

The role of *Phytophthora cactorum* in decline of hydroponically- grown strawberry and evaluation of relative resistance of strawberry cultivars to it

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Abstract

Phytophthora crown- and root- rot is one of the important soil-borne diseases of strawberry grown in hydroponic culture. Plant roots affected by root and crown rot show yellowish and decline symptoms and the plant perishes and dies gradually. To identify the factor responsible for strawberry crown rot, some samples were taken from infected plants. The samples were washed with tap water for 1-2 hr, blotted dry and plated on CMA. *Phytophthora* fungus was separated from infected tissue. Based on morphological characteristics and temperature requirement, the pathogen was identified as *Phytophthora cactorum*. Comparison of crown and root colonization and percent of dead seedlings showed that Selva, Aliso and Gavita cultivars had the most and the least resistance, respectively, but Kameroseh showed immune response to *Phytophthora cactorum*.

Keywords: Greenhouse diseases, Crown and root rot, Colonization.

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