

Genetic divergence studies in rice

DEBORA GANTA AND D.P.B. JYOTHULA*

Department of Genetics and Plant Breeding, Allahabad Agricultural Institute- Deemed University, ALLAHABAD
(U.P.) INDIA

ABSTRACT

Genetic diversity among twenty five genotypes of rice of different geographic origin was studied by considering twelve quantitative characters. Analysis of variability revealed the presence of considerable amount of variability among the genotypes for all the twelve quantitative characters. The multivariate analysis following Mahalanobis D^2 statistics, revealed considerable genetic diversity in the material and led to their grouping into six clusters. The three characters, *viz.*, plant height, biological yield and flag leaf width appeared as the major source of divergence. On the basis of genetic distance, cluster means and per se performance a crossing programme involving diverse genotypes like RNR 196, SKL-61-14-15-10, BGL-11694 is suggested to obtain superior segregants for yield improvement.

Key words : Variability, Heritability, Genetic divergence, Clusters, Rice

* Author for correspondence Present Address : Agricultural Research Station, Ragolu SRIKAKULAM (A.P.) INDIA