

Divergence studies in Castor (*Ricinus communis* L.)

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Castor is one of the ancient non-edible oilseed crops of the world, with India enjoying a monopoly status in export of castor oil. The diversity of parents is of prime importance, since the crosses made between the genetically divergent parents are likely to throw desirable recombinants in the progenies. In this context the present study assumes importance. An experiment was carried out with 52 genotypes at Agricultural College Farm, Bapatla during kharif 2008-09. Hierarchical cluster analysis revealed that among the eight clusters, cluster III and VII were the largest containing 12 genotypes each followed by cluster VI with 9 genotypes. In principal component analysis first seven principal components with eigen value more than one contributed 90.83 per cent towards the total variability with PC₁ contributing maximum towards variability (41.61%). The mutual relationships among the nine clusters using Mahalanobis D² statistic revealed highest intra cluster distance in cluster IX and inter cluster distance between clusters VIII and IX. So, the genotypes PPL-174, PPL-175, PPL-177 identified by above multivariate analysis can be exploited for getting good recombinants in future breeding programmes.

Biography

K. Udaya Bhanu completed my M.Sc (Agriculture) from Agricultural College, Bapatla of Acharya N.G. Ranga Agricultural University (ANGRAU). Now I am doing my Ph.D. in Genetics and Plant Breeding in the same University.

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