**A-109**

# STUDY OF TRICHODERMA STRAINS FOR BIOLOGICAL CONTROL OF AVOCADO ROOT DISEASES CAUSED BY *PHYTOPHTHORA CINNAMOMI* AND *ROSELLINIA NECATRIX*

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*Phytophthora cinnamomi* and *Rosellinia necatrix* are two filamentous fungi that produce avocado root rot diseases. The virulence of certain races has caused important economic losses. In order to control this situation, several physical, chemical and biological methods of control have been started in the last few years. One of the promising strategies to improve protection of the avocado crop is Biological Control.

In our laboratory, in collaboration with other recognized research groups and with participation of Campiña Verde Ecosol, 4 strains of *Trichoderma* (AVOTRICH) have been selected. In this genus, different agents of biological control have been described, considering the antagonism *in vitro* over isolates of *P. cinnamomi* and *R. necatrix* from avocado orchards in Málaga and Granada. Later, the possible compatibility among these pathogens and *T. harzianum* CECT 2413, habitually used as model strain for its production of proteins with antifungal activity, has been studied. Because of the great complexity of the interactions among the different strains of *Trichoderma* and the isolates of both pathogens, the production of proteins, the general enzymatic activities and isozymes with possible activity in the antagonism, were studied. In this work the effects of different filtrates from *Trichoderma* cultures and different purified proteins, with litic activity on different cellular walls of phytopathogenic fungi, on the growth and development of *P. cinnamomi* and *R. necatrix* are shown.