

Detection And Management of Tomato Leaf Curl Virus Disease And Its Whitefly Vector Through Plant Promoting Management Approaches for Inducing Severity And Leaf Curl

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Abstract

Tomato yellow leaf curl is a destructive viral disease of tomato caused by Tomato yellow leaf curl virus which is seriously hampered the cultivation and production of tomato in susceptible cultivars caused more than 90%. Several measures have been practices to manage tomato yellow leaf curl using methods which can delay the development of the disease or reduce the disease severity. Among the various inducers of resistance, plant promoting (PGPR) rhizobacteria use for attract attention because of their advantages over other inducers, which include broad-spectrum antimicrobial activity, high levels of colonization on plant tissues, and growth-promoting capacity. Other study also showed that salicylic acid is a natural plant hormone involved in natural plant defense against diseases which have been practiced to manage tomato leaf curl using menthol the efficacy of chemical inducers such as salicylic acid, and radiation-modified for inducing tomato leaf curl resistance was evaluated under screen house conditions. This research aim to study on „Detection and management of tomato leaf curl virus disease and its whitefly vector through plant promoting management approaches for inducing severity and leaf curl“. Objective of this study is determined the effective of induced virus resistance through plant growth promoting and biological control agent for inducing disease severity of tomato leaf curl virus disease. The experiment will be laid out in (RCBD) with four replications for four treatments and with 10 plants per treatment The experimental treatments will be T0: Control T1: Trichoderma spp., T2: Salicylic acid, T3: Carrageenan and T4: Plant growth promoting rhizobacteria.