

Genetic Variability and Character Association Studies in Introgressed lines of *Gossypium hirsutum*

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ABSTRACT

Eighty two introgressed lines along with two checks were evaluated for yield and its component traits. Wide range of genotypic coefficient of variation and phenotypic coefficient of variation, high heritability accompanied by high genetic advance were observed for number of bolls per plant, seed cotton yield per plant and number of monopodia revealing the role of additive gene action. The phenotypic and genotypic correlations revealed significant and positive correlation of number of bolls per plant with seed cotton yield. Path analysis further confirmed this relationship. It clearly indicated that boll number is amenable to selection. However care should be taken in boll weight and boll number since they are negatively correlated with each other *vis a vis* boll weight is positively correlated with important fibre characters.

Key words : *Gossypium hirsutum*, Introgression, Variability.