Effect of host genotypes and cultural practices for the management of bacterial wilt in brinjal (Solanum melongena L)

Abstract:

Bacterial wilt caused by Ralstonia solanacearum was the major disease of brinjal in winter under 'Tilla' (hillock) land condition of Tripura during the year 2003 to 2005. The disease affected all 10 tested brinjal varieties. However, amongst them, 'Singnath' was the most resistant nearly immune with 0.93% of wilt. The varieties like 'BB-40', 'BB-64' and 'Green Round' were the other three resistant genotypes, while, 'Jhum Begun' and 'Pongal Green' were highly susceptible. Soil disinfection with lime one month before transplantation and the use of Pseudomonas fluorescens as bio-control agent were effective to minimize the bacterial wilt incidence in field. However, in both the cases considerable numbers of plants 38.0% and 47.2% were wilted while studied with the highly susceptible variety, 'Pongal Green', which suggesting the need of host resistance in adopting any measure for the management of bacterial wilt in field.

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