

Studies on genetic variability, heritability and genetic advance in segregating generations of rice (*Oryza sativa* L.)

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SUMMARY

Genotypic and phenotypic coefficient of variation, heritability and genetic advance as per cent of mean were estimated in the F₂ and F₃ segregating populations of six crosses for six yield and yield component characters. The F₂ populations of the cross P₁ × P₃ showed high PCV, GCV coupled with high heritability estimates and high genetic advance as percentage of mean for number of filled grains per panicle, 100 grain weight, biomass per plant and grain yield per plant. Similarly, the F₃ population of the cross P₂ × P₁ exhibited high genetic parameters for number of productive tillers per plant and grain yield per plant. These populations could well be subjected to simple pure line selection to improve grain yield per plant.

Key words : Genotypic and phenotypic coefficient of variation, Heritability, Genetic advance, Rice.