



RESEARCH ARTICLE

DOI: 10.15740/HAS/IJFCI/7.1/57-60

Variability, heritability and genetic advance studies in F_2 population of rice (*Oryza sativa* L.)

M. SALA AND P. SHANTHI

ABSTRACT : An investigation was carried out in F_2 population of eight crosses with 160 single plants to estimate the variability, heritability, genetic advance and genetic advance as percentage. The results showed that PCV values in general was higher than GCV for various characters studied. The high PCV and GCV values was obtained for single plant yield followed by number of productive tillers per plant and low PCV and GCV was observed for plant height and panicle length. The small difference observed between GCV and PCV indicate the presence of high genetic variability for the traits which may facilitate selection. The traits thousand grain weight and number of fertile spikelet per panicle and single plant yield had high heritability along with high genetic advance as per cent of mean indicate that these characters attributable to additive gene effects which are fixable revealing that improvement in these characters would be possible through direct selection.

KEY WORDS : Rice, Genotypic co-efficient of variation, Phenotypic co-efficient of variation, Heritability, Genetic advance as a per cent of mean

HOW TO CITE THIS ARTICLE : Sala, M. and Shanthi, P. (2016). Variability, heritability and genetic advance studies in F_2 population of rice (*Oryza sativa* L.). *Internat. J. Forestry & Crop Improv.*, 7 (1) : 57-60, DOI: 10.15740/HAS/IJFCI/7.1/57-60.

ARTICLE CHRONICAL : Received : 06.02.2016; Revised : 14.04.2016; Accepted : 15.05.2016

MEMBERS OF RESEARCH FORUM

Address of the Correspondence : M. SALA, Tamil Nadu Rice Research Institute (TNAU) ADUTHURAI (T.N.) INDIA
Email: swtsala1@gmail.com

Address of the Coopted Authors : P. SHANTHI, Tamil Nadu Rice Research Institute (TNAU) ADUTHURAI (T.N.) INDIA