# EVALUATION OF CHROMOSOME SUBSTITION LINES CROSSED WITH HIGH FIBER STRENGTH LINES

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## Abstract

Three cotton chromosome substitution lines (CS-B16, CS-B22sh, CS-B25) and TM-1 were crossed with eight strong fiber lines. These 12 parents and their $F_1$ hybrids were grown at Mississippi State in two locations with replicated field plots in 2006. Agronomic and fiber traits were measured and analyzed subject to the general linear model and the additive-dominance genetic model. Parents and $F_1$ hybrids were compared regarding these traits. Variance components were estimated and genetic effects were predicted as well. The detailed genetic information that is useful for fiber and yield improvements were reported.