

# **Assessment of Genetic Diversity for Grain Yield and Quality Traits in Rice (*Oryzasativa*.) Using Principal Component Analysis**

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## **ABSTRACT**

The present experiment was conducted with forty long duration rice genotypes for estimation of genetic diversity by using Principal Component analysis. The first four principal components with eigen values more than one contributed 78.913 per cent towards the total variability. The analysis thus identified the maximum contributing variables *i.e.*, L/B ratio, days to maturity, days to 50% flowering, seed yield per plant, grains per panicle, panicle length, test weight, productive tillers per plant and grain yield per plant. The contribution of the main characters for variance was easily identified by the characters loaded on the PC<sub>1</sub> with high loading values.

Key words: *D<sup>2</sup>, Grain Yield, PCA, Rice.*