

Influence of Dates of Sowing on Genetic Parameters for Yield and its Contributing Characters in Groundnut (*Arachis hypogaea* L.)

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ABSTRACT

Fifty groundnut genotypes were evaluated in three different environments represented by three dates of sowing. Phenotypic co-efficient of variation, genotypic co-efficient of variation, heritability and genetic advance as per cent of mean were computed for yield and yield contributing characters. Comparison of GCV values across environments indicated that for the characters, plant height, kernel yield per plant, pod yield per plant, harvest index, variation was high in the material studied. For these traits, heritability values were moderate to high which was reflected in moderate to high GAM values. For shelling and sound mature kernel percentage, GCV values were moderate with high heritability estimates resulting in moderate to high GAM values. Days to 50 per cent flowering had low GCV but heritability was high in all three environments with moderate genetic gain. For SCMR and SLA, the traits that confer water-use efficiency, GCV values were low with moderate heritability estimates with low genetic gain in the first two environments but in the third environment (August first fortnight sowing), GCV was higher than the first two environments with high heritability and moderate genetic gain from which it can be inferred that the selection for these traits would be more fruitful in this environment. Oil and protein contents seem to be more influenced by non additive genetic effects as both GCV and GAM were low though the heritability was high.

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