

RESEARCH PAPER

## Genetic divergence studies in exotic collections of tomato (Solanum lycopersicum L.)

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Abstract: Genetic divergence analysis following Mahalanobis  $D^2$  statistics revealed considerable genetic diversity among 59 genotypes of tomato for all the eighteen quantitative characters which was pertaining to the growth, earliness, yield and quality. Fifty nine genotypes were grouped into 7 distinct clusters depending upon the similarities of their  $D^2$  values following Tocher's method. Appreciable diversity within and between 7 clusters was observed. The characters fruit weight, number of fruits per plant and plant height were the potent factors in differentiating the germplasm of tomato under study. The use of diverse genotypes from the clusters with high intercluster distance (cluster VI and VII, V and VII and V and VI) in hybridization is expected to result in high heterosis and throw desirable transgressive segregants.

**Key Words:** Genetic divergence, Exotic, Tomato

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