RESEARCH **P**APER

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Genetic variability, heritability and scope of genetic improvement for yield components in tomato (Lycopersicon esculentum Mill.)

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Genetic variability, heritability and genetic advance were studied among 20 agro-morphological traits of 31 genotypes of tomato (*Lycopersicon esculentum* Mill.) during *Rabi*, 2007-2008. Highest heritability estimate was recorded for average fruit weight (g), pericarp thickness (mm), days to 50 per cent flowering, number of fruits per plant, total fruit yield per plant, total soluble solids (%), indicating that these characters were highly heritable and governed by additive gene effects. High heritability coupled with high genetic advance was observed for number of seeds per fruit, average fruit weight (g), total number of fruits per plant, plant height, fruit set (%) indicating that most likely the heritability is due to additive gene effects. Thus, selection may likely to further improvement in these traits for varietal performance.

Key words : Tomato, Genetic variability, heritability, Genetic advance

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