

Studies on Host Range of *Phytophthora capsici* and

Its Length of Survival in Soil.

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Abstract

Phytophthora blight of solanaceous plants caused by *Phytophthora capsici* is one of the most destructive diseases in Taiwan. It mainly occurred on sweet pepper, hot pepper, tomato and eggplant in Nantow, Yuanlin, Changhwa, Tainan and Pingtung areas during the spring and summer rainy seasons. Thirty-eight isolates of *P. capsici* were isolated from 15 counties and all isolates belong to A mating type. *Solanum nigrum* is the first to be found as a host plant of *P. capsici*. The viable *p. capsici* can be detected 5, 7 and 1 month after the natural field soil inoculated with hyphae, zoosporangia and zoospore, respectively. In addition, the organism remained detectable after diseased plant buried in natural field soil for 6 months.

Key words: Phytophthora blight, Solanaceous, Host

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