

Variability in Brinjal (*Solanum melongena* L.): A review

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Abstract

Brinjal (*Solanum melongena* L.) is a commercial vegetable as well as a main crop in the world, particularly in the tropics also in subtropics. According to De Candolle, brinjal is the native of India in ancient times. In the 15th century in Europe eggplant was first recorded. Among people it remains popular in entire social strata, therefore it was called as vegetable of masses. Sound knowledge of genetic variability, heritability & genetic advance, correlation, path coefficient and genetic diversity of different quantitative as well as qualitative characters, as well as effects regarding yield, is necessary to achieve highest production and productivity. Consequently, the information underneath gives a sound breeding plan for the enhancement of brinjal.

Keywords: Brinjal, Correlation, Variability, Genetic diversity and Path coefficient

Introduction:

Genetic variability prevailing in breeding material provide benefits for any crop improvement programme (Meena and Bahadur, 2013). For recognition of considerable genotypes, evaluation of germplasm is the basic tool. Genetic variability remains essential in case of any crop enhancement programme. The plant genetic makeup along with the environment will control the phenotypic expression of the plant character. Correlation coefficient analysis evaluates the mutual relationship among 2 plant traits also set up yield components and thereby selection have been done for yield improvement. Path co-efficient analysis estimates the direct as well as an indirect effect of various components therefore providing an understanding of the direct & indirect contribution of each trait towards yield. For a hybridization programme selection of parents is a good scope from divergence analysis. The assessment of diversity and establishing relationships between cultivated species plays a vital role in genetic divergence. Therefore, the major concern for any breeder is the genetic variability concerning fruit yield and its attributes.

Genetic variability:

Genetic variability is the basis for rational plant breeding programme. The variability that exists within the population is generally measured by variables like phenotypic coefficient of variation (PCV) as