Host Status of Pitaya Genotypes Fruit to Meloidogyne enterolobii and M. incognita

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Abstract : The Pitahayas are cactus native from America and abundant in arid regions. The cultivation is based mainly on the following species: Hylocereus undatus, H. polyrhizus, H. setaceus and H. megalanthus, being H. undatus the most cultivated in Brazil. The pitahaya cultivation is recent in Brazil and is concentrated in São Paulo. Meloidogyne enterolobii is of unknown origin being distributed in several countries. This nematode has recently been detected in Brazil causing damage in several crops. Similarly, M. incognita is a widely distributed pathogen in Brazil. The objective of this study is to evaluate the following accesses of pitahaya to M. enterolobii: CPAC- Py H. hundatus 01, 02, 03, 04, 05, 06, 07 and 08; CPAC - Py H. costaricense 8A; CPAC - Py Selenicereus setaceus 17 and CPAC - Py S. megalantus 22. And the following accesses to M. incognita: CPAC- Py H. hundatus 05; CPAC - Py H. costaricense 8A; CPAC - Py S. setaceus 17 and CPAC - Py S. megalantus 22. According to the results, CPAC - Py H. hundatus 01, 02, 03, 04 and 07 were considered resistant. While CPAC - Py 05 and 08 was susceptible. CPAC-Py 06 also was considered susceptible, because there was the reaction of susceptibility in one of the trials. Given this wide diversity in H. hundatus and being this species the most cultivated in Brazil it is suggested to work more with this material in Embrapa Cerrados. CPAC - Py H. costaricense 8A behaved as susceptible in one of the trials. CPAC - Py S. setaceus 17 and CPAC - Py S. megalantus 22 were considered highly susceptible. The susceptibility of S. megalantus is widely described in the literature. In relation to M. incognita, there were differences between the results in both experiments, but all behaved as susceptible in at least one of the tests.

Keywords : pitaya, meloidogyne, fruit, resistance

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