

# **Genetic Variability, Heritability and Genetic Advance in Rice (*Oryza sativa* L.)**

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## **ABSTRACT**

Twenty nine genotypes were studied for their genotypic, phenotypic and environmental coefficient of variation during *khariif* 2011. Results indicated significant differences among all the characters studied viz., days to 50 % flowering, plant height, no. of ear bearing tillers per plant, panicle length, testweight and grain yield per plant. Phenotypic coefficient of variation (PCV) was higher than the genotypic coefficient of variation (GCV) and environmental coefficient of variation (ECV) for all the traits but smaller differences between GCV and PCV were recorded for all the characters studied, which indicated less influence of environment on these characters. PCV was highest for plant height (15.73 %) followed by grain yield per plant (15.57 %), no.of ear bearing tillers per plant (13.83 %) and test weight (12.32 %). GCV and PCV were lowest for panicle length and days to 50 % flowering. High heritability coupled with high genetic advance was observed for plant height and days to 50 % flowering, indicating the predominance of additive gene action in controlling these characters, simple selection could be effective for improving these characters.

**Key words :** Genetic advance, Heritability, Rice, Variability.