

Variability, Heritability and Genetic Advance in Kenaf (*Hibiscus cannabinus* L.)

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ABSTRACT

An investigation was carried out to assess the variability, heritability and genetic advance for ten quantitative characters *viz.*, days to 50% flowering, plant height, basal stem diameter, bark thickness, number of nodes per plant, inter-nodal length, green plant weight, fibre length, fibre-wood ratio and fibre yield per plant in 28 genotypes (twenty one F₁S and seven parents) of kenaf (*Hibiscus cannabinus* L.). The analysis of variance indicated significant differences among the genotypes for all the characters studied. The results revealed high PCV and GCV for fibre yield per plant. The estimates of heritability and genetic advance as per cent of mean were high for the characters *viz.*, bark thickness, green plant weight and fibre yield per plant indicating that most likely the heritability is due to additive gene action and selection may be effective. High heritability coupled with moderate genetic advance as per cent of mean was observed for number of nodes per plant and fibre length whereas, moderate heritability combined with moderate genetic advance as per cent of mean for plant height and inter-nodal length indicating the role of both additive and non-additive gene actions; Moderate heritability coupled with low genetic advance as per cent of mean was observed for basal stem diameter while moderate heritability coupled with high genetic advance as per cent of mean for fibre-wood ratio whereas, high heritability coupled with low genetic advance as per cent of mean for days to 50% flowering indicating the role of non-additive gene action.

Key words : Genetic advance, Heritability, Kenaf, Variability.