**RAÇAS DE POPULAÇÕES DE Meloidogyne enterolobii DE DIFERENTES CULTURAS NO BRASIL: DIVERSIDADE GENÉTICA e TESTE DE HOSPEDEIROS DIFERENCIAIS.** Races of *Meloidogyne enterolobii* populations from different crops in Brazil: genetic diversity and differential hosts test.

Souza C.F.B [1,2]; Cruz A.L.P. [2]; Cares J.E. [1]; Castagnone-Sereno P. [3]; Carneiro R.M.D.G [2]. [1]UnB, Brasília, DF. [2]EMBRAPA CENARGEN, Brasília, DF. [3]INRAE, França. Email: anaportocruz@gmail.com.

Apoio: CNPq e EMBRAPA.

The NORTH CAROLINA DIFFERENTIAL HOSTS TEST (NCDHT) exhibited distinct pathogenic profiles in five populations of Meloidogyne enterolobii, supporting a subclassification of this species into two physiological races: race 1 (positive reaction on tomato, tobacco, watermelon, and pepper but not on peanut and cotton) and race 2 (positive in the same crops and cotton but not on peanut). Only the cotton populations belong to race 2, the populations from other crops belong to race1. As the cultivars proposed by NCDHT are obsolete, we assessed the efficacy of current Brazilian cultivars. The cultivars proposed are tomato 'Santa Clara', pepper 'Magali R', watermelon 'Crimson sweet', peanut 'IAC Tatu', tobacco 'NC4' (Rk gene) and cotton 'FM966'. This study also investigated the genetic diversity of M. enterolobii races from Brazil. Genetic variability was assessed using 44 RAPD and 7 AFLP primers. The concatenated neighbor-joining analysis clustered two guava (race 1) and two cotton (race 2) populations with 95% and 100% bootstrap support, respectively. The two pepper populations (race 1) clustered with other populations of race 1. The sweet potato (race 1) population was the most divergent (36% of polymorphism). It clustered separately, but was still related to other race 1 populations in the phylogenetic tree. This study emphasizes the importance of understanding intraspecific variability of M. enterolobii in managing the impact of this nematode through genetic resistance and crop rotation strategies.