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Research Article

Genetic diversity studies for various quantitative traits in cowpea (*Vigna unguiculata* L.)

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SUMMARY

Fifty indigenous genotypes of cowpea were evaluated to assess genetic diversity for seed yield. The D^2 value ranged between 3.27 to 282.23 indicating that presence of substantial amount of genetic diversity. All 50 genotypes were grouped in to XIV clusters in which cluster I had maximum genotypes followed by cluster II and cluster III to XIV were monogenotypic in nature. The maximum inter cluster distance was observed between cluster-IV and cluster-XIV (D = 16.80) and maximum intra cluster distance was observed for cluster-II (D=7.34). The variance of cluster means revealed that plant height, 100 seed weight, protein per cent, days to 50 per cent flowering were the main characteristics contributing to the divergence. On the basis of inter-cluster distances, cluster means and *per se* performance the genotypes V-262, CAZC-04-1, JLCP-32, JLCP-37 were found to be superior which can be used in hybridization programme.

Key Words : Genetic diversity, Quantitative traits, Cowpea

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