NEMATODES OF PUBLIC HEALTH CONCERN IN SYNANTHROPIC TERRESTRIAL MOLLUSKS IN BRASILIA, FEDERAL DISTRICT, BRAZIL

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Terrestrial gastropods (slugs and snails) are important components of Brazilian biodiversity due to their richness of species. However, some species are considered agricultural pests or carriers of nematodes of interest to Public Health, such as *Angiostrongylus cantonensis*, etiological agent of the zoonosis eosinophilic meningitis (EoM). After the report of a suspected case of EoM in a child in Ceilândia, Brasília, an epidemiological study was carried out involving the survey of transmitting terrestrial mollusks in the patient's home, as well as in 03 neighbourhoods with previous reports of mollusk infestation. Four mollusk collections were carried out during the dry and rainy periods (2021 and 2022), performing 38 collecting sites. Nematode larvae recovered by the technique of artificial digestion of mollusks. Obtained larvae were identified based on the analysis of mitochondrial cytochrome *c* oxidase I (MT-CO1). We collected 806 mollusks from nine species of seven families: Achatinidae (Achatininae and Subulininae), Agriolimacidae, Ariophantidae, Bradybaenidae, Bulimulidae, Limacidae, and Veronicellidae. Part of the collected mollusks (n=527) was parasitologically analyzed, and the others (n=279) were fixed for morphological identification and deposit in the Mollusk Collection of the Oswaldo Cruz Institute. A total of 134 specimens (25%) were naturally infected by nematodes: *A. cantonensis* (at 03 sites), *Aelurostrongylus abstrusus* (05), and *Cruzia tentaculata* (08). The African snail was the most infected species (53,7%), including the neighbourhood where the child with suspected EoM resides. The results also indicated 07 new reports of mollusk species for Brasília. They reinforce the importance of surveying the mollusks to better understand the epidemiology of transmission of parasitic diseases such as EoM, which is essential for directing more effective prevention and control measures, aiming at promoting the health of the population.

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