

## SELECTION OF TOLERANT AVOCADO ROOTSTOCKS TO WHITE ROOT ROT CAUSED BY *ROSELLINIA NECATRIX* A-199

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White root rot caused by *Rosellinia necatrix* is one of the most important diseases that affect avocado orchards in Spain. Diseases caused by soil fungi are difficult to control and, therefore, its control has to be considered under different approaches. Nevertheless, considering that the infested soils of avocado orchards are the main source of inoculum and that the tree expresses symptoms when its radical system is totally invaded, the measures of control must be basically preventive and, in this way, the availability of rootstocks tolerant to *R. necatrix* is specially interesting to improve the avocado crop in Spain. With this goal, a selection program of tolerant material to *R. necatrix*, has been initiated, in which the multiplication of the material is carried out *in vitro*.

In this study, artificial inoculations with *R. necatrix* have been carried out, using different avocado sources; i) seeds from local trees acclimated to this area as well as seeds from other origins, ii) rootstocks tolerant to *P. cinnamomi*, selected by the University of California (USA) and by Hans Merensky Holdings PTY. LTD (South Africa) and, iii) vegetatively multiplied plants from selected healthy trees of infested orchards (escape trees).

Currently 51 clones of juvenile material which have survived the first inoculation with *R. necatrix* have been selected, from which 5 clones have later been evaluated, through a second inoculation. The results of these second inoculations have confirmed the tolerance detected in the first one in several clones, which have been selected for the following evaluation in an artificially infested plot. On the other hand, the inoculations carried out with 55 clones tolerant to *P. cinnamomi*, have shown that this material is very susceptible to *R. necatrix*. Finally, 16 escape trees from avocado orchards have been selected, from which 8 are being multiplied for later evaluation.