

2020 Cotton Variety Testing and On-Farm Results



Coordinators of Virginia Cotton Official Variety Testing in 2020

Hunter Frame, Field Crop Agronomist/Assistant Professor

Marie Schirmacher, Research Specialist, Tidewater Agricultural Research and Extension Center

David Horton, Research Specialist, Tidewater Agricultural Research and Extension Center

Other contributors:

Karl Jones, Agricultural Manger, Tidewater Agricultural Research and Extension Center

Producers Participating in the 2020 Cotton Variety On-Farm Testing:

John Allen, Isle of Wight County

Brian Darden, Southampton County

Matt Drake, Southampton County

Michael Ellis, City of Suffolk

Clay Lowe, Surry County

Bob Rogers, Sussex County

Jared Webb, Sussex County

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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 2020. All locations were planted using a two row Seed Research Equipment Solutions Classic Aire planter. All locations were harvested using a 2-row commercial cotton picker modified with a system to collect cotton in mesh bags for weighing or weigh on picker with electronic scales. The 2020 OVT received 43 entries from six 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 2020 USDA discount table and do not reflect actual discounts given during the fall of 2020. Premiums and discounts are reported in points per pound.

2020 Agronomic Inputs for Locations

(Rates on a per acre basis)

Suffolk, VA - Tidewater AREC Location OVT Trial

Planted: May 26, 2020

Harvested: Nov. 24, 2020

Population: 43,560 plants/acre

Fertilizer:
352 lb. of 8-8-34 bulk blend on May 4, 2020
40 lb. N ac⁻¹ as 24-0-0-3S dribbled on Jul. 8, 2020
1 qt. Boron on Jul. 21, 2020
40 lb. N ac⁻¹ as 24-0-0-3 on Jul. 28, 2020

PGR: 8 oz. Pix® on Aug. 5, 2020

Herbicide:
1 qt. Roundup® on Apr. 22, 2020
1 pt. Prowl®, 1 qt. Cotoran 4L® on May 27, 2020
24 fl. oz. Roundup® on Jun. 9, 2020
22 fl. oz. Roundup®, 40 fl. oz. Warrant® on Jun. 30, 2020
24 fl. oz. Roundup® on Aug. 5, 2020

Insecticide:
12 oz. Orthene 97® on Jun. 9, 2020
2 oz. Transform® on Jul. 21, 2020
10 oz. Diamond® on Jul. 21, 2020
6 oz. Bifenthrin® on Aug. 5, 2020
10 oz. Besiege® on Aug. 5, 2020

Harvest Aid: 1 qt. Finish 6 Pro®, 4 fl. oz. Folex®, 3 fl. oz. Dropp® on Oct. 16, 2020

Plot Size: 2 rows 35' x 36" 4 replications

Soil Type Eunola

Cooperator: Karl Jones

Southampton Co., VA- Drake Farm OVT Trial

Planted:	May 24, 2020
Harvested:	Dec. 2, 2020
Population:	43,560 plants/acre
Fertilizer:	40 lb ac ⁻¹ K ₂ O preplant broadcast 25 lb N ac ⁻¹ in UAN32 + 11-37-0 blend in 2x2 band on May 24, 2020 40 lb P ₂ O ₅ ac ⁻¹ in 2x2 band on May 24, 2020 10 lb S ac ⁻¹ as 12-0-0-26S in 2x2 band on May 24, 2020 75 lbs. N per acre 24-0-0-3S on Jul. 16, 2020
PGR:	16 fl. oz. Veto® on Aug. 10, 2020
Herbicide:	32 fl. oz. Envy Six Max®, 3 fl. oz. Verifact on Apr. 10, 2020 32 fl. oz. Liberty 280 SL on May 15, 2020 12 oz. Dual II Magnum®, 32 oz. Liberty 280 SL on Jun. 24, 2020
Insecticide:	8 oz. Livid 90 Prill® on May 15, 2020 3.2 fl. oz. Baythroid XL®, 8 oz. Orthene 97® on Aug. 10, 2020
Harvest Aids:	32 oz. Finish 6 Pro®, 6.4 fl. oz. Folex 6EC®, 3.2 oz. FreeFall SC®, 8 oz. Super Boll® on Oct. 20, 2020
Plot Size:	2 rows 35' x 36" 4 replications
Soil Type	State and Altavista
Cooperator:	Matt Drake

Sussex Co., VA- Rogers Farm OVT Trial

Planted:	May 11, 2020
Harvested:	Dec. 11, 2020
Population:	43,560 plants/acre
Fertilizer:	25 lb N ac ⁻¹ in UAN32 + 11-37-0 blend in 2x2 band on May 11, 2020 40 lb P ₂ O ₅ ac ⁻¹ in 2x2 band on May 11, 2020 10 lb S ac ⁻¹ as 12-0-0-26S in 2x2 band on May 11, 2020 34 fl. oz. 10% Boron on Jun. 30, 2020 75 lbs. N per acre 24-0-0-3S on Jul. 1, 2020 32 fl. oz. 10% Boron on Aug. 11, 2020
PGR:	16 fl. oz. Mepstar® on Jul. 16, 2020 11.4 fl. oz. Mepex® on Aug. 11, 2020
Herbicide:	32 fl. oz. Roundup®, 1.4 pt. Barrage®, 1 qt./100 gal Hel-fire® on Mar. 27, 2020 32 fl. oz. Roundup®, 1 pt. Cotoran®, 1 qt./100 gal Spectrum® on May 16, 2020 2.85 pt. Warrant® on Jun. 10, 2020 34 fl. oz. Roundup®, 1.5 oz. Staple® on Jun. 30, 2020
Insecticide:	7 oz. Acephate® on Jun. 10, 2020 6.4 fl. oz. Brigade®, 8 oz. Acephate® on Aug. 11, 2020
Harvest Aids:	2.67 pt. Prep®, 6 fl. oz. Def®, 4 fl. oz. Dropp® on Oct. 5, 2020
Plot Size:	2 rows 35' x 36" 4 replications
Soil Type	Slagle and Emporia + Slagle
Cooperator:	Bob Rogers

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

Planted: May 25, 2020

Harvested: Dec. 10, 2020

Population: 43,560 plants/acre

Fertilizer: 21 lb. N, 90 lbs. K₂O ac⁻¹ preplant
95 lb. 21-0-0-24S during the season

PGR: 16 oz. Pix®, 22 oz. Pix® applied during the season

Herbicide: 1.3 pt. Prowl® applied once during the season
1 pt. Dual® applied once during the season
1 pt. Roundup® applied three times during the season

Insecticide: Admire Pro® applied once during the season
3.2 fl. oz. Baythroid® applied once during the season

Harvest Aids: 3 pt. Boll Opener®, 1 pt. Def®, 4 fl. oz. Dropp®

Plot Size: 2 rows 35' x 36" 4 replications

Soil Type Slagle and Yemassee

Cooperator: John Allen

On-Farm Variety Trials

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

County	Cooperator	Planting Date	Harvest Date
Isle of Wight	John Allen	May 26, 2020	Dec. 10, 2020
Suffolk	Mike Ellis	May 25, 2020	Dec. 29, 2020
Southampton	Brian Darden	May 24, 2020	Dec. 3, 2020
Surry	Clay Lowe	May 26, 2020	Nov. 25, 2020
Sussex	Jared Webb	May 17, 2020	Dec. 4, 2020

Table 2: Relative yields for varieties entered at all locations in the 2020 Official Variety Testing (OVT) Program

Seed Company	Variety	Maturity	TAREC	SHC	SUX	IOW	Avg. Relative Yield
Bayer	DP 2115 B3XF**	Early	0.93	1.00	0.94	0.96	0.96
Bayer	DP 2038 B3XF*	Mid	0.92	0.98	0.87	0.95	0.93
BASF	ST 4550GLTP	Early	1.00	0.83	0.78	1.00	0.90
BASF	ST 5471GLTP	Mid	0.90	0.97	0.76	0.95	0.90
Corteva	PHY 545 W3FE**	Full	0.68	0.89	0.93	0.94	0.86
BASF	ST 5091 B3XF**	-	0.93	0.94	0.75	0.82	0.86
Loveland	DG 3456 B3XF	Early-Mid	0.93	0.75	0.84	0.91	0.86
Bayer	19R125B3XF¶	Early-Mid	0.77	0.88	0.89	0.86	0.85
Corteva	PHY 443 W3FE**	Mid	0.90	0.74	0.86	0.89	0.85
Americot	NG 3195B3XF¶**	Early-Mid	0.89	0.81	0.83	0.83	0.84
Armor	Armor 9210 B3XF	-	0.76	0.88	1.00	0.71	0.84
Bayer	DP 1646 B2XF	Mid-Full	0.83	0.96	0.81	0.74	0.84
BASF	BX 2192B3XF¶	-	0.81	0.96	0.76	0.80	0.83
BASF	ST 4990B3XF*	Early-Mid	0.83	0.83	0.93	0.74	0.83
Bayer	DP 2012 B3XF*	Early	0.73	0.96	0.84	0.79	0.83
Corteva	PHY 400 W3FE	Mid	0.82	0.77	0.84	0.87	0.82
BASF	BX 2194B3XF¶	-	0.73	0.92	0.85	0.77	0.82
Corteva	PHY 390 W3FE*	Mid	0.77	0.82	0.81	0.87	0.82
Corteva	PX 4B08 W3FE¶	Mid-Full	0.67	0.84	0.91	0.85	0.82
BASF	ST 5600B2XF	Mid-full	0.68	0.92	0.82	0.83	0.81
Loveland	DG 3570 B3XF	Mid	0.79	0.83	0.72	0.86	0.80
Bayer	DP 2020 B3XF*	Early-Mid	0.75	0.87	0.78	0.79	0.80
Loveland	DG 3535 B3XF	Mid	0.75	0.83	0.87	0.69	0.78
Americot	NG 4936B3XF	Mid	0.73	0.81	0.81	0.78	0.78
Corteva	PHY 500 W3FE	Mid-Full	0.68	0.78	0.94	0.72	0.78
Corteva	PHY 350 W3FE	Mid	0.76	0.73	0.79	0.79	0.77
BASF	BX 2151GLTP¶	-	0.81	0.68	0.79	0.74	0.76
Loveland	DGX139241 B3XF¶	Mid-Full	0.69	0.76	0.83	0.71	0.75
Bayer	DP 1916 B3XF	Early	0.72	0.93	0.69	0.64	0.75
Americot	NG 5150B3XF¶**	Mid	0.63	0.88	0.80	0.63	0.74
Bayer	DP 2055 B3XF*	Full	0.72	0.71	0.80	0.71	0.73
Bayer	DP 1840 B3XF	Mid-Full	0.61	0.91	0.87	0.54	0.73
Corteva	PHY 332 W3FE**	Early-Mid	0.78	0.63	0.77	0.75	0.73
BASF	ST 5610B3XF	Mid-full	0.69	0.76	0.76	0.68	0.72
Corteva	PHY 360 W3FE*	Early-Mid	0.78	0.64	0.77	0.70	0.72
Americot	NG 3729B3XF	Early-Mid	0.80	0.60	0.79	0.61	0.70
Corteva	PHY 340 W3FE	Early-Mid	0.67	0.67	0.71	0.74	0.70

Americot	AMX19A014B3XF†	Early-Mid	0.67	0.70	0.67	0.59	0.66
Americot	NG 3930B3XF	Early-Mid	0.72	0.61	0.55	0.65	0.63
Americot	AMX19A015B3XF†	Early-Mid	0.70	0.66	0.59	0.44	0.60
Americot	AMX19A016B3XF†	Early-Mid	0.46	0.74	0.70	0.38	0.57
Americot	NG 4098B3XF	Mid	0.66	0.52	0.53	0.48	0.55
Americot	AMX19A018B3XF†	Early-Mid	0.62	0.46	0.30	0.47	0.46
		Mean	0.76	0.80	0.79	0.75	0.77
		LSD (0.1)	0.12	0.15	0.18	0.15	-

† Experimental lines not released

* 2020 release variety

**2021 release variety

Table 3: Two-year (2019-2020) relative yield averages for varieties tested each year

Seed Company	Variety	Avg. Relative Yield
BASF	ST 4550 GLTP	0.92
Bayer	DP 1646 B2XF	0.88
BASF	ST 5471 GLTP	0.87
Corteva	PHY 545 W3FE	0.86
Americot	NG 4936 B3XF	0.86
Loveland	DG 3570 B3XF	0.85
Corteva	PHY 400 W3FE	0.84
Corteva	PHY 443 W3FE	0.84
BASF	ST 5600 B2XF	0.83
Corteva	PHY 350 W3FE	0.82
Corteva	PHY 332 W3FE	0.81
Bayer	DP 1840 B3XF	0.81
Corteva	PHY 500 W3FE	0.80
Americot	NG 3729 B2XF	0.79
Bayer	DP 1916 B3XF	0.78
Corteva	PHY 340 W3FE	0.75
Americot	NG 3930 B3XF	0.74
		Mean
		0.83

Table 4: Three-year (2018-2020) relative yield averages for varieties tested each year

Seed Company	Variety	Avg. Relative Yield
BASF	ST 4550 GLTP	0.92
Bayer	DP 1646 B2XF	0.89
Corteva	PHY 400 W3FE	0.85
BASF	ST 5471 GLTP	0.84
Corteva	PHY 350 W3FE	0.83
Corteva	PHY 340 W3FE	0.81
Bayer	DP 1916 B3XF	0.80
Bayer	DP 1840 B3XF	0.79
Corteva	PHY 500 W3FE	0.78
Americot	NG 3729 B2XF	0.78
Mean		0.83

Table 5: Lint yield and lint percentage of varieties tested during 2020 at the four OVT locations

Seed Company	Variety	Suffolk		Southampton		Sussex		Isle of Wight	
		Lint Yld	Lint	Lint Yld	Lint	Lint Yld	Lint	Lint Yld	Lint
		lb./A	%	lb./A	%	lb./A	%	lb./A	%
Bayer	DP 2115 B3XF**	1362	43.5	1477	44.1	1427	44.3	934	42.1
Bayer	DP 2038 B3XF*	1347	45.9	1449	46.3	1319	43.9	925	44.3
BASF	ST 4550GLTP	1471	44.7	1232	43.4	1176	43.3	974	43.3
BASF	ST 5471GLTP	1323	40.8	1431	40.6	1152	39.2	927	41.0
Corteva	PHY 545 W3FE**	1000	43.3	1317	43.8	1414	44.4	917	43.8
BASF	ST 5091 B3XF**	1366	42.5	1386	43.1	1142	42.0	799	40.2
Loveland	DG 3456 B3XF	1367	43.2	1109	43.3	1278	44.3	890	40.4
Bayer	19R125B3XF†	1137	43.4	1302	44.4	1354	43.9	833	43.4
Corteva	PHY 443 W3FE**	1325	42.7	1093	41.1	1298	42.5	870	41.3
Americot	NG 3195B3XF†**	1310	42.0	1194	43.5	1255	42.3	807	41.5
Armor	Armor 9210 B3XF	1113	40.9	1301	41.6	1515	43.0	696	41.0
Bayer	DP 1646 B2XF	1226	41.9	1412	43.7	1225	40.9	725	41.3
BASF	BX 2192B3XF†	1193	41.4	1416	42.1	1153	40.3	777	40.1
BASF	ST 4990B3XF*	1225	39.7	1227	40.7	1411	39.3	717	38.1
Bayer	DP 2012 B3XF*	1069	39.8	1422	41.6	1271	40.9	765	38.3
Corteva	PHY 400 W3FE	1208	43.0	1133	43.3	1272	42.9	845	42.0
BASF	BX 2194B3XF†	1073	40.1	1358	43.2	1284	41.7	754	41.3
Corteva	PHY 390 W3FE*	1139	42.9	1205	43.7	1222	42.2	845	42.2
Corteva	PX 4B08 W3FE†	989	43.8	1245	40.0	1379	42.6	824	42.5

BASF	ST 5600B2XF	1007	41.7	1359	42.3	1235	41.9	804	41.3
Loveland	DG 3570 B3XF	1161	41.6	1229	41.9	1088	41.6	839	40.6
Bayer	DP 2020 B3XF*	1101	39.9	1286	40.8	1179	39.8	774	38.6
Loveland	DG 3535 B3XF	1108	39.4	1226	40.3	1325	41.3	671	37.8
Americot	NG 4936B3XF	1067	39.9	1191	39.3	1232	39.7	756	38.9
Corteva	PHY 500 W3FE	1003	43.6	1146	42.9	1429	42.3	700	41.7
Corteva	PHY 350 W3FE	1123	40.1	1071	38.3	1202	40.1	768	38.5
BASF	BX 2151GLTP†	1193	43.9	1007	44.4	1191	44.9	723	42.8
Loveland	DGX139241 B3XF†	1010	42.0	1119	41.7	1251	41.7	696	40.6
Bayer	DP 1916 B3XF	1054	42.2	1372	45.0	1052	42.5	627	40.0
Americot	NG 5150B3XF†**	920	40.8	1305	43.1	1213	41.6	617	39.4
Bayer	DP 2055 B3XF*	1053	42.7	1055	41.3	1209	41.5	690	38.9
Bayer	DP 1840 B3XF	904	40.1	1342	39.5	1315	39.5	530	37.9
Corteva	PHY 332 W3FE**	1152	41.2	928	39.7	1174	40.5	731	39.7
BASF	ST 5610B3XF	1008	42.7	1122	44.0	1158	44.3	667	42.3
Corteva	PHY 360 W3FE*	1147	41.7	944	41.2	1167	39.9	682	40.2
Americot	NG 3729B3XF	1182	40.3	891	41.4	1203	40.6	589	39.7
Corteva	PHY 340 W3FE	982	43.3	983	43.1	1082	41.5	726	42.2
Americot	AMX19A014B3XF†	984	38.4	1028	39.9	1011	38.8	575	38.3
Americot	NG 3930B3XF	1058	40.2	908	41.8	831	40.1	631	40.0
Americot	AMX19A015B3XF†	1027	36.8	982	36.5	896	35.9	428	35.8
Americot	AMX19A016B3XF†	675	37.7	1091	39.0	1063	38.0	374	39.1
Americot	NG 4098B3XF	977	39.0	775	37.3	801	37.8	472	38.6
Americot	AMX19A018B3XF†	916	40.7	677	40.2	452	39.1	461	39.6
Mean		1117.5	41.5	1180.1	41.8	1193.1	41.4	729.2	40.5
LSD (0.1)		172.00	0.95	224.00	1.30	267.00	0.90	148.00	1.20

† Experimental lines not released

* 2020 release variety

** 2021 release variety

Table 6: Lint yield and lint percent of varieties from the five 2020 On-Farm trial locations

Variety [†]	Avg. across 5 locations		Isle of Wight Co.- Allen		Suffolk- Ellis		Southampton Co.- Darden		Surry Co.- Lowe		Sussex Co.- Webb	
	Lint Yield	Lint lb./A	Lint Yield	Lint lb./A	Lint Yield	Lint lb./A	Lint Yield	Lint lb./A	Lint Yield	Lint lb./A	Lint Yield	Lint lb./A
	%	%	%	%	%	%	%	%	%	%	%	%
ST 4550GLTP	1091	45.0	1103	46.3	1313	45.2	1091	44.4	915	43.6	1035	45.7
DP 2038B3XF	1033	45.6	729	45.0	1160	45.4	1271	45.7	728	45.4	1278	46.4
PHY 400W3FE	982	44.0	837	44.1	1142	43.4	1120	43.3	733	44.7	1080	44.4
NG 4936B3XF	973	40.2	801	39.4	1141	40.7	1095	40.2	691	39	1136	41.7
PHY 340W3FE	971	44.4	856	44.3	1116	44.1	1017	43	668	44.7	1199	45.7
ST 4990B3XF	962	39.8	742	38.4	1206	40.7	1104	39.5	687	39.3	1072	41.1
DP 1646B2XF	955	43.0	687	42.4	1055	43.1	1132	42.9	624	42.7	1279	43.8
DP 2012B3XF	947	41.0	664	39.6	1083	41.7	1087	41.7	673	40.9	1230	41.2
PHY 350W3FE	920	41.2	893	41.0	1052	41.2	891	39.7	656	41.3	1109	42.9
NG 3930B3XF	901	40.6	755	41.9	1124	41.5	637	39.4	- *	- *	1090	39.5
NG 4098B3XF	762	39.9	578	40.2	976	39.9	709	39.1	585	40.8	959	39.4
Mean	954	42.2	786	42.1	1124	42	1014	41.7	696	42.2	1133	42.9
LSD (0.1)	-	-	76	1.1	75	0.9	103	1.5	-	-	-	-

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

*NG 3930B3XF not reported due to error at planting

Table 7: Average lint quality and associated 2020 scheduled discounts for top 10 varieties in relative yield across all four OVT locations (excluding unreleased experimental lines)

Variety	Lint Quality ^I					Discounted Amount ^{II} (points per pound)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 2115 B3XF	39	4.5	30.1	85.2	41	-56	18	19	10	-10
DP 2038 B3XF	37	4.6	30.3	83.4	41	-94	19	9	15	-51
ST 4550GLTP	38	4.5	32.1	84.6	44	-56	41	16	-6	-5
ST 5471GLTP	39	4.4	30.8	83.3	41	-56	24	8	51	26
PHY 545										
W3FE	38	4.2	30.3	84.1	44	-56	15	13	-81	-110
ST 5091 B3XF	39	4.1	31.1	84.4	41	-116	31	14	-16	-88
DG 3456 B3XF	39	4.1	29.6	83.6	39	1	23	8	206	238
PHY 443										
W3FE	38	4.4	32.1	84.3	41	-56	31	14	-39	-50
NG 3195B3XF	38	4.3	31.5	84.4	46	1	31	14	-241	-195
Armor 9210										
B3XF	39	4.7	31.5	84.1	44	-95	35	13	-74	-121
Mean	38	4.4	30.9	84.1	-	-58	27	13	-18	-37

^I 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 the Rd & +b values.

^{II} Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 8: Lint quality and associated 2020 scheduled discounts for top 10 varieties in relative yield at the Tidewater AREC OVT location (excluding unreleased experimental lines)

Variety	Lint Quality ^I					Discounted Amount ^{II} * (points per pound)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 2115 B3XF	39	4.0	28.9	84.3	41	5	0	15	-295	-275
DP 2038 B3XF	37	4.1	28.7	81.9	41	5	0	0	-295	-290
ST 4550GLTP	37	4.1	30.5	83.4	41	5	25	10	-25	15
ST 5471GLTP	38	3.9	28.9	82.3	41	5	0	0	-25	-20
PHY 545										
W3FE	38	3.6	29.6	82.8	41	0	5	0	-295	-290
ST 5091 B3XF	38	3.4	29.4	83.5	41	-465	5	10	-295	-745
DG 3456 B3XF	38	3.8	27.8	82.9	41	5	0	0	170	175
PHY 443										
W3FE	37	3.8	30.6	83.2	41	5	25	10	-295	-255
NG 3195B3XF	38	3.9	29.5	83.6	41	5	5	10	-430	-410
Armor 9210										
B3XF	39	4.1	30.5	82.2	41	5	25	0	-295	-265
Mean	38	3.9	29.4	83.0	-	-43	9	6	-208	-236

^I 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 the Rd & +b values.

^{II} Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Bale sample (versus hand sampling) of lint may result in artificial increase in leaf grade, therefore points, without cleaning prior to ginning.

Table 9: Lint quality and associated 2020 scheduled discounts for top 10 varieties in relative yield at the Southampton Co.- Drake Farm OVT location (excluding unreleased experimental lines)

Variety	Lint Quality^I					Discounted Amount^{II} (points per pound)				
	Staple	Mic	Str	Uni	HVI	Staple	Mic	Str	Uni	/ Color
	<i>32nd</i>		<i>g/tex</i>	<i>%</i>	<i>Color</i>			<i>g/tex</i>	<i>%</i>	
DP 2115 B3XF	39	4.8	30.3	85.6	31	0	25	20	420	465
DP 2038 B3XF	37	4.9	30.9	84.2	31	0	25	15	440	480
ST 4550GLTP	38	4.8	32.4	85.3	41	0	45	20	225	290
ST 5471GLTP	39	4.5	31.8	84.3	31	0	45	15	455	515
PHY 545										
W3FE	37	4.3	29.1	84	31	5	5	15	440	465
ST 5091 B3XF	38	4.4	31	83.8	31	0	45	10	455	510
DG 3456 B3XF	38	4.5	31	83.4	31	0	45	10	455	510
PHY 443										
W3FE	37	4.5	32	85	31	0	45	20	440	505
NG 3195B3XF	38	4.6	32.8	84.7	41	0	45	15	225	285
Armor 9210										
B3XF	39	4.9	32.8	85	41	0	45	20	225	290
Mean	38	4.6	31.4	84.5	-	1	37	16	378	432

^IStaple= Fiber Length reported in 32nds of an inch; Mic= Micronaire, Str= Fiber strength reported in grams per tex; Uni= Uniformity; HVI=color determined by the Rd & +b values.

^{II} Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 10: Lint quality and associated 2020 scheduled discounts for top 10 varieties in relative yield at the Sussex Co.- Rogers Farm OVT location (excluding unreleased experimental lines)

Variety	Lint Quality [†]					Discounted Amount ^{††} (points per pound)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 2115 B3XF	40	5.2	32.4	86.7	41	-235	45	25	225	60
DP 2038 B3XF	38	5.3	31.7	85	41	-385	45	20	225	-95
ST 4550GLTP	39	5.1	34.2	85.7	41	-235	50	20	225	60
ST 5471GLTP	40	5.0	34.4	84.4	41	-235	50	15	225	55
PHY 545 W3FE	40	5.1	34.3	86.2	51	-235	50	25	-160	-320
ST 5091 B3XF	41	4.9	33.4	86.2	41	0	50	25	225	300
DG 3456 B3XF	40	4.6	31.4	85.3	41	0	45	20	225	290
PHY 443 W3FE	39	5.2	36.1	86.5	41	-235	50	25	225	65
NG 3195B3XF	39	4.9	33.7	85.6	51	0	50	20	-310	-240
Armor 9210 B3XF	40	5.5	32.5	85.2	41	-385	45	20	225	-95
Mean	40	5.1	33.4	85.7	-	-195	48	22	133	8

* 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 the Rd & +b values.

** Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 11: Lint quality and associated 2020 scheduled discounts for top 10 varieties in relative yield at the Isle of Wight Co.- Allen Farm OVT location (excluding unreleased experimental lines)

Variety	Lint Quality [†]					Discounted Amount ^{††*} (points per pound)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 2115 B3XF	38	3.8	28.7	84.2	51	5	0	15	-310	-290
DP 2038 B3XF	37	4.2	29.7	82.4	51	5	5	0	-310	-300
ST 4550GLTP	38	4.2	31.1	84.1	51	5	45	15	-450	-385
ST 5471GLTP	38	4.0	28.2	82.3	51	5	0	0	-450	-445
PHY 545 W3FE	37	4.0	28.3	83.4	51	5	0	10	-310	-295
ST 5091 B3XF	38	3.6	30.5	83.9	51	0	25	10	-450	-415
DG 3456 B3XF	38	3.6	28	82.6	41	0	0	0	-25	-25
PHY 443 W3FE	37	4.0	29.5	82.5	52	5	5	0	-525	-515
NG 3195B3XF	37	3.6	30	83.6	51	0	25	10	-450	-415
Armor 9210 B3XF	39	4.3	30.2	83.9	51	0	25	10	-450	-415
Mean	38	3.9	29.4	83.3	-	3	13	7	-373	-350

* 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 the Rd & +b values.

** Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

* Bale sample (versus hand sampling) of lint may result in artificial increase in leaf grade, therefore points, without cleaning prior to ginning.

Table 12: Lint quality and associated 2020 scheduled discounts for varieties at the Isle of Wight Co.- Allen On-Farm location

Variety	Lint Quality [†]					Discounted Amount [‡] (points per pound)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 1646 B2XF	40	3.67	26.1	84.3	51	0	0	15	-570	-555
DP 2012 B3XF	38	3.73	28.7	84.1	51	5	0	15	-450	-430
DP 2038 B3XF	36	4.17	26.3	82.4	41	5	0	0	-30	-25
PHY 340 W3FE	37	4.2	27.2	83.4	51	5	0	10	-450	-435
PHY 350 W3FE	38	4.03	27.1	83.6	51	5	0	10	-450	-435
PHY 400 W3FE	38	4.23	29.2	83.1	51	5	5	10	-450	-430
ST 4550GLTP	37	4.63	28.4	84.2	51	0	0	15	-450	-435
ST 4990B3XF	38	3.97	27.4	85.3	51	5	0	20	-450	-425
NG4936B3XF	39	3.83	27	84.1	51	5	0	15	-450	-430
NG3930B3XF	37	3.97	26	83	51	5	0	10	-570	-555
NG4098B3XF	40	3.93	30.7	83.5	51	5	25	10	-2000	-1960
Mean	38	4.0	27.6	83.7	-	4	3	12	-575	-556

[†]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 the Rd & +b values.

[‡]Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 13: Lint quality and associated 2020 scheduled discounts for varieties at the Suffolk- Ellis On-Farm location

Variety	Lint Quality [†]					Discounted Amount [‡] (points per pound)				
	Staple 32 nd	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 1646 B2XF	40	4	27.2	84.6	51	5	0	15	-450	-430
DP 2012 B3XF	39	4.07	27	83.9	51	5	0	10	-310	-295
DP 2038 B3XF	37	4.23	28	83.1	41	5	0	10	-25	-10
PHY 340 W3FE	37	4.27	27.8	83.2	41	5	0	10	-25	-10
PHY 350 W3FE	37	3.93	28.3	83.8	51	5	0	10	-310	-295
PHY 400 W3FE	38	4	30	83.4	41	5	25	10	-25	15
ST 4550GLTP	38	4.37	28.9	84.6	51	0	0	15	-310	-295
ST 4990B3XF	39	4.27	27.3	85.5	51	5	0	20	-310	-285
NG4936B3XF	39	4.2	27.8	85.2	51	5	0	20	-450	-425
NG3930B3XF	37	4.07	27.9	84.3	41	5	0	15	-25	-5
NG4098B3XF	40	4	31.2	83.5	51	5	45	10	-450	-390
DP 1646 B2XF	40	4	27.2	84.6	51	5	0	15	-450	-430
Mean	38	4.1	28.3	84.1	-	5	6	13	-245	-220

[†]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 the Rd & +b values.

[‡]Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 14: Lint quality and associated 2020 scheduled discounts for varieties at the Southampton Co.- Darden On- Farm location

Variety	Lint Quality [†]					Discounted Amount [‡] (points per pound)				
	Staple 32 nd	Mic	Str	Uni	HVI Color	Mic	Str	Uni	Staple / Color	TOTAL
			g/tex	%						
DP 1646 B2XF	41	4.47	28.2	84.2	61	0	0	15	-2000	-1985
DP 2012 B3XF	40	4.47	30.2	84.9	51	0	25	15	-450	-410
DP 2038 B3XF	37	4.57	29.2	82.6	51	0	5	0	-450	-445
PHY 340 W3FE	39	4.47	30.7	84.4	51	0	25	15	-570	-530
PHY 350 W3FE	39	4.47	29.7	85	51	0	5	20	-450	-425
PHY 400 W3FE	39	4.47	32.9	83.8	51	0	45	10	-450	-395
ST 4550GLTP	39	4.63	31.3	85.1	51	0	45	20	-450	-385
ST 4990B3XF	39	4.57	28	84.8	51	0	0	15	-570	-555
NG4936B3XF	40	4.53	28.4	84.4	51	0	0	15	-450	-435
NG3930B3XF	38	3.7	28.7	82.7	51	5	0	0	-570	-565
NG4098B3XF	41	4.4	30.4	83.7	61	0	25	10	-665	-630
Mean	39	4.4	29.8	84.1	-	0	16	12	-643	-615

[†] 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 the Rd & +b values.

[‡] Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

Table 15: Lint quality and associated 2020 scheduled discounts for varieties at the Surry Co.- Lowe On-Farm location

Variety	Lint Quality [†]					Discounted Amount [‡] * (points per pound)				
	Staple 32 nd	Mic	Str	Uni	HVI Color	Mic	Str	Uni	Staple / Color	TOTAL
			g/tex	%						
DP 1646 B2XF	40	3.9	28.3	83.9	51	5	0	10	-570	-555
DP 2012 B3XF	39	4.3	31.1	84.8	51	0	45	15	-570	-510
DP 2038 B3XF	36	4.8	29.3	82.3	51	0	5	0	-570	-565
PHY 340 W3FE	38	4.6	28.4	83	41	0	0	10	-295	-285
PHY 350 W3FE	38	4.2	29.2	84.3	41	5	5	15	-295	-270
PHY 400 W3FE	37	4.4	31	82.2	51	0	45	0	-450	-405
ST 4550GLTP	37	4.5	31.9	82.9	51	0	45	0	-450	-405
ST 4990B3XF	40	4.4	30.4	85.6	51	0	25	20	-570	-525
NG4936B3XF	39	3.9	28.9	82.9	51	5	0	0	-570	-565
NG4098B3XF	39	4.4	34	84	51	0	50	15	-310	-245
Mean	38	4.3	30.3	83.6	-	2	22	9	-465	-433

[†] 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 the Rd & +b values.

[‡] Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

*Lint processing does not allow for cleaning prior to ginning- may result in artificial increase in leaf grade, therefore points.

Table 16: Lint quality and associated 2020 scheduled discounts for varieties at the Sussex Co.-Webb On-Farm location

Variety	Lint Quality^I					Discounted Amount^{II} (points per pound)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple / Color	TOTAL
	32nd		g/tex	%	Color		g/tex	%		
DP 1646 B2XF	41	4.6	28.4	84.5	51	0	0	15	-310	-295
DP 2012 B3XF	38	4.2	33.1	82.5	51	5	50	0	-310	-255
DP 2038 B3XF	37	4.3	31.2	83.1	41	0	45	10	-25	30
PHY 340 W3FE	38	4.4	30.7	83.7	51	0	25	10	-450	-415
PHY 350 W3FE	38	4.6	30.8	83.7	51	0	25	10	-310	-275
PHY 400 W3FE	38	4.1	33.8	83.7	51	5	50	10	-160	-95
ST 4550GLTP	37	4.8	32.8	84.3	51	0	45	15	-160	-100
ST 4990B3XF	39	4.5	30.6	84.8	51	0	25	15	-450	-410
NG4936B3XF	39	4.5	30.8	84	51	0	25	15	-450	-410
NG3930B3XF	39	4.8	30	83.5	51	0	25	10	-310	-275
NG4098B3XF	41	4.1	35.2	84.4	51	5	50	15	-450	-380
Mean	39	4.4	31.6	83.8	-	1	33	11	-308	-262

^I 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 the Rd & +b values.

^{II} Discounted amounts taken from the Cotton Incorporated 2020 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

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