

RUBBER TREE MORTALITY AS A FUNCTION OF *Meloidogyne exigua* POPULATION LEVEL / MORTALIDADE DE SERINGUEIRA EM FUNÇÃO DO NÍVEL POPULACIONAL DE *Meloidogyne exigua*. <u>GONTIJO, L.N.¹</u>; COELHO, L.²; MIRANDA, E.L³. ¹ Universidade Federal de Uberlândia, ICIAG, CEP 38400-902, CP: 593, Doutoranda, Agrônoma. ² UFU, ICIAG, CEP 38400-902, CP: 593, Eng. Florestal, professor. ³ Universidade Federal de Uberlândia, ICIAG, CEP 38400-902, CP: 593, Agrônomo.

The wide distribution and dissemination of *Meloidogyne exigua* in rubber tree plantations, together with its high reproductive capacity and aggressiveness, make this nematode a limiting factor for the development of this crop. This study evaluated the population density and the spatial distribution of *M. exigua* in a property in Triângulo Mineiro - Minas Gerais. The study was done in an area planted in January 2008, with RRIM600 clone, where 7.2 hectares were sampled. Population density was evaluated, nematode and plant mortality distribution were determined by the Run test, basal area calculated and maps drawn to represent the variations of soil infestation by *M. exigua* and mortality of rubber trees. The spatial distribution of the nematode population in the soil and roots showed the presence of three foci in elliptical form, with a concentration of nematodes above 5800 individuals per 150 cm³ of soil and 50 g of roots. The incidence of dead trees varied from 0 to 70% with the formation of two foci of high mortality. The highest population density of M. exigua in the studied area was concentrated in elliptic foci, coinciding with the largest number of dead plants in the direction of planting lines. The spatial analysis confirmed that the distribution of the nematodes was clustered and its concentration affected growth and survival of the rubber trees.

Key-words: Hevea brasiliensis; Root-knot nematode; Geo-populational distribution