Principal Component and Cluster analysis in Chickpea (Cicer arietinum L.)

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ABSTRACT

Seventy genotypes of chickpea were evaluated to study genetic divergence by using principal component and cluster analysis. These genotypes were grouped into 9 clusters. Principal components with eigen values more than the one contributed 89.34 per cent of the cumulative variance. Higher inter cluster distance was observed between cluster IV and IX followed by cluster IV and VI. In hierarchical cluster analysis the clustering pattern of genotypes was to be independent of their eco-geographical origin.

Key words: Chickpea, Cluster Analysis, Genetic Divergence, Principal Component Analysis.