

SELECTION AND EVALUATION OF WEST INDIAN AVOCADO ROOTSTOCKS TOLERANT-RESISTANT TO ROT ROOT CAUSED BY *Phytophthora cinnamomi* Rands

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The main focus on rootstocks selection in avocado research is to look for resistance to the disease caused by *Phytophthora cinnamomi* Rands. It is well known that the West Indian race is the most tolerant-resistant to the pathogen. The Canary Islands have an important population of West Indian race trees dating back to the 15th century when trade and migrations movements commenced between the Canaries and Latin America.

Hence, the *Instituto Canario de Investigaciones Agrarias* has developed a *P. cinnamomi* resistance selection program with local West Indian trees. The trials have been performed in two orchards naturally infested with *P. cinnamomi* for more than 30 years.

A first trial evaluates rootstocks seedlings for tolerant-resistance to *P. cinnamomi*. They were previously selected by different procedures: nutrient solution tank inoculated with the pathogen and natural infested soil in pots and in field. In the second trial the best material, selected from the first trial, was clonated and reevaluated in natural infested soil, choosing trees that showed a good recovery from the disease. It has been evaluated 11 West Indian rootstocks that were compared with the Duke 7 and Thomas rootstocks, known for their tolerance-resistance to *P. cinnamomi*. After 8 years of reevaluation, the rootstocks Canarias 1, Canarias 2 and Canarias 3 show 100% of survival, and 89% was observed for Canarias 4 against 50-60% of survival of Mexican rootstocks Duke 7 and Thomas.