

# **Genetic Variability Studies for Yield Attributes in Rice (*Oryza sativa* L.) Genotypes under Late Sown Conditions**

**B Mercy Grace, K Madhu Kumar, A Appala Swamy and G Ramesh**

Department of Genetic and Plant Breeding, Agricultural College, Naira 532 185, Andhra Pradesh

## **ABSTRACT**

A field experiment was conducted by using forty rice genotypes to study genetic variability, heritability and genetic advance (GA) for yield and yield associated traits in rice under late sown conditions. The experiment has revealed significant differences among the genotypes for the yield and its components. The phenotypic coefficient of variation (PCV) was higher than genotypic coefficient of variation (GCV) for all ten traits indicating that they all interacted with the environment to some extent. High estimates of PCV and GCV obtained for number of grains per panicle while high PCV and moderate GCV recorded for test weight and grain yield per plant. High heritability was obtained for days to 50% flowering followed by kernel length, plant height, number of grains per panicle, panicle length and days to maturity which indicates high heritable portion of variation. High genetic advance were obtained for number of grains per panicle, grain yield per plant, number of productive tillers per plant and test weight. The estimates of PCV, GCV, heritability and genetic advance as percent of mean were high for number of grains per panicle indicate the existence of high degree of variability and additive gene action in the inheritance of this trait and improvement of these characters is possible through simple selection.

Key words: *Late sown condition, Rice, Variability.*