.1	31	0	40	20	455	515
DG 3570 B3XF	37	4.6	33.7	86.7	21	0	40	20	495	555
Mean	38	4.6	33.4	85.7	31.0	0	38	19	425	482

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 11: Lint quality and associated 2022 scheduled discounts for varieties at the Isle of Wight Co.- Butler On-Farm location

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
NG 3195 B3XF	39	4.6	33.9	85.4	51	0	40	20	-450*	-390
NG 3299 B3XF	38	4.8	35.5	85.0	41	0	40	20	-60	0
ST 4595 B3XF	38	4.6	32.4	84.4	51	0	30	15	-450	-405
ST 5091 B3XF	39	4.0	32.0	84.4	51	0	30	15	-450	-405
DP 2038 B3XF	37	4.5	33.4	84.5	41	0	40	15	-310	-255
DP 2115 B3XF	38	4.5	31.9	84.0	41	0	30	15	-60	-15
DP 2239 B3XF	39	4.5	33.4	84.2	51	0	40	15	-450	-395
PHY 360 W3FE	38	4.4	32.1	84.7	51	0	30	15	-2000	-1955
PHY 400 W3FE	38	4.0	36.7	84.5	51	0	40	15	-2000	-1945
PHY 443 W3FE	37	4.3	36.8	85.3	51	0	40	20	-550	-490
DG 3456 B3XF	39	4.4	31.5	84.5	41	0	30	15	-310	-265
DG 3570 B3XF	37	4.7	31.9	84.6	41	0	30	15	-60	-15
Mean	38	4.4	33.5	84.6	46.8	0	35	16	-596	-545

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Lint processing does not allow for lint cleaning prior to ginning- may result in artificial increase in leaf grade, therefore deductions may be higher than with a commercial gin.

Table 12: Lint quality and associated 2022 scheduled discounts for varieties at the Suffolk- Ellis On-Farm location

Variety	Lint Quality [¶]					Loan Premiums/Discounts ^{¶¶} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
NG 3195 B3XF	38	4.4	32.9	84.9	51	0	30	15	-550*	-505
NG 3299 B3XF	39	4.3	36.3	85.1	41	0	40	20	-60	0
ST 4595 B3XF	40	3.9	32.0	82.6	51	0	30	5	-550	-515
ST 5091 B3XF	38	3.5	31.7	83.4	41	0	30	10	-430	-390
DP 2038 B3XF	37	3.7	30.0	82.8	41	5	15	5	-310	-285
DP 2115 B3XF	40	4.2	33.5	85.5	41	5	40	20	-310	-245
DP 2239 B3XF	40	3.6	29.7	85.1	41	0	5	20	-310	-285
PHY 360 W3FE	39	4.0	32.8	84.8	51	0	30	15	-550	-505
PHY 400 W3FE	38	3.5	31.6	84.7	41	0	30	15	-310	-265
PHY 443 W3FE	38	3.6	34.3	84.3	51	0	40	15	-2000	-1945
DG 3456 B3XF	39	3.7	37.4	85.1	41	5	40	20	-310	-245
DG 3570 B3XF	38	4.2	31.7	83.6	51	0	30	10	-450	-410
Mean	39	3.9	32.8	84.3	45.2	1	30	14	-512	-466

[¶] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{¶¶} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Lint processing does not allow for lint cleaning prior to ginning- may result in artificial increase in leaf grade, therefore deductions may be higher than with a commercial gin.

Table 13: Lint quality and associated 2022 scheduled discounts for varieties at the Southampton Co. #1 - Darden On-Farm location

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
NG 3195 B3XF	39	4.2	33.9	85.3	51	5	40	20	-325*	-260
NG 3299 B3XF	39	4.8	37.6	85.3	41	0	40	20	155	215
ST 4595 B3XF	39	4.4	36.1	85.9	51	0	40	20	-450	-390
ST 5091 B3XF	39	4.2	33.2	84.5	41	5	40	15	-60	0
DP 2038 B3XF	37	4.8	33.1	83.7	41	0	40	10	145	195
DP 2115 B3XF	37	4.7	31.8	85.0	41	0	30	20	-310	-260
DP 2239 B3XF	37	4.2	32.2	82.9	41	5	30	5	-310	-270
PHY 360 W3FE	37	4.0	30.8	83.5	51	0	15	10	-450	-425
PHY 400 W3FE	38	3.9	35.1	83.6	41	0	40	10	-430	-380
PHY 443 W3FE	36	3.8	34.2	84.4	41	5	40	15	-310	-250
DG 3456 B3XF	37	4.2	30.1	84.8	41	5	15	15	145	180
DG 3570 B3XF	37	4.5	33.8	84.0	41	0	40	15	-60	-5
Mean	38	4.3	33.5	84.4	43.5	2	34	15	-188	-138

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Lint processing does not allow for lint cleaning prior to ginning- may result in artificial increase in leaf grade, therefore deductions may be higher than with a commercial gin.

Table 14: Lint quality and associated 2022 scheduled discounts for varieties at the Southampton Co. #2 - Barnes On-Farm location

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
NG 3195 B3XF	38	4.8	33.5	86.1	51	0	40	20	-450*	-390
NG 3299 B3XF	37	4.9	32.3	84.0	51	0	30	15	-2000	-1955
ST 4595 B3XF	39	4.7	30.8	85.0	51	0	15	20	-2000	-1965
ST 5091 B3XF	39	4.3	31.6	85.4	41	0	30	20	-60	-10
DP 2038 B3XF	36	4.8	33.0	83.3	41	0	40	10	-310	-260
DP 2115 B3XF	38	4.6	32.1	85.7	41	0	30	20	-60	-10
DP 2239 B3XF	39	4.8	31.3	85.6	41	0	30	20	-310	-260
PHY 360 W3FE	37	4.8	31.5	83.2	51	0	30	10	-450	-410
PHY 400 W3FE	37	4.8	32.5	83.7	51	0	30	10	-550	-510
PHY 443 W3FE	37	4.8	37.9	85.1	51	0	40	20	-2000	-1940
DG 3456 B3XF	38	4.3	31.1	84.6	51	0	30	15	-2000	-1955
DG 3570 B3XF	38	5.0	31.8	84.7	41	-235	30	15	-60	-250
Mean	38	4.7	32.7	84.7	47.0	0	32	17	-819	-771

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Lint processing does not allow for lint cleaning prior to ginning- may result in artificial increase in leaf grade, therefore deductions may be higher than with a commercial gin.

**Table 15: Lint quality and associated 2022 scheduled discounts for varieties at the Surry Co.-
Low On-Farm location**

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
NG 3195 B3XF	37	4.7	30.1	83.7	41	0	15	10	145	170
NG 3299 B3XF	40	3.9	31.2	82.6	41	5	30	5	-310*	-270
ST 4595 B3XF	41	4.1	29.7	83.4	51	0	5	10	-550	-535
ST 5091 B3XF	39	3.7	29.5	82.4	51	0	5	5	-550	-540
DP 2038 B3XF	38	4.0	33.5	85.8	51	0	40	20	-450	-390
DP 2115 B3XF	38	4.2	31.1	83.0	41	5	30	10	-60	-15
DP 2239 B3XF	38	4.3	31.4	84.4	51	0	30	15	-2000	-1955
PHY 360 W3FE	39	4.3	29.8	85.0	51	0	5	20	-450	-425
PHY 400 W3FE	39	4.0	32.0	83.5	51	0	30	10	-450	-410
PHY 443 W3FE	39	3.9	33.8	84.0	51	0	40	15	-550	-495
DG 3456 B3XF	40	4.1	31.0	84.5	51	0	30	15	-2000	-1955
DG 3570 B3XF	40	3.9	32.8	83.8	51	0	30	10	-550	-510
Mean	39	4.1	31.2	83.8	48.0	1	23	12	-523	-487

[†]Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Lint processing does not allow for lint cleaning prior to ginning- may result in artificial increase in leaf grade, therefore deductions may be higher than with a commercial gin.

Table 16: Lint quality and associated 2022 scheduled discounts for varieties at the Sussex Co.-Webb On-Farm location

Variety	Lint Quality [†]					Loan Premiums/Discounts ^{††} (points per lb)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple/ Color	TOTAL
	32 nd		g/tex	%	Color					
NG 3195 B3XF	38	4.5	32.1	84.3	51	0	30	15	-450*	-405
NG 3299 B3XF	39	5.0	33.8	85.9	51	-235	40	20	-450	-625
ST 4595 B3XF	39	3.9	32.3	83.1	51	0	30	10	-2000	-1960
ST 5091 B3XF	40	3.9	31.3	82.8	51	0	30	5	-450	-415
DP 2038 B3XF	37	4.5	31.1	83.3	51	0	30	10	-450	-410
DP 2115 B3XF	38	4.3	30.7	84.4	51	0	15	15	-450	-420
DP 2239 B3XF	39	4.2	31.2	83.7	51	0	30	10	-450	-410
PHY 360 W3FE	37	4.2	29.6	83.3	61	0	5	10	-2000	-1985
PHY 400 W3FE	38	3.9	32.9	84.1	51	0	30	15	-550	-505
PHY 443 W3FE	37	4.5	32.1	86.2	51	0	30	20	-450	-400
DG 3456 B3XF	38	4.3	29.3	82.3	51	0	5	5	-550	-540
DG 3570 B3XF	38	4.6	30.9	84.3	51	0	15	15	-550	-520
Mean	38	4.3	31.7	84.1	52.0	-24	25	13	-770	-754

[†] Staple = Fiber length reported in 32nds of an inch; Mic= micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI= color determined by Rd and +b values.

^{††} Discounted amounts taken from the Cotton Incorporated 2022 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Lint processing does not allow for lint cleaning prior to ginning- may result in artificial increase in leaf grade, therefore deductions may be higher than with a commercial gin.

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