

Genetic Variability Studies for Grain yield and its Component Characters in Rice (*Oryza sativa* L.)

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ABSTRACT

The present investigation was undertaken to study the extent of genetic variability in 45 elite rice (*Oryza sativa* L.) genotypes for twenty one yield and quality characters during *kharif* 2015. The magnitude of difference between PCV and GCV was relatively low for all the traits, indicating less environmental influence. High GCV and PCV were recorded for grain yield plant⁻¹, water uptake, volume expansion ratio and alkali spreading value. High heritability coupled with high genetic advance as percent of mean were recorded for days to 50% flowering, productive tillers plant⁻¹, filled grains panicle⁻¹, total grains panicle⁻¹, test weight, grain yield plant⁻¹, L/B ratio, water uptake, kernel elongation ratio, volume expansion ratio, alkali spreading value and protein percent indicating the preponderance of additive gene action and these characters could be improved through selection.

Key words: *GCV, Genetic Advance, Heritability, PCV and Rice.*