Studies on Genetic Variability, Heritability and Genetic Advance in Upland Cotton(*Gossypium hirsutum* L.)

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ABSTRACT

Sixty genotypes of upland cotton of diverse origin were studied to observe their genetic variability, heritability and genetic advance in yield, yield contributing and fibre quality characters. The analysis of variance revealed that sufficient variability was present in the material studied for all the 16 characters. The phenotypic coefficient of variation (PCV) was slightly higher in magnitude than genotypic coefficient of variation (GCV) for all the characters indicating the influence of environment. Higher heritability coupled with high genetic advance was observed for characters like plant height, number of monopodia plant^{-1}, number of sympodia plant^{-1},boll weight, number of bolls plant^{-1}, seed index, lint index, micronaire, lint yield plant^{-1} and seed cotton yield plant^{-1} indicating the preponderance of additive gene action in making selection effective for these characters.

Key words*: Genetic advance, GCV, heritability, PCV.*