

## 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: *Hylcocereus 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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