

Morphological and morphometric characterization and hygienic-sanitary importance of helminths parasites of *Lopholatilus villarii* Ribeiro, 1915, commercialized in the state of Rio de Janeiro, Brazil.

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The parasitism in fish has been recorded along the Brazilian coast, and the presence of nematodes of the families Anisakidae and Raphidascarididae, may lead to rejection by the consumer, because of the disgusting aspect that these parasites confer on the fish and some species can cause serious diseases due to the accidental ingestion of parasitized fish. The tile fish, *Lopholatilus villarii*, occurs from Brazil to Argentina and there is a meat commercially very appreciated. The aim of this study was to identify taxonomically, by optical and electronic scanning microscopy, larvae of anisakid and raphidascaridid nematodes in *L. villarii* purchased in the fish markets from Niterói municipality, State of Rio de Janeiro, Brazil, calculate their parasitary indices and present sites of infection. The fish were transported in an isothermal box with ice to the Laboratory of Inspection and Fish Technology of the Veterinary Medicine School of Fluminense Federal University, to proceed with the necropsy. The internal organs were transferred to Petri dishes containing physiological solution with 0.65% NaCl. The nematodes larvae found dead were fixed in A.F.A (70% alcohol - formaldehyde - acetic acid) and the live larvae were fixed in hot AFA at 60 °C, to die distended, preserved in a solution of 70 °GL ethanol plus 5% glycerin and clarified with Amman's lactophenol. Measurements were obtained in millimeters by bright field microscopy Olympus BX 41. Some specimens were prepared for scanning electron microscopy (SEM) according to the usual techniques for helminthology. Vouchers specimens were preserved in 70°GL ethanol and deposited in the Helminthological Collection of the Oswaldo Cruz Institute (CHIOC), FIOCRUZ, Rio de Janeiro, Brazil. In the present study, 28 (90.3%) fish were parasitized with anisakid and raphidascaridid nematodes larvae identified as: *Anisakis* sp., *Terranova* sp., *Pseudoterranova* sp. and *Hysterothylacium deardorffoverstreetorum* (L₃ and one L₄), with prevalences of 3.2%, 22.6%, 6.4% and 87.1%, intensity* and mean intensity of 2*, 2, 1.5, 7.7 and abundance** and mean abundance of 0.06**, 0.45, 0.09 e 6.68, respectively. The helminths were found parasitizing, mainly, serosas of intestine, stomach and liver and one larvae of *H. deardorffoverstreetorum* was also parasitizing the abdominal musculature of one fish. The specimens collected in the present study, presented similar morphological and morphometric features and similar parasitary indices to those of nematodes specimens from other teleosts in the State of Rio de Janeiro coast. This is the first report of anisakid and raphidascaridid nematodes in *L. villarii*. The presence of these parasites, although in serosas, should be emphasized, since these nematodes have been reported as zoonotic agents around the world and the repugnant aspect, leads to the reduction of the commercial value or rejection of the fish by the consumer.

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