

MICROPROPAGATION AND *IN VITRO* RESISTANCE TESTS AGAINST *Phytophthora cinnamomi* OF MEXICAN-RACE AVOCADO GENOTYPES

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From the germplasm bank of Mexican-race avocado (*Persea americana* Mill. var. *drymifolia*) in INIFAP Uruapan (Michoacán, Mexico), several materials (genotypes) grown by biotechnological means have been selected, 6 of them have high potential resistance to the oomycete *Phytophthora cinnamomi*. These materials are required to be characterized and evaluated to determine their resistance levels to the infection and propagate them asexually. For this reason, an evaluation for the resistance of these avocado materials against *P. cinnamomi*, using *in vitro* bioassays, was proposed. To evaluate these materials, *in vitro* cultures were established as from axillary and apical buds, following aseptic protocols, shoot regeneration and rooting protocols previously reported. In order to determine the resistance, *in vitro* plantlets were submitted to an oomycete attack with the application of mycelia segments with chlamidospores in the radical system. The number of buds and roots in each avocado genotype was optimized by modifying the doses of benzyladenine and indolebutyric acid, obtaining an average of 5 shoots per explant and up to 3 roots per bud. From the 6 genotypes tested, only accessions JSP755 and JSP3 showed resistance to *in vitro* infection by *P. cinnamomi*. These materials did not show any defoliation symptoms or proliferation of mycelia in radical vascular tissue.