Genetic Variability, Heritability and Genetic Advance Studies for Yield, Yield Contributing Characters and Quality Traits in Cotton (*Gossypium hirsutum* L.)

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ABSTRACT

Forty two hybrids along with their 17 parents and three standard checks were studied to observe genetic variability, heritability and genetic advance for seed cotton yield and its contributing characters. The analysis of variance revealed that the sufficient variability was present in the material for all the characters. The Phenotypic Coefficient of Variation (PCV) was slightly higher than Genotypic Coefficient of Variation (GCV) for all the characters indicating the influence of the environment. The variability studies indicated that high PCV and GCV was observed in case of lint yield and high and moderate in case of number of bolls plant^{-1} and seed cotton yield plant^{-1}. High heritability coupled with high genetic advance as percent of mean was observed for number of bolls plant^{-1}, boll weight (g), seed index (g), lint index (g), lint yield (g) and seed cotton yield plant^{-1} which provides better scope for advancement through direct selection.

Key words : *Genetic advance, Gossypium hirsutum, Heritability, Seed cotton yield, Variability* .