

# **Studies on Genetic Variability in Gall midge Resistant Genotypes for Yield and its Components in Rice (*Oryza sativa* L.)**

**U Likhita, K Madhu Kumar, T Haritha and P Uday Babu**

Department of Genetics and Plant Breeding, Agricultural college, Bapatla, Andhra Pradesh.

## **ABSTRACT**

Fifty gall midge resistant genotypes in rice were evaluated during *Kharif*, 2022 for genetic diversity for yield and its component characters under late sown conditions. The analysis of variance has revealed significant differences among the genotypes for all the nine characters studied. The moderate per cent of GCV and PCV was recorded for days to 50% flowering, total tillers/ m<sup>2</sup>, EBT/ m<sup>2</sup>, filled grains per panicle, total grains per panicle, test weight and grain yield indicating the existence of moderate amount of variability for effective selection towards improvement of these traits. The heritability and genetic advance as per cent of mean is high for days to fifty per cent flowering, total tillers/ m<sup>2</sup>, EBT/ m<sup>2</sup>, filled grains per panicle, test weight, total grains per panicle and grain yield reflecting the existence of additive gene action in the expression of these traits. Therefore, simple direct selection may be effective for the improvement of these traits based on the phenotypic values.

**Key words:** *Rice, Variability, Gall midge and Resistant genotypes*