



Genetic Diversity within Commercialized Paddy (*Oryza Sativa* L.) Cultivars

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Abstract: A set of thirty rice high yielding genotypes were evaluated to study the genetic diversity for yield and quality contributing traits. These genotypes were grouped into six clusters, 13 genotypes were grouped in cluster II but cluster I comprised of only two genotypes. Maximum inter cluster D^2 value was observed between cluster I and V (915) followed by cluster III and V (862). The greater distance between two clusters can be used in rice hybridization programme for improving grain yield. Maximum intra-cluster distance was observed in cluster VI indicating greater genetic divergence between the genotypes belonging to this cluster. Days to 50% flowering, 1000-grain weight, decorticated grain length, decorticated grain length-breadth ratio, elongation ratio, alkali spreading value contributed 92.05% of total divergence.

Keywords: Cluster analysis, Crop diversity, Genetic variability, Rice
