176 EPIDEMICS OF *Meloidogyne brasilensis* ON PROCESSING TOMATO HYBRIDS CARRYING THE *Mi* (ROOT-KNOT NEMATODE RESISTANCE) GENE IN CENTRAL BRAZIL / Epidemia de *Meloidogyne brasilensis* em híbridos de tomateiro industrial contendo o gene *Mi* de resistência aos nematóides das galhas no Brasil Central.

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Root samples were obtained from two root-knot resistant hybrids, which were cultivated under center-pivot irrigation in Silvânia, GO. These *Mi* gene-carrying hybrids had slow development and malformed roots due to the high number of *Meloidogyne* sp. galls. This nematode population virulent to the *Mi*-gene was analyzed under light microscopy and was found to have an elongated to ovoid perineal pattern with a flattened to very high, squarish dorsal arch, which was distinct from the predominant tomato-infecting *Meloidogyne* species. The morphological characteristics of this population were in agreement with that reported to *M. brasilensis* (Charchar , Eisenback, 2002). *M. brasilensis* is a new species that was initially found causing root-rot, wilting and numerous galls in *Pisum sativum* cv. Mikado in Brasília-DF and in tomato Rossol (a cultivar with the *Mi* gene) in Londrina-PR. This is the first report of this species infecting plants outside these two type localities. The massive use of tomato hybrids with the *Mi* gene could be a selection factor favoring this pathogen under growing conditions in Brazil. Germplasm screening searching for sources of resistance to this nematode is now underway.