

## STUDIES ON GENETIC VARIABILITY PARAMETERS IN MUNGBEAN (*VIGNARADIATA* L.)

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**Abstract:** Mungbean is a very important pulse crop and development of new varieties with desirable traits forms an important breeding objective. Evaluation of germplasm for yield and yield contributing traits is crucial to know the variability and their exploitation in the breeding programmes. In the present study, 48 genotypes were evaluated for different yield and yield characters. Analysis of variance for all the traits was significant revealing availability of sufficient variability for these traits in the studied material. The genotypic coefficients of variation for all the characters studied were lesser than the phenotypic coefficients of variation indicating the presence of interaction between genotypes with environment. Wide genetic variability was observed for the characters viz., pod length, seeds/pod, whereas it was narrow for the characters viz., days to 50% flowering, plant height, clusters/plant, branches/plant, pods/plant, days to maturity and yield/plant. High heritability with high genetic advance as per cent of mean was recorded for plant height, clusters/plant, branches/plant, seeds/pods, pods/plant and yield/plant indicating the preponderance of additive gene action in the inheritance of these traits and offers the scope for further improvement through simple selection procedures. High heritability coupled with low genetic advance as per cent of mean was observed for days to maturity indicating the role of non-additive gene action in the inheritance of this trait and the non-additive component may be exploited through heterosis breeding. The traits, plant height, clusters/plant, branches/plant, pods/plant, seeds/pod and yield/plant indicated the preponderance of additive gene action in their expression and can be exploited using direct simple selection.

**Keywords:** Genetic advance, Heritability, Mung bean, Variability

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