

# **Studies on Genetic Parameters for Morphological and Quality Traits in Rice**

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## **ABSTRACT**

Thirty rice genotypes were evaluated to estimate the genetic variability parameters for 14 morphological and grain quality traits. Analysis of variance revealed the existence of significant differences among the genotypes for all the characters studied. High GCV and high PCV were observed for grain yield per plant and volume expansion ratio indicating the presence of wider variability for these traits. Low to moderate heritability and genetic advance as per cent of mean were manifested by productive tillers per plant, test weight and L/B ratio. High heritability coupled with high genetic advance as per cent of mean was observed for grain yield per plant, water uptake, volume expansion ratio and amylose content revealing the preponderance of additive gene action and direct selection may be effective for improving these traits. High heritability coupled with moderate genetic advance as per cent of mean was observed for plant height, days to 50% flowering, panicle length, spikelet fertility percentage, kernel length and protein content indicating the role of both additive and non-additive gene effects in governing the inheritance of these traits.

**Key words:** *Rice, genetic parameters and quality.*