

EFFECTS OF THE S-MIC-O-BAC ON THE CONTROL OF ROOT ROT (*Phytophthora cinnamomi* Rands) IN AVOCADO TREES (*Persea americana* Mill. CV HASS) IN MICHOACÁN, MEXICO.

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The avocado root rot caused by *Phytophthora cinnamomi* Rands is one of the main disease in avocado trees. The objective of this work was: to determine the biological effectiveness of S-Mic-or-bac (*Trichoderma reesi*, *Azospyrillum spp*, *Bacillus subtilis*, *Pseudomonas florencens*, *Saccharomyces spp*, *Streptomyces spp*.) in the *Phytophthora cinnamomi* control in avocado orchards. The investigation work was made in Araparícuaro, Michoacán. A completely-randomized experimental design was used with 6 replications. The experimental unit was one tree. Evaluated treatments were: 1. S-Mic-or-bac 30 litres/tree. 2. S-Mic-o-bac 40 litres/tree. 3. S-Mic-o-bac 60 litres/tree. 4. S-Mic-o-bac 50 litres/tree + pollarding of the tree + 100 kg bovine manure. 5. Control (pollarding of trees). 6. Producing control (Ridomil 4E 2 ml l⁻¹ of water). Treatment applications were performed every three months, and a total of 5 applications were made for each treatment. The evaluated variables were: a) Certification of trees infected by *Phytophthora cinnamomi*. b) Roots growth dynamics in infected trees. c) Infection level in avocado roots. d) Fungi and bacteria populations in trees rhizosphere. Based on Tukey test at p=0.01, treatments 4., 2., 3. and 1. are statistically equal, with recovery level of tree of 100%,100%, 100%, 75% respectively. The worst treatments were those performed on 5. (control) and 6 (producing control).. The recovery rate on those treatments was 0% and 58%, respectively.