

***MODE OF INHERITANCE OF EARLINESS IN TOMATO (LYCOPERSICON ESCULENTUM MIL L.)***

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***ABSTRACT:***

Two tomato genotypes, i.e., the line S65-R2 and the cultivar Super Strain B were used as parents in studying the inheritance of earliness. Populations studied were the parents, F1, F2, Bcp1 and Bcp2 of the cross "S65-R2 × Super Strain B". A Randomized Complete Block Design was used. Data obtained indicated that the number of days to first ripe fruit is controlled by single pair of genes with dominance to the short period to maturity and presence of additive gene effects. Early yield as fruit number is controlled by one pair of major genes with over-dominance of the large number of fruits. Furthermore, the expression of heterosis requires the presence of many minor genes. Early yield as fruit weight is controlled by several number of genes with over-dominance for high early yield. The superiority of the F1 population encourage the development of hybrid cultivars for early production.

***Key words:*** Tomato, inheritance, early and total yield, additive, dominance.