MOLECULAR IDENTIFICATION OF TRICHODERMA SPP. STRAINS, IN VITRO GROWTH RATE AND ANTAGONISM AGAINST PLANT PATHOGEN FUNGI.

ABSTRACT

Six *Trichoderma* spp. native strains were identified to specie and studied to determine their growth rate and antagonism against plant pathogen fungi. The strains were cultivated on Potato Dextrose Agar to determine their morphological characteristics and growth rate. Molecular analysis was carried out to identify their species. The antagonistic activity was tested by the dual cultures confrontation method. Although morphological characteristics of strains were similar to *T. harzianum* and *T. viride*, the molecular analysis showed that strains TC74, TC74M, T341, T359 and T479, were *T. asperellum* and T397 was *T. longibrachiatum*. *Trichoderma* strains mean growth rate at 25 ºC ranged from 12 to 17 mmd-1. Inhibition of the *B. cinerea* growth ranged from 60% to 75% and mycelium overgrown from 25% to 100%. Inhibition of *R. solani* growth ranged from 34% to 52% and overgrown from 15% to 100%. Antagonistic activity of *T. asperellum* TC74, T341 and T359 was similar to reference strains T22 and Th. The same three strains inhibited the *M. phaseolina* growth from 44% to 64%, *R. solani* from 51% to 59%, P*. omnivora* 28% to 37% and *Fusarium* sp. 5% to 14%.

http://www.sociedadmexicanadefitopatologia.org/archives/rmf_28_2_art_2.pdf

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