GENETIC DIVERGENCE ANALYSIS IN CHICKPEA (CICER ARIETINUM L.)

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Abstract: Genetic divergence analysis is a powerful tool in quantifying the degree of divergence between biological populations and to assess the relative contribution of different components to the total divergence. The present investigation aimed at ascertaining the nature and magnitude of genetic diversity among a set of chickpea genotypes. The genetic divergence were estimated in 30 elite genotypes for characters by using Mahalanobis D^2 statistic. The genotypes were grouped into four clusters. Cluster IV had maximum intra cluster distance while inter cluster distance was highest between clusters II and IV. Cluster means indicated that none of the clusters was superior for all characters studied. Therefore hybridization between genotypes belonging to different clusters is suggested for development of superior genotypes.

Keywords: D² static, Genetic divergence, Chickpea

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