

Table 7. Lint Yield, Gin Turnout, and Fiber Quality of Early-Maturing Cotton Varieties Grown in Lee County at St. Charles, SC, in 2017. Early-Maturity Dryland OVT. M. Jones.

| Variety | Lint Yield lb/acre | Gin Turnout % | Fiber Length in. | Fiber Uniformity % | Fiber Strength g/tex | Elongation | Micronaire |
|--------------------------|-----------------------|------------------|---------------------|-----------------------|-------------------------|------------|------------|
| PHY 440W3FE | 1370 | 42.2 | 1.21 | 84.9 | 37.5 | 4.9 | 4.3 |
| PX 3A99W3FE | 1289 | 41.9 | 1.14 | 84.1 | 33.8 | 6.1 | 4.9 |
| PHY 430W3FE ₂ | 1270 | 44.0 | 1.10 | 83.7 | 36.0 | 6.8 | 4.6 |
| PX 3A82W3FE | 1260 | 40.8 | 1.13 | 85.1 | 37.4 | 7.7 | 4.7 |
| PX 5A57W3FE | 1246 | 40.8 | 1.16 | 84.9 | 35.2 | 6.4 | 4.3 |
| PHY 480W3FE | 1221 | 42.1 | 1.13 | 83.2 | 34.7 | 7.4 | 4.6 |
| DG CPS16228NR | 1206 | 42.4 | 1.17 | 84.9 | 35.5 | 7.6 | 4.6 |
| PX 5B76W3FE | 1190 | 41.0 | 1.15 | 84.4 | 35.1 | 5.7 | 4.7 |
| DP 1614B2XF | 1186 | 42.4 | 1.19 | 84.7 | 33.3 | 7.6 | 5.1 |
| ST 5115GLT | 1184 | 39.9 | 1.18 | 84.2 | 35.2 | 6.3 | 4.5 |
| PHY 444WRF | 1170 | 41.3 | 1.23 | 86.0 | 34.1 | 5.7 | 4.1 |
| DP 1522B2XF | 1164 | 42.0 | 1.17 | 84.3 | 33.8 | 8.0 | 5.2 |
| PX 5B73W3FE | 1157 | 41.5 | 1.16 | 84.2 | 34.6 | 6.3 | 4.6 |
| PHY 330W3FE | 1144 | 42.1 | 1.16 | 85.6 | 35.6 | 5.6 | 4.7 |
| PX 2A28W3FE | 1138 | 39.6 | 1.20 | 84.5 | 35.5 | 4.1 | 4.3 |
| PX 3A96W3FE | 1136 | 40.6 | 1.15 | 84.7 | 34.1 | 6.5 | 4.9 |
| ST 5020GLT | 1111 | 40.6 | 1.21 | 85.1 | 35.0 | 6.4 | 4.9 |
| PHY 499WRF | 1110 | 41.7 | 1.16 | 85.2 | 37.0 | 7.1 | 4.9 |
| ST 4949GLT | 1103 | 43.5 | 1.14 | 83.8 | 33.4 | 6.5 | 4.9 |
| NG 3522B2XF | 1102 | 41.9 | 1.11 | 82.3 | 30.4 | 6.3 | 4.8 |
| PHY 340W3FE | 1091 | 43.3 | 1.15 | 84.1 | 34.9 | 6.0 | 4.7 |
| PHY 490W3FE | 1089 | 41.7 | 1.15 | 84.3 | 38.2 | 7.3 | 4.7 |
| NG 3699B2XF | 1078 | 39.8 | 1.21 | 84.2 | 34.7 | 4.7 | 4.8 |
| PHY 430W3FE ₁ | 1068 | 41.5 | 1.11 | 84.3 | 34.3 | 6.4 | 4.7 |
| PHY 450W3FE | 1065 | 40.3 | 1.13 | 83.6 | 39.2 | 6.7 | 4.9 |
| PHY 300W3FE | 1062 | 42.9 | 1.14 | 83.3 | 33.9 | 5.7 | 4.9 |
| PHY 312WRF | 1046 | 41.8 | 1.16 | 85.1 | 34.5 | 6.5 | 4.8 |
| DG 3385B2XF | 1041 | 41.3 | 1.14 | 84.1 | 31.8 | 8.2 | 5.0 |
| ST 5517GLT | 1027 | 39.5 | 1.21 | 83.9 | 36.0 | 5.5 | 4.4 |
| NG 3406B2XF | 928 | 41.1 | 1.13 | 82.6 | 31.4 | 7.9 | 4.8 |
| DP 1725B2XF | 916 | 41.9 | 1.20 | 84.7 | 34.5 | 5.2 | 4.7 |
| ST 4848GLT | 876 | 42.7 | 1.15 | 83.6 | 33.4 | 5.9 | 4.9 |
| LSD (0.05) | 217 | 1.8 | 0.03 | 1.4 | 1.6 | 0.7 | 0.2 |
| C.V. (%) | 14 | 3.1 | 1.97 | 1.2 | 3.2 | 7.6 | 3.1 |
| Trial Mean | 1126 | 41.6 | 1.16 | 84.3 | 34.8 | 6.4 | 4.7 |

Bold numbers are not statistically different at the 0.05 level of probability.

_{1,2} PHY 430W3FE is a 50/50 blend of sister lines tested as PX 4A54W3FE₁ AND PX 4A57W3FE₂ in trial

Location: Pete Player Farm, St. Charles, SC

Soil Type: Norfolk Sandy Loam

GPS Coordinates: lat: 34.098206; long: -80.228366

Planted: May 23, 2017

Harvested: November 21, 2017

Table 8. Lint Yield, Gin Turnout, and Fiber Quality of Late-Maturing Cotton Varieties Grown in Lee County at St. Charles, SC, in 2017. Late-Maturity Dryland OVT. M. Jones.

| Variety | Lint Yield lb/acre | Gin Turnout % | Fiber Length in. | Fiber Uniformity % | Fiber Strength g/tex | Elongation | Micronaire |
|--------------------------|-----------------------|------------------|---------------------|-----------------------|-------------------------|------------|------------|
| PHY 480W3FE | 1379 | 42.3 | 1.14 | 84.7 | 33.0 | 7.9 | 4.6 |
| PX 3A99W3FE | 1364 | 41.5 | 1.14 | 84.0 | 33.0 | 6.3 | 4.8 |
| ST 6182GLT | 1337 | 44.1 | 1.14 | 83.7 | 30.8 | 6.6 | 4.7 |
| PX 5B76W3FE | 1306 | 40.8 | 1.15 | 84.7 | 33.7 | 6.3 | 4.7 |
| PHY 430W3FE ¹ | 1299 | 41.2 | 1.14 | 83.4 | 33.8 | 6.6 | 4.5 |
| PHY 430W3FE ² | 1287 | 43.9 | 1.09 | 83.1 | 34.9 | 7.1 | 4.6 |
| PHY 330W3FE | 1287 | 43.2 | 1.16 | 84.7 | 34.0 | 6.0 | 4.6 |
| PX 5A57W3FE | 1285 | 40.0 | 1.15 | 84.2 | 33.7 | 7.1 | 4.2 |
| MN 16R353B3XF | 1271 | 44.1 | 1.16 | 84.0 | 35.4 | 7.4 | 4.8 |
| NG 5007B2XF | 1254 | 40.6 | 1.14 | 83.0 | 29.9 | 8.1 | 4.6 |
| PX 3A96W3FE | 1252 | 40.9 | 1.14 | 84.7 | 32.6 | 7.1 | 4.8 |
| ST 4949GLT | 1245 | 41.8 | 1.12 | 84.7 | 32.4 | 6.9 | 4.6 |
| PX 5B73W3FE | 1237 | 41.0 | 1.13 | 83.6 | 33.8 | 6.3 | 4.4 |
| PHY 340W3FE | 1222 | 42.2 | 1.13 | 83.9 | 32.5 | 6.9 | 4.8 |
| ST 5020GLT | 1209 | 40.0 | 1.20 | 84.8 | 33.4 | 6.9 | 4.9 |
| PX 3A82W3FE | 1201 | 42.3 | 1.13 | 84.9 | 36.3 | 6.8 | 4.7 |
| PHY 444WRF | 1194 | 41.2 | 1.23 | 85.4 | 32.7 | 5.8 | 4.2 |
| PHY 312WRF | 1183 | 40.5 | 1.15 | 84.9 | 33.7 | 6.4 | 4.7 |
| DP 1646B2XF | 1159 | 41.8 | 1.20 | 83.2 | 30.9 | 7.5 | 4.6 |
| DP 1639B2XF | 1156 | 42.6 | 1.12 | 83.6 | 33.4 | 7.3 | 4.8 |
| CG 9608B3XF | 1151 | 44.3 | 1.13 | 83.7 | 30.7 | 5.7 | 4.6 |
| DP 1840B3XF | 1150 | 40.8 | 1.18 | 83.5 | 32.4 | 7.0 | 4.4 |
| PHY 499WRF | 1145 | 41.2 | 1.13 | 83.2 | 35.1 | 7.9 | 4.9 |
| DP 1851B3XF | 1143 | 41.0 | 1.16 | 84.5 | 35.4 | 8.1 | 4.4 |
| ST 5517GLT | 1130 | 37.4 | 1.18 | 83.3 | 33.9 | 6.1 | 4.3 |
| ST 5115GLT | 1124 | 38.8 | 1.14 | 83.2 | 33.2 | 6.8 | 4.4 |
| DG 3757B2XF | 1118 | 42.1 | 1.13 | 83.4 | 30.4 | 7.7 | 4.8 |
| DP 1538B2XF | 1104 | 41.2 | 1.10 | 82.6 | 31.3 | 7.8 | 4.8 |
| PHY 490W3FE | 1081 | 42.3 | 1.13 | 82.5 | 36.5 | 7.5 | 4.8 |
| PHY 440W3FE | 1079 | 41.7 | 1.17 | 83.8 | 36.9 | 5.1 | 4.4 |
| AMX 1711B2XF | 1073 | 40.9 | 1.20 | 84.5 | 33.2 | 6.9 | 4.5 |
| CP 3885B2XF | 1072 | 40.9 | 1.13 | 84.4 | 31.4 | 8.3 | 4.6 |
| PHY 300W3FE | 1051 | 42.6 | 1.11 | 83.9 | 33.5 | 6.4 | 4.7 |
| NG 4601B2XF | 1049 | 40.8 | 1.17 | 84.5 | 34.7 | 6.4 | 4.8 |
| PHY 450W3FE | 1042 | 40.8 | 1.13 | 83.9 | 37.2 | 7.4 | 5.0 |
| DG 3635B2XF | 1023 | 40.1 | 1.14 | 83.3 | 33.1 | 6.8 | 4.9 |
| DG CPS17330 | 1010 | 43.9 | 1.15 | 83.8 | 34.7 | 6.6 | 4.7 |
| DP 1747NRB2XF | 979 | 42.9 | 1.13 | 83.2 | 34.2 | 6.3 | 5.1 |
| DG 3526B2XF | 979 | 40.4 | 1.13 | 84.0 | 32.5 | 8.8 | 4.8 |
| DP 1553B2XF | 958 | 41.8 | 1.15 | 83.5 | 31.2 | 7.9 | 4.7 |
| PX 2A28W3FE | 862 | 41.4 | 1.15 | 82.5 | 32.8 | 4.7 | 4.6 |
| LSD (0.05) | 218 | 2.1 | 0.04 | 1.5 | 1.6 | 0.8 | 0.2 |
| C.V. (%) | 14 | 3.7 | 2.27 | 1.3 | 3.4 | 8.1 | 3.2 |
| Trial Mean | 1134 | 41.5 | 1.15 | 83.8 | 33.4 | 6.5 | 4.6 |

Bold numbers are not statistically different at the 0.05 level of probability.

^{1,2} PHY 430W3FE is a 50/50 blend of sister lines tested as PX 4A54W3FE¹ AND PX 4A57W3FE² in trial

Location: Pete Player Farm, St. Charles, SC

Soil Type: Norfolk Sandy Loam

GPS Coordinates: lat: 34.098159; long: -80.228097

Planted: May 23, 2017

Harvested: November 21, 2017