

THE EFFECTS OF COTTON FRUITING HABITS ON YIELD AND QUALITY IN GEORGIA

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Abstract

In the state of Georgia, DP555 BG/RR cotton has been planted on 80% of cotton acres since 2003. This cultivar has excellent yield under both irrigated and non-irrigated conditions. Its fruiting habits are also unique: the plants have traditionally produced fewer fruit early in the season and increased fruit later in the season compared to other cultivars. DP555 will not be planted, and an important part of cultivar selection will be determining the fruiting habits of the potential replacement cultivars. We tested DP555 with several new cultivars for growth and fruiting habits under irrigated and non-irrigated production regimes. None of the other cultivars tested had fruiting habits approximating DP555, but several had similar yield characteristics. Some of the highest yielding cultivars included DP 1034 B2RF, ST 5458 B2RF, DP1050B2RF, FM1740 B2RF, and PHY375 WRF.