

## **TITLE: RUBBER TREE NEMATODES IN THE SAINT PATRICIAN VALLEY**

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### **ABSTRACT**

Among the phytosanitary problems, occurring in *Hevea brasiliensis*, the *Meloidogyne exigua* Goeldi can be highlighted, known as the nematode of the rubber tree. This work was intended to quantify and identify nematodes in a production area in the Saint Patrician Valley. The clones studied were Rrim 600, RRP 255, GT-1 aged 16 years. For extraction of the soil nematodes, we used the floating-sedimentation-sieving method, combined with centrifugation. Specimens obtained were killed in condition of a Maria Bath at 55 °C, for five minutes and then placed in Golden 2x fixed solution (3% formaldehyde) for subsequent quantification and identification. The identification and quantification were conducted in the Nematology Laboratory of the University of Brasília. The population estimate was performed by counting on Peters blades using light microscope. For the identification of the species, the temporary and/or permanent blades were based on morphological characteristics with the use of taxonomic keys. In the soil samples of the three studied clones were found *Pratylenchus spp.* In the clone PR255 we found other parasite nematodes of the genus *Criconemoides sp.* and *Paratrichodorus sp.* and juvenile of *Meloidogyne sp.* In the roots of the clone RRP 255 we found males of *Pratylenchus*. Larger populations were found in the clone Rrim 600 (831.7 specimens), followed by the clone RRP R255 (45.1) and smaller populations in the GT1 clone (four). The lesser population of *Pratylenchus* was observed in the GT1 clone both in the soil and in the roots, this might suggest some kind of resistance that needs to be clarified in the future. In general *Pratylenchus spp.* was the most found genus in the clones studied (RRP 255, GT 1 and Rrim 600) both in the soil and the roots. In the Clone RRP 255 were also found the genera *Criconemoides*, *Paratrichodorus* and *Meloidogyne*.

**Keywords:** *Hevea brasiliensis*, Study, Nematology.