



## 2016 COTTON VARIETY TESTING AND ON-FARM RESULTS



### **Coordinators of Virginia Cotton Official Variety Testing in 2016**

Hunter Frame, Field Crop Agronomist/Assistant Professor

Gail White, Research Specialist, Tidewater Agricultural Research and Extension Center

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

### **Other contributors:**

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

Mike Parrish, Extension Agent, Agricultural and Natural Resources, Dinwiddie County

Livvy Preisser, Extension Agent, Agricultural and Natural Resources, Southampton County

Glenn Slade, Senior Extension Agent, Agricultural and Natural Resources, Surry County

Janet Spencer, Extension Agent, Agricultural and Natural Resources, Isle of Wight County

### **Producers Participating in the 2016 Cotton Variety On-Farm Testing:**

John Allen, Isle of Wight County

Les Babb, Isle of Wight County

Billy Bain and Randy Everett, Dinwiddie County

Matt Drake, Southampton County

Lewis and M.L. Everett, Southampton County

Ben and Richard Kitchen, Southampton County

Moyler Pond, Surry 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 2015. 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 2015 OVT received 33 entries from five seed companies. Each company was charged an entry fee for each hybrid per location entered. Eight extra varieties were entered in the Suffolk-TAREC location as part of a regional variety testing program protocol.

## 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 2015 discount table and do not reflect actual discounts given during the fall of 2015. Premiums and discounts are reported in points per pound.

# 2016 Agronomic Inputs for Locations

(Rates on a per acre basis)

## Suffolk, VA - Tidewater AREC Location OVT Trial

<b>Planted:</b>	May 16, 2016
<b>Harvested:</b>	Nov. 2, 2016
<b>Population:</b>	43,560 plants/acre
<b>Fertilizer:</b>	254 lbs. of 6-16-39 per acre broadcast pre-plant 80 lbs. N per acre 24-0-0-3S + 1 qt. Boron 10% on Jul. 13, 2016
<b>Cover Crop:</b>	Small grain
<b>PGR:</b>	6 oz. Pentia <sup>®</sup> on Jul. 13, 2016 14 oz. Pentia <sup>®</sup> on Aug. 5, 2016
<b>Herbicide:</b>	3 pt. Warrant <sup>®</sup> and 1 qt. Cotoran <sup>®</sup> on May 17, 2016 24 oz. Roundup WeatherMax <sup>®</sup> on Jul. 6, 2016
<b>Insecticide:</b>	18 oz. Velum Total <sup>®</sup> on May 16, 2016 10 oz. Orthene <sup>®</sup> on Jun. 15, 2016 3 oz. Baytroid <sup>®</sup> on Aug. 5, 2016 13 oz. Bidrin XPll <sup>®</sup> and 3 oz. Belt <sup>®</sup> on Aug. 12, 2016
<b>Harvest Aid:</b>	1 qt. Finish 6 Pro <sup>®</sup> , 4 oz. Folex <sup>®</sup> , 5 oz. Dropp <sup>®</sup> on Oct. 17, 2016
<b>Plot Size:</b>	2 rows 35' x 36" 4 replications
<b>Soil Type</b>	Nansemond
<b>Cooperator:</b>	Karl Jones

## Southampton Co., VA- Everett Farm OVT Trial 1

**Planted:** May 10, 2016

**Harvested:** Oct. 26, 2016

**Population:** 43,560 plants/acre

**Fertilizer:** 32 oz. B-moly<sup>®</sup> on Jun. 29, 2016  
16 oz. Boron on Jul. 29, 2016

**PGR:** 10 oz. Pix<sup>®</sup> on Jul. 15, 2016  
8 oz. Pix<sup>®</sup> on Jul. 29, 2016

**Herbicide:** 32 oz. Roundup PowerMax<sup>®</sup>, 1.6 oz. Valor<sup>®</sup>, 32 oz. 2-4D Amine<sup>®</sup> on Apr. 8, 2016  
32 oz. Roundup PowerMax<sup>®</sup> on Jun. 4, 2016  
32 oz. Roundup PowerMax<sup>®</sup> on Jun. 29, 2016

**Insecticide:** 18 oz. Velum Total<sup>®</sup> on May 10, 2016  
8 oz. Acephate<sup>®</sup> on Jun. 4, 2016  
2 oz. Admire<sup>®</sup> on Jul. 15, 2016  
6 oz. Bifenthrin<sup>®</sup> on Jul. 29, 2016  
6 oz. Bifenthrin<sup>®</sup>, 14.5 oz. Prevathon<sup>®</sup> on Aug. 15, 2016

**Harvest Aids:** 32 oz. Finish<sup>®</sup>, 4 oz. Folex<sup>®</sup>, 3.2 oz. Thidazurion<sup>®</sup> on Oct. 4, 2016

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

**Soil Type** Emporia

**Cooperator:** Lewis Everett

## Southampton Co., VA- Drake Farm OVT Trial 2

**Planted:** May 11, 2016

**Harvested:** Nov. 2, 2016

**Population:** 43,560 plants/acre

**Fertilizer:** 250 lbs. 7-0-40 per acre applied at-plant  
30 gals 24-0-0-3S at side-dress application  
1 qt. Boron on Jul. 7, 2016  
1 qt. Boron on Aug. 3, 2016

**PGR:** 12 oz. VETO<sup>®</sup> on Jul. 7, 2016  
1 pt. VETO<sup>®</sup> on Aug. 3, 2016

**Herbicide:** 1 qt. Envy Six Max<sup>®</sup>, 2 oz. Valor<sup>®</sup>, 1 qt. 2-4D<sup>®</sup> on Apr. 8, 2016  
1 qt. Envy Six Max<sup>®</sup> on Jun. 2, 2016  
1 qt. Envy Six Max<sup>®</sup> on Jun. 22, 2016  
1 qt. Envy Six Max<sup>®</sup> on Aug. 3, 2016

**Insecticide:** 8 oz. Livid 97<sup>®</sup> on Jun. 2, 2016  
2 oz. Provoke<sup>®</sup> on Jul. 7, 2016  
6 oz. Reveal<sup>®</sup> on Aug. 3, 2016  
4 oz. Intrepid Edge<sup>®</sup>, 4 oz. Mustang Max<sup>®</sup> on Aug. 15, 2016

**Harvest Aids:** 8 oz. Quiver<sup>®</sup>, 3 pt. Valour<sup>®</sup>, 3 oz. Vacate<sup>®</sup> on Oct. 16, 2016

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

**Soil Type** Emporia + Slagle

**Cooperator:** Matt Drake

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

<b>Planted:</b>	May 16, 2016
<b>Harvested:</b>	Nov. 11, 2016
<b>Population:</b>	43,560 plants/acre
<b>Fertilizer:</b>	115 lbs. N, 55 lbs. P <sub>2</sub> O <sub>5</sub> , and 120 lbs. K <sub>2</sub> O per acre applied in four applications
<b>Herbicide:</b>	22 oz. Glyphosate <sup>®</sup> applied three time during the season
<b>Insecticide:</b>	18 oz. Velum Total <sup>®</sup> on May 16, 2016 3.2 oz. Baythroid <sup>®</sup> applied twice during the season
<b>Harvest Aids:</b>	8 oz. Def <sup>®</sup> , 3 pt. Prep <sup>®</sup> , 3 oz. Dropp <sup>®</sup>
<b>Plot Size:</b>	2 rows 35' x 36" 4 replications
<b>Soil Type</b>	Yemassee and Slage
<b>Cooperator:</b>	John Allen

## On-Farm Variety Trials

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

<b>County</b>	<b>Planting Date</b>	<b>Harvest Date</b>
<b>Southampton</b>	May 16, 2016	Nov. 7, 2016
<b>Dinwiddie</b>	May 16, 2016	Oct. 27, 2016
<b>Surry</b>	May 27, 2016	Nov. 18, 2016
<b>Isle of Wight 1</b>	May 16, 2016	Nov. 8, 2016
<b>Isle of Wight 2</b>	May 20, 2016	Nov. 18, 2016

**Table 2: Relative yields for varieties entered at all locations in the 2016 Official Variety Testing (OVT) Program**

Seed Company	Variety	Maturity	Relative Yield				Avg. Relative Yield
			TAREC	SHC1	SHC2	IOW	
Dow AgroSciences	PHY 333 WRF	early	1.00	0.81	0.92	0.99	0.93
Dow AgroSciences	PHY 312 WRF	early	0.98	0.82	0.90	0.92	0.90
Monsanto	DP 1646 B2XF	mid-full	0.99	0.81	0.93	0.86	0.90
Bayer CropScience	ST 5020 GLT		0.93	0.73	0.97	0.95	0.89
Monsanto	DP 1538 B2XF	mid	0.98	0.81	0.99	0.78	0.89
CPS Dyna-Gro	DG 3526 B2XF	mid	0.84	0.96	0.89	0.84	0.88
Monsanto	DP 1639 B2XF	mid	0.89	0.73	1.00	0.86	0.87
Dow AgroSciences	PHY 495 W3RF	mid	0.98	0.77	0.77	0.92	0.86
Bayer CropScience	ST 4848 GLT	early-mid	0.95	0.72	0.94	0.83	0.86
Dow AgroSciences	PHY 499 WRF	mid	0.94	0.77	0.87	0.86	0.86
Dow AgroSciences	PHY 444 WRF	mid	0.90	0.62	0.87	1.00	0.85
Bayer CropScience	ST 6182 GLT	full	0.86	1.00	0.85	0.66	0.84
Americot/NexGen	AMX 1601 B2XF <sup>¶</sup>	mid	0.90	0.72	0.80	0.89	0.83
Monsanto	DP 1725 B2XF	mid	1.00	0.65	0.81	0.85	0.82
Dow AgroSciences	PHY 487 WRF	mid	0.95	0.69	0.82	0.82	0.82
Bayer CropScience	ST 4946 GLB2	early-mid	0.91	0.59	0.87	0.88	0.81
Bayer CropScience	ST 5115 GLT	mid	0.87	0.79	0.72	0.86	0.81
Bayer CropScience	ST 4747 GLB2	early	0.85	0.68	0.90	0.80	0.81
Americot/NexGen	NG 3405 B2XF	early-mid	0.85	0.76	0.76	0.83	0.80
Monsanto	DP 1614 B2XF	early	0.85	0.67	0.79	0.88	0.80
Americot/NexGen	NG 3522 B2XF	early-mid	0.87	0.63	0.81	0.89	0.80
Bayer CropScience	BX 1776 GLTP <sup>¶</sup>		0.91	0.62	0.84	0.77	0.78
Monsanto	MON 15R513 B2XF <sup>¶</sup>	early	0.86	0.67	0.82	0.75	0.78
Monsanto	MON 16R229 B2XF <sup>¶</sup>	early-mid	0.89	0.57	0.73	0.85	0.76
Monsanto	DP 1522 B2XF	early-mid	0.84	0.54	0.74	0.88	0.75
CPS Dyna-Gro	DG 3757 B2XF	full	0.75	0.66	0.87	0.73	0.75
Americot/NexGen	NG 3406 B2XF	early-mid	0.84	0.71	0.74	0.69	0.74
Bayer CropScience	BX 1775 GLTP <sup>¶</sup>		0.85	0.51	0.69	0.77	0.71
Bayer CropScience	BX 1737 GLT <sup>¶</sup>		0.89	0.52	0.57	0.84	0.71
CPS Dyna-Gro	DG 3445 B2XF	mid	0.54	0.45	0.61	0.63	0.56
		<b>Mean</b>	<b>0.88</b>	<b>0.70</b>	<b>0.83</b>	<b>0.84</b>	<b>0.81</b>
		<b>LSD (0.1)</b>	<b>0.134</b>	<b>0.174</b>	<b>0.159</b>	<b>0.120</b>	

<sup>¶</sup> Experimental lines not released



**Table 3: Two year (2015-2016) relative yield averages for varieties tested each year**

<b>Seed Company</b>	<b>Variety</b>	<b>Avg. Relative Yield</b>
Monsanto	DP 1538 B2XF	0.91
Dow AgroSciences	PHY 333 WRF	0.90
Dow AgroSciences	PHY 499 WRF	0.89
Dow AgroSciences	PHY 312 WRF	0.89
Bayer CropScience	ST 6182 GLT	0.88
Monsanto	DP 1639 B2XF	0.88
Dow AgroSciences	PHY 444 WRF	0.88
Dow AgroSciences	PHY 495 W3RF	0.86
Bayer CropScience	ST 4848 GLT	0.86
Dow AgroSciences	PHY 487 WRF	0.85
Monsanto	DP 1614 B2XF	0.82
Bayer CropScience	ST 5115 GLT	0.82
Americot/NexGen	NG 3405 B2XF	0.82
Bayer CropScience	ST 4946 GLB2	0.79
Monsanto	DP 1522 B2XF	0.78
Americot/NexGen	NG 3406 B2XF	0.77
Bayer CropScience	ST 4747 GLB2	0.77
	<b>Mean</b>	<b>0.85</b>

**Table 4: Three year (2014-2016) relative yield averages for varieties tested each year**

<b>Seed Company</b>	<b>Variety</b>	<b>Avg. Relative Yield</b>
Dow AgroSciences	PHY 333 WRF	0.92
Dow AgroSciences	PHY 444 WRF	0.90
Dow AgroSciences	PHY 499 WRF	0.90
Dow AgroSciences	PHY 312 WRF	0.89
Dow AgroSciences	PHY 495 W3RF	0.88
Bayer CropScience	ST 6182 GLT	0.87
Bayer CropScience	ST 4946 GLB2	0.84
Dow AgroSciences	PHY 487 WRF	0.83
Bayer CropScience	ST 5115 GLT	0.83
Bayer CropScience	ST 4747 GLB2	0.80
	<b>Mean</b>	<b>0.87</b>

**Table 5: Lint yield and lint percentage of varieties tested during 2016 at the four OVT locations**

Seed Company	Variety	Suffolk		Southampton1		Southampton2		Isle of Wight	
		Lint Yld lb/A	Lint %	Lint Yld lb/A	Lint %	Lint Yld lb/A	Lint %	Lint Yld lb/A	Lint %
Dow AgroSciences	PHY 333 WRF	1269.6	42.6	561.0	43.3	1008.3	43.1	1271.5	44.6
Dow AgroSciences	PHY 312 WRF	1244.3	44.0	562.1	45.0	979.7	41.7	1171.9	44.5
Monsanto	DP 1646 B2XF	1259.0	43.0	558.5	43.7	1020.7	43.9	1094.8	44.6
Bayer CropScience	ST 5020 GLT	1185.5	40.6	503.7	41.5	1054.6	40.6	1208.9	43.1
Monsanto	DP 1538 B2XF	1245.1	44.6	560.1	43.7	1078.3	43.4	996.7	43.0
CPS Dyna-Gro	DG 3526 B2XF	1060.3	43.0	661.2	44.9	976.5	43.2	1073.2	46.3
Monsanto	DP 1639 B2XF	1125.4	44.6	501.4	41.8	1092.7	44.5	1096.0	45.4
Dow AgroSciences	PHY 495 W3RF	1247.6	43.9	527.4	45.0	843.4	42.8	1173.6	44.7
Bayer CropScience	ST 4848 GLT	1203.9	44.0	493.4	44.3	1031.4	42.5	1058.1	44.2
Dow AgroSciences	PHY 499 WRF	1192.3	43.2	529.0	44.0	947.0	43.5	1094.4	44.1
Dow AgroSciences	PHY 444 WRF	1148.6	43.5	425.4	44.4	954.1	43.7	1278.3	44.0
Bayer CropScience	ST 6182 GLT	1090.0	47.3	688.4	45.8	931.8	44.6	846.4	46.9
Americot/NexGen	AMX 1601 B2XF <sup>†</sup>	1142.8	44.0	499.0	41.8	875.9	42.9	1138.5	43.6
Monsanto	DP 1725 B2XF	1267.1	45.8	444.7	42.2	881.5	43.7	1085.3	47.4
Dow AgroSciences	PHY 487 WRF	1206.9	40.0	475.1	43.2	896.1	41.8	1048.4	42.2
Bayer CropScience	ST 4946 GLB2	1151.5	40.3	404.9	41.0	955.5	39.5	1123.6	42.0
Bayer CropScience	ST 5115 GLT	1101.3	41.5	547.1	40.9	786.3	40.6	1099.0	42.5
Bayer CropScience	ST 4747 GLB2	1085.2	41.8	467.2	41.7	979.5	39.8	1023.7	42.8
Americot/NexGen	NG 3405 B2XF	1077.4	41.4	524.9	42.2	830.0	41.6	1062.2	43.0
Monsanto	DP 1614 B2XF	1084.0	44.1	461.2	43.2	862.5	41.0	1130.4	47.1
Americot/NexGen	NG 3522 B2XF	1103.2	42.1	433.5	42.2	882.2	42.1	1135.3	45.0
Bayer CropScience	BX 1776 GLTP <sup>†</sup>	1151.0	42.7	425.0	39.9	919.0	40.6	982.6	44.7
Monsanto	MON 15R513B2XF <sup>†</sup>	1095.6	42.0	463.1	42.0	898.9	40.2	952.6	44.0
Monsanto	MON 16R229B2XF <sup>†</sup>	1136.2	44.4	392.7	41.8	794.1	42.1	1088.1	45.8
Monsanto	DP 1522 B2XF	1072.3	42.9	374.7	42.6	804.5	42.1	1127.5	42.7
CPS Dyna-Gro	DG 3757 B2XF	949.3	44.3	456.9	41.8	948.1	43.3	929.5	44.6
Americot/NexGen	NG 3406 B2XF	1065.3	40.5	490.4	42.2	806.9	41.9	879.8	42.4
Bayer CropScience	BX 1775 GLTP <sup>†</sup>	1084.4	40.6	350.1	41.0	757.9	41.0	980.9	42.8
Bayer CropScience	BX 1737 GLT <sup>†</sup>	1128.0	41.6	360.3	42.0	619.0	40.3	1078.7	41.9
CPS Dyna-Gro	DG 3445 B2XF	682.2	37.9	309.4	38.3	661.5	38.7	808.7	40.6
Monsanto	DP 0912 B2RF	1213.0	41.3	--	--	--	--	--	--
Seed Source Genetics	HQ 210 CT	1107.8	44.5	--	--	--	--	--	--
Dow AgroSciences	PHY 552 WRF	1089.4	42.7	--	--	--	--	--	--
Bayer CropScience	FM 2484 B2F	903.0	42.0	--	--	--	--	--	--
Dow AgroSciences	PHY 725 RF	477.2	37.5	--	--	--	--	--	--
	<b>Mean</b>	1104.1	42.6	481.7	42.6	902.6	42.0	1068.0	44.0
	<b>LSD (0.1)</b>	145.17	1.40	119.43	1.40	174.29	1.21	154.24	1.14

<sup>†</sup> Experimental lines not released

**Table 6: Lint yield and lint percent of varieties from the five 2016 On-farm trial locations**

Variety <sup>†</sup>	Avg. across 5 loc.		Southampton Co.		Dinwiddie Co.		Surry Co.		Isle of Wight Co.1		Isle of Wight Co.2	
	Lint Yield lb/A	Lint %	Lint Yield lb/A	Lint %	Lint Yield lb/A	Lint %	Lint Yield lb/A	Lint %	Lint Yield lb/A	Lint %	Lint Yield lb/A	Lint %
PHY 312 WRF	1096.5	44.0	1011.7	43.7	1306.3	44.0	1006.0	43.7	1226.8	44.4	931.9	44.0
PHY 333 WRF	1071.1	45.1	1011.6	44.8	1155.5	44.4	1000.7	45.2	1156.2	46.0	1031.4	45.1
PHY 444 WRF	1039.6	45.3	1025.2	45.2	1157.6	45.2	919.4	45.6	1171.3	45.2	924.7	45.3
DP 1639 B2XF	1036.7	46.1	989.7	45.6	1298.1	47.5	840.4	45.2	1106.5	46.0	948.6	46.1
PHY 499 WRF	1000.1	44.0	971.7	44.4	1045.3	43.2	935.4	44.1	1107.2	44.4	941.1	44.0
ST 4946 GLB2	981.8	42.2	977.1	42.2	1260.6	42.5	898.6	42.1	955.1	41.8	817.7	42.2
ST 4949 GLT	972.8	46.8	921.2	47.1	999.1	45.2	842.5	48.6	1165.9	46.4	935.2	46.8
DP 1522 B2XF	935.9	42.9	945.1	42.5	1020.8	43.3	792.2	43.3	1000.0	42.5	921.6	42.9
DP 1538 B2XF	933.4	45.5	912.0	45.2	1115.1	45.2	756.6	46.4	895.1	45.2	988.4	45.5
ST 4848 GLT	909.0	45.1	896.9	44.4	990.8	45.6	733.2	45.2	1034.0	45.2	890.3	45.1
NG 3405 B2XF	887.5	42.2	933.2	43.3	994.2	41.4	690.1	42.1	862.3	42.1	957.8	42.2
DP 1614 B2XF	876.1	45.3	899.0	45.6	1083.1	45.6	723.2	44.8	902.2	45.2	772.8	45.3
ST 6182 GLT	862.5	46.5	929.9	47.9	972.6	46.0	663.3	46.0	799.6	46.0	947.3	46.5
<b>Mean</b>	969.5	44.7	955.7	44.8	1107.6	44.5	830.9	44.8	1029.4	44.6	923.8	44.7
<b>LSD (0.1)</b>	--	--	77.3	1.47	116.7	2.03	115.0	2.01	153.2	1.22	--	--

<sup>†</sup>PHY = PhytoGen, Dow AgroSciences; DP = DeltaPine, Monsanto; NG = NexGen, Americot/NexGen; ST = Stoneville, Bayer CropScience

**Table 7: Average lint quality and associated 2016 scheduled discounts for top 10 varieties planted in Virginia across all eight locations**

Variety	Lint Quality <sup>†</sup>					Discounted Amount <sup>††</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
PHY 333 WRF	37	4.6	31.3	83.1	51-1	-26.9	30.6	11.3	82.5	97.5
PHY 499 WRF	37	4.7	31.7	82.9	41-4	-28.8	31.3	10.0	118.1	130.6
ST 4946 GLB2	37	4.8	31.5	82.7	41-3	-28.8	31.9	9.4	183.8	196.3
DP 1538 B2XF	36	4.8	28.7	82.9	41-3	-84.4	1.9	8.1	204.4	130.0
DP 1522 B2XF	36	4.9	29.7	82.7	41-3	-86.4	13.8	10.0	216.9	154.4
NG 3406 B2XF*	36	4.6	28.8	82.5	41-4	3.8	7.5	10.0	145.0	166.3
PHY 495 W3RF*	36	4.7	32.1	83.0	41-3	-57.5	37.5	12.5	178.8	171.3
DP 1639 B2XF	36	4.9	31.4	82.8	41-4	-131.3	33.1	10.0	166.9	78.8
ST 6182 GLT*	37	4.7	30.1	82.9	41-3	0.0	20.0	10.0	200.0	230.0
PHY 444 WRF	38	4.2	32.4	83.5	41-3	7.5	39.4	16.3	233.8	296.9
<b>Mean</b>	37	4.7	31.0	82.9	-	-49.6	26.1	10.8	172.2	159.4

<sup>†</sup> 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.

<sup>††</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

\*Varieties planted only in four locations (OVTs trials).

**Table 8: Lint quality and associated 2016 scheduled discounts for top 10 varieties planted in Virginia at the Tidewater AREC OVT location**

Variety	Lint Quality <sup>¶</sup>					Discounted Amount <sup>¶¶</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
PHY 333 WRF	38	4.7	30.8	83.8	31-1	0	25	15	470	<b>510</b>
PHY 499 WRF	36	4.8	31.7	83.6	21-2	0	40	15	490	<b>545</b>
ST 4946 GLB2	37	4.9	32.4	83.5	21-2	0	40	15	525	<b>580</b>
DP 1538 B2XF	37	5.2	29.1	84.9	21-1	-230	5	25	525	<b>325</b>
DP 1522 B2XF	38	5.1	30.6	84.4	21-2	-230	25	25	535	<b>355</b>
NG 3406 B2XF	37	4.8	30.2	83.8	21-2	0	25	15	525	<b>565</b>
PHY 495 W3RF	37	5.1	34.8	84.7	21-2	-230	45	25	525	<b>365</b>
DP 1639 B2XF	37	5.0	30.9	83.2	21-2	-230	25	15	525	<b>335</b>
ST 6182 GLT	37	4.8	30.3	83.7	21-2	0	25	15	525	<b>565</b>
PHY 444 WRF	38	4.3	31.5	84.5	21-2	0	40	25	535	<b>600</b>
<b>Mean</b>	37	4.9	31.2	84.0	-	-92.0	29.5	19.0	518.0	<b>474.5</b>

<sup>¶</sup> 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.

<sup>¶¶</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

**Table 9: Lint quality and associated 2016 scheduled discounts for top 10 varieties planted in Virginia at the Southampton Co. Everett Farm OVT 1 location**

Variety	Lint Quality <sup>¶</sup>					Discounted Amount <sup>¶¶</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
PHY 333 WRF	35	4.2	29.4	81.3	52-2	15	5	0	-320	-300
PHY 499 WRF	37	4.3	29.4	81.1	51-4	0	5	0	-125	-120
ST 4946 GLB2	37	4.5	30.5	81.3	51-2	0	25	0	-125	-100
DP 1538 B2XF	36	4.4	29.7	81.9	51-3	0	5	0	-130	-125
DP 1522 B2XF	36	4.5	29.7	81.5	51-2	0	5	0	-130	-125
NG 3406 B2XF	35	4.0	27.5	80.6	52-1	15	0	0	-320	-305
PHY 495 W3RF	35	4.2	30.0	81.5	51-3	0	25	0	-150	-125
DP 1639 B2XF	36	4.7	30.5	80.8	51-4	0	25	0	-150	-125
ST 6182 GLT	37	4.5	30.5	81.3	51-2	0	25	0	-125	-100
PHY 444 WRF	38	4.2	31.9	82.6	51-1	15	40	5	-125	-65
<b>Mean</b>	36	4.3	29.9	81.4	-	4.5	16.0	0.5	-170.0	-149.0

<sup>¶</sup> 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.

<sup>¶¶</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

**Table 10: Lint quality and associated 2016 scheduled discounts for top 10 varieties planted in Virginia at the Southampton Co. Drake Farm OVT 2 location**

Variety	Lint Quality <sup>¶</sup>					Discounted Amount <sup>¶¶</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
PHY 333 WRF	35	4.6	29.3	82.1	51-4	0	5	5	-150	-140
PHY 499 WRF	37	4.3	28.6	81.5	51-2	0	0	0	-125	-125
ST 4946 GLB2	37	4.8	29.0	81.9	51-2	0	5	0	-125	-120
DP 1538 B2XF	35	4.7	28.0	81.7	51-4	0	0	0	-150	-150
DP 1522 B2XF	36	4.7	27.9	80.7	51-4	0	0	0	-130	-130
NG 3406 B2XF	35	4.5	27.9	81.1	51-4	0	0	0	-150	-150
PHY 495 W3RF	35	4.5	31.9	81.5	51-4	0	40	0	-150	-110
DP 1639 B2XF	36	4.9	30.0	81.5	51-3	0	25	0	-130	-105
ST 6182 GLT	37	4.8	29.0	81.9	51-2	0	5	0	-125	-120
PHY 444 WRF	38	4.1	30.4	82.1	51-1	15	25	5	-125	-80
<b>Mean</b>	36	4.6	29.2	81.6	-	1.5	10.5	1.0	-136.0	-123.0

<sup>¶</sup> 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.

<sup>¶¶</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

**Table 11: Lint quality and associated 2016 scheduled discounts for top 10 varieties planted in Virginia at the Isle of Wight Co. OVT location**

Variety	Lint Quality <sup>¶</sup>					Discounted Amount <sup>¶¶</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
PHY 333 WRF	37	5.0	33.1	84.8	31-1	-230	45	25	460	300
PHY 499 WRF	38	4.9	32.3	83.9	31-1	0	40	15	470	525
ST 4946 GLB2	37	4.7	30.7	84.5	21-2	0	25	25	525	575
DP 1538 B2XF	36	4.9	27.5	83.9	31-1	0	0	15	440	455
DP 1522 B2XF	37	5.1	30.5	83.2	31-1	-230	25	15	460	270
NG 3406 B2XF	37	4.9	29.4	84.5	21-2	0	5	25	525	555
PHY 495 W3RF	36	4.8	31.6	84.4	21-2	0	40	25	490	555
DP 1639 B2XF	37	5.1	32.2	83.8	31-1	-230	40	15	460	285
ST 6182 GLT	37	4.7	30.7	84.5	21-2	0	25	25	525	575
PHY 444 WRF	38	4.3	32.9	85.2	21-1	0	40	35	535	610
<b>Mean</b>	37	4.8	31.1	84.3	-	-69.0	28.5	22.0	489.0	470.5

<sup>¶</sup> 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.

<sup>¶¶</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.



**Table 12: Lint quality and associated 2016 scheduled discounts for varieties at the Southampton Co. On-farm location**

Variety	Lint Quality <sup>¶</sup>					Discounted Amount <sup>¶¶</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 1522 B2XF	36	5.1	30.1	82.0	41-3	-230	25	5	260	<b>60</b>
DP 1538 B2XF	35	5.1	28.0	81.7	41-3	-230	0	0	170	<b>-60</b>
DP 1614 B2XF	37	5.1	30.3	82.4	51-1	-230	25	5	-125	<b>-325</b>
DP 1639 B2XF	36	5.3	30.5	82.3	51-1	-375	25	5	-130	<b>-475</b>
PHY 333 WRF	37	4.9	31.7	81.8	51-2	0	40	0	-125	<b>-85</b>
PHY 499 WRF	37	5.0	32.9	83.7	41-4	-230	40	15	270	<b>95</b>
PHY 444 WRF	38	4.4	33.7	82.6	41-2	0	45	5	260	<b>310</b>
PHY 312 WRF	36	4.9	31.9	82.4	41-3	0	40	5	260	<b>305</b>
ST 4848 GLT	36	4.9	30.9	82.1	41-2	0	25	5	260	<b>290</b>
ST 6182 GLT	36	5.1	29.7	82.4	41-3	-230	5	5	260	<b>40</b>
ST 4946 GLB2	36	5.2	32.1	82.6	41-2	-230	40	5	260	<b>75</b>
ST 4949 GLT	34	5.0	29.5	80.9	41-3	-230	5	0	45	<b>-180</b>
NG 3405 B2XF	34	4.9	26.1	80.0	41-3	0	0	0	45	<b>45</b>
<b>Mean</b>	36	5.0	30.6	82.1	-	<b>-152.7</b>	24.2	4.2	131.5	<b>7.3</b>

<sup>¶</sup> 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.

<sup>¶¶</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

**Table 13: Lint quality and associated 2016 scheduled discounts for varieties at the Dinwiddie Co. On-farm location**

Variety	Lint Quality <sup>†</sup>					Discounted Amount <sup>††</sup> (points per pound)				
	Staple	Mic	Str	Uni	HVI	Mic	Str	Uni	Staple / Color	TOTAL
	32 <sup>nd</sup>		g/tex	%	Color		g/tex	%		
DP 1522 B2XF	36	4.6	29.6	83.1	41-1	0	5	15	260	<b>280</b>
DP 1538 B2XF	36	4.2	29.5	82.8	41-2	15	5	5	260	<b>285</b>
DP 1614 B2XF	40	4.4	32.0	84.1	41-2	0	40	25	280	<b>345</b>
DP 1639 B2XF	37	4.2	33.1	83.2	41-2	15	45	15	270	<b>345</b>
PHY 333 WRF	39	4.3	33.1	83.9	41-4	0	45	15	230	<b>290</b>
PHY 499 WRF	37	4.3	34.2	82.8	51-1	0	45	5	<b>-125</b>	<b>-75</b>
PHY 444 WRF	40	3.8	34.0	84.0	41-2	15	45	25	280	<b>365</b>
PHY 312 WRF	38	4.1	33.0	83.9	41-3	15	45	15	280	<b>355</b>
ST 4848 GLT	37	4.5	33.3	83.1	41-3	0	45	15	270	<b>330</b>
ST 6182 GLT	37	4.2	31.3	83.8	41-3	15	40	15	270	<b>340</b>
ST 4946 GLB2	37	4.6	32.8	83.1	41-3	0	40	15	270	<b>325</b>
ST 4949 GLT	36	4.3	31.7	82.3	41-4	0	40	5	210	<b>225</b>
NG 3405 B2XF	37	4.2	28.2	82.5	41-3	15	0	5	270	<b>290</b>
<b>Mean</b>	<b>38</b>	<b>4.3</b>	<b>32.0</b>	<b>83.3</b>	<b>-</b>	<b>6.9</b>	<b>33.8</b>	<b>13.5</b>	<b>232.7</b>	<b>286.9</b>

<sup>†</sup> 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.

<sup>††</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

**Table 14: Lint quality and associated 2016 scheduled discounts for varieties at the Surry Co. On-farm location**

Variety	Lint Quality <sup>¶</sup>					Discounted Amount <sup>¶¶</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 1522 B2XF	36	4.9	28.9	82.7	41-1	0	0	5	210	<b>215</b>
DP 1538 B2XF	36	5.0	28.7	82.2	41-3	-230	0	15	260	<b>45</b>
DP 1614 B2XF	37	5.2	30.4	82.5	51-1	-230	25	5	-125	<b>-325</b>
DP 1639 B2XF	37	5.0	32.3	83.8	41-4	-230	40	15	220	<b>45</b>
PHY 333 WRF	38	4.7	31.6	84.2	51-1	0	40	25	-125	<b>-60</b>
PHY 499 WRF	36	4.9	31.9	83.0	51-1	0	40	15	-130	<b>-75</b>
PHY 444 WRF	39	4.3	32.4	83.1	41-4	0	40	15	230	<b>285</b>
PHY 312 WRF	38	4.6	31.6	83.2	41-4	0	40	15	230	<b>285</b>
ST 4848 GLT	37	5.1	31.5	82.7	51-1	-230	40	5	-125	<b>-310</b>
ST 6182 GLT	37	4.9	30.1	83.3	41-3	0	25	15	270	<b>310</b>
ST 4946 GLB2	37	4.9	32.3	83.1	41-3	0	40	15	270	<b>325</b>
ST 4949 GLT	36	5.0	30.6	83.4	41-1	-230	25	15	260	<b>70</b>
NG 3405 B2XF	36	4.7	28.5	82.4	41-1	0	0	5	210	<b>215</b>
<b>Mean</b>	37	4.9	30.8	83.1	-	<b>-88.5</b>	27.3	12.7	127.3	<b>78.8</b>

<sup>¶</sup> 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.

<sup>¶¶</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.

**Table 15: Lint quality and associated 2016 scheduled discounts for varieties at the Isle of Wight Co. 1 On-farm location**

Variety	Lint Quality <sup>¶</sup>					Discounted Amount <sup>¶¶</sup> (points per pound)				
	Staple 32 <sup>nd</sup>	Mic	Str g/tex	Uni %	HVI Color	Mic	Str g/tex	Uni %	Staple / Color	TOTAL
DP 1522 B2XF	37	4.8	30.6	83.8	41-3	0	25	15	270	<b>310</b>
DP 1538 B2XF	36	4.8	28.8	82.7	41-3	0	0	5	260	<b>265</b>
DP 1614 B2XF	38	4.8	31.0	82.5	51-1	0	40	5	-125	<b>-80</b>
DP 1639 B2XF	37	4.7	32.0	83.5	41-3	0	40	15	270	<b>325</b>
PHY 333 WRF	37	4.4	31.7	82.7	41-4	0	40	5	220	<b>265</b>
PHY 499 WRF	37	4.7	32.6	83.7	41-4	0	40	15	220	<b>275</b>
PHY 444 WRF	39	4.0	32.8	83.6	41-3	15	40	15	280	<b>350</b>
PHY 312 WRF	37	4.6	31.0	82.7	51-1	0	40	5	-125	<b>-80</b>
ST 4848 GLT	37	4.6	32.1	84.2	41-4	0	40	25	220	<b>285</b>
ST 6182 GLT	37	4.5	30.7	82.8	41-4	0	25	5	220	<b>250</b>
ST 4946 GLB2	36	4.7	32.3	81.8	51-1	0	40	0	-130	<b>-90</b>
ST 4949 GLT	36	4.7	30.7	83.1	41-2	0	25	15	260	<b>300</b>
NG 3405 B2XF	36	4.3	29.1	81.9	41-3	0	5	0	260	<b>265</b>
<b>Mean</b>	37	4.6	31.2	83.0	-	1.2	30.8	9.6	161.5	<b>203.1</b>

<sup>¶</sup> 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.

<sup>¶¶</sup> Discounted amounts taken from the Cotton Incorporated 2016 CC Loan Schedule of Premiums and Discounts for Upland and ELS Cotton.