

Genetics of yield and its components in eggplant (*Solanum melongena* L.)

Abstract

Inheritance study for yield and its components were conducted in five selected parents of brinjal namely MTE 1, MTE 2, Terung Bujur, Terung Telunjuk and NTH080077. Parents, F1 and F2 progenies were evaluated under field condition at MARDI, Serdang. Data on vegetative and yield components were recorded for parents F1 and F2 populations. Genetics study for inheritance were evaluated, and it showed that days to flower, fruit number per plant and fruit weight were observed as additive gene effect. Whereas, plant height and yield per plant were dominance gene effect. High heritability and high genetic advance were observed for fruit number per plant, fruit weight and yield per plant. Low and moderate phenotypic and coefficient of variations were observed for all traits. Moderate phenotypic and coefficient of variations were expressed by fruit number per plant, fruit weight and yield per plant. The selection of genotypes with high heritability coupled with genetic advance for these traits indicates the potential for crop improvement through selection.