

## Studies on genetic variability and direct selections for important traits in segregating materials of groundnut (*Arachis hypogaea* L.)

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### **ABSTRACT**

Six crosses of  $F_2$  population and nine parental lines were evaluated for variability, heritability and genetic advance during *Kharif*, 2007. Observations on eleven characters recorded. Analysis of variance revealed highly significant differences among the genotypes, parents as well as crosses for all the characters indicating thereby sufficient variability in the material studied. The range of variation was maximum for plant height, shelling out-turn, oil content and pod yield per plant in most of the crosses. High values of GCV, PCV and genetic advance were observed for days to flowering, number of primary branches per plant, plant height, number of mature pods per plant, number of immature pods per plant, kernel yield per plant and pod yield per plant in most of the crosses. All the characters expressed high heritability estimates except shelling out-turn in the cross-2 and cross-6. The expression of high heritability coupled with high genetic advance and high values of GCV and PCV for pod yield per plant for above characters indicating that  $F_2$  generation was mainly under the influence of additive gene action and scope for improvement through simple selection.

**Key words :** Genetic variability, Heritability, Genetic advance, Groundnut

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