BIOLOGICAL CONTROL OF Phytophthora citrophthora AND P. nicotianae var. Parasitica On Citros BY Trichoderma koningii AND T. harzianum.

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Phytophthora citrophthora and P. nicotianae var. parasitica are considered to be the most serious soil borne disease affecting citros in Brazil. Biological control of Phytophthora in the orchard is a management option that may ofter potential. Trichoderma spp. are well documented as effective biological control agents, including some pythiaceous fungi. Two isolates of Trichoderma harzianum (Th. 13 and Th. 9) and one isolate of T. koningii (Tk.3), Isolated from Sclerotinia sclerotiorum sclerotia, were evaluated against different isolates of Phytophthora in vitro and in a greenhouse bioassay. Isolates Th. 13 and Th.9 parasited both Phytophthora species. Isolate Tk.3 completly inhibited the mycelial growth of Phytophthora. Isolate Tk. 3 produces a toxic metabolite that inhibit the growth of Phytophthora, Isolate Th. 9 consistently was superior to all other isolates in reducing the root disease. Citros seedlings survived an average of 90% whereas those in the control survived only 30-50%.