

Genetic divergence in soybean [*Glycine max* (L.) Merrill]

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The genetic distance for 40 genotypes of soybean collected from different soybean growing areas of India and abroad was estimated using D² statistics. The results showed adequate genetic diversity for all the traits with D² values ranging from 27.14 to 361.76. The results revealed that 40 genotypes were grouped into 12 clusters with substantial divergence between them. Cluster I was very large comprising 20 genotypes followed by cluster II and IV with five genotypes and cluster VI with two genotypes, while clusters III, V and VII to XII were solitary clusters. The maximum inter-cluster distance was obtained between cluster IV and VI (D = 19.02) followed by those between cluster IV and XI (D = 16.29) which may serve as potential parents for hybridization. The genetic divergence had little to do with the geographic factor as noticed by the random distribution of genotypes into various clusters. Number of pods/plant, plant height and seed yield/plant were the major characters contributing to the genetic divergence.

Key words : Genetic divergence, Cluster analysis, D² analysis, *Glycine max*

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