

ESTUDOS SOBRE O CONTROLE BIOLÓGICO DA MURCHA VASCULAR DA BERINGELA CAUSADA POR Verticillium dahliae EM CONDIÇÕES DE CAMPO

STUDIES ON BIOLOGICAL CONTROL OF VASCULAR WILT OF EGGPLANT CAUSED BY Verticillium dahliae IN FIELD CONDITIONS

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The present study reports the antagonistic potential of Trichoderma species against V. dahliae in field conditions; survival of these species in natural and sterilized soils, and the effect of Trichoderma spp. on eggplant seedling emergence and growth. Under controlled conditions, I. koningii, isolates TW6 and CNP_{311a}; I. viride, isolates T15P and TAL-1 and I. harzianum, isolates CNP₁₇ and TC11 were efficient in reducing V. dahliae inoculum. For fungus development and metabolites production, 28 °C was the best temperature. pH levels tested showed no apparent effect on isolate growth, although metabolite production had been enhanced at pH 4.5. Eggplant seedling emergence was enhanced by Trichoderma in natural soil, and inhibited at increasing spore concentration. I. koningii (TW6) increased plant height and dry weight. Isolates T15P, TAL-1, CNP_{311a} and TW6 survived in natural soil for 210 days. I. harzianum, CNP17 was efficient in reducing the pathogen inoculum in field conditions, showing a control of 95%. These results imply that biocontrol of V. dahliae can be effective under natural conditions.

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