Transfer of tomato leaf curl virus (ToLCV) resistance from Solanum pimpinellifolium to Solanum lycopersicum L.

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ABSTRACT : The transfer of tomato leaf curl virus (ToLCV) gene was studied in the progenies derived from the interspecific crosses between ToLCV resistant *Solanum pimpinellifolium* to *Solanum lycopersicum* L., related two susceptible cultivar DVRT-2 and PBC and one resistant wild line EC-520074. The P_1 , P_2 , F_1 , F_2 , BC_1 , and BC_2 progenies of the two crosses were natural and artificial inoculation with local strains of ToLCV by means of parents. The P_1 , P_2 , F_1 , F_2 , BC_1 , and BC_2 related two resistant parent EC-520074 based on two epistatic gene effect one is the wild parent and other from the cultivated, resulting from the ratio of 13:3 segregation in F_2 and 1:1 in BC_1 , respectively.

Key Words: ToLCV, Natural Screening and Artificial Screening.