

# MOLECULAR CHARACTERIZATION OF CHRYSANTHEMUM (*CHRYSANTHEMUM MORIFOLIUM* RAMAT) GERMPLASM USING RAPD MARKERS

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**Abstract:** Genetic variation among 24 chrysanthemum cultivars was examined by RAPD markers. A total of 79 fragments was produced with 10 RAPD primers and out of which 64 (81.01%) were found polymorphic and 15 bands (18.99%) monomorphic. The number of polymorphic fragments varied from 4.0 (OPF13) to 15 (OPF06) with an average of 7.9 bands per primer. The PIC was varied from 0.10 to 0.66 with an average .50, MI varied from 0.36 to 6.99 with an average 2.92 and RP value was noted in the ranged from 5.17 to 14.50 with an average 9.40. UPGMA clustering revealed two major group (Group1 and Group 2) and these further divided into seven clusters. Among the 24 genotypes, Poncho, Terri, Rangoli, Sweta, Ravikiran and Nanco are divergent and may be useful for breeding programme. Results suggested that RAPDs are highly useful for assessing the genetic diversity analysis among the chrysanthemum germplasm and parental selection studies in chrysanthemum.

**Keywords:** Chrysanthemum, molecular characterization, RAPD markers, genetic diversity

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