

# VARIABILITY AND GENETIC PARAMETERS FOR GRAIN YIELD IN CMS BASED RICE HYBRID (*ORYZA SATIVA* L.)

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Received-22.01.2015, Revised-17.02.2015

**Abstract :** The present investigation was carried out during *kharif* 2012 and 2013 at Raipur to study the genetic parameters for quantitative and quality characters in eighty three genotypes in rice (*Oryza sativa* L.). Analysis of variance revealed significant differences for almost all the traits under study. The characters, viz. sterile spikelets panicle<sup>-1</sup>, fertile spikelet panicle<sup>-1</sup>, pollen fertility percent, grain yield plant<sup>-1</sup>, spikelet fertility percent, harvest index and biological yield plant<sup>-1</sup> exhibited high genotypic coefficient of variation (GCV) and phenotypic coefficient of variation (PCV). Small differences between GCV and PCV were recorded for all the characters studied which indicated less influence of environment on these characters. sterile spikelet panicle<sup>-1</sup>, fertile spikelet panicle<sup>-1</sup>, pollen fertility percent, grain yield plant<sup>-1</sup>, spikelet fertility percentage, harvest index, biological yield plant, number of spikelet panicle<sup>-1</sup>, 1000 grain weight and productive tillers plant exhibited high heritability coupled with high genetic advance as per cent of mean indicating that simple selection could be effective for improving these characters.

**Keywords :** Genetic advance, GCV, Heritability, Hybrid rice, PCV

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