

Genetic variability in Indian and exotic brinjal genotypes for morpho-biochemical characters

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ABSTRACT: Genetic variability is the pre-requisite for improvement of any crop. Thirty one diverse Indian and exotic collections of brinjal were evaluated for eleven important morphological and nine biochemical traits to study the genetic variability. Highly significant differences were observed for all the characters suggesting ample scope of improvement in brinjal. High genotypic coefficient of variation (GCV) and phenotypic coefficient of variation (PCV) were recorded for fruit length, fruit girth, fruit weight, number of fruits per plant and yield/plant, total sugar, ascorbic acid, chlorophyll a, chlorophyll b, total chlorophyll, total anthocyanin content and total antioxidant capacity. High heritability and high genetic advance were reported for plant height, fruit length, fruit girth, fruit weight, number of fruits per plant and yield per plant and for all the biochemical characters under study. Therefore, selection will be effective for these characters due to additive gene effect.

Key Words : *Solanum melongena* L., morpho-biochemical characters, genetic advance, heritability.