

**Digenetic trematodes *Lecithochirium* sp. (Hemiuridae) and *Aponurus* sp. (Lecithasteridae) in *Paralichthys patagonicus* Jordan, 1889 collected from the litoral of Rio de Janeiro state, Brazil.**

Michelle Cristie G. Fonseca<sup>1</sup>; Delir C. Gomes<sup>1</sup>; Nilza N. Felizardo<sup>2</sup>; Sérgio C. São Clemente<sup>2</sup> & Marcelo Knoff<sup>1</sup>

<sup>1</sup>Laboratório de Helmintos Parasitos de Vertebrados - IOC, FIOCRUZ, Rio de Janeiro, RJ, Brasil.

<sup>2</sup>Laboratório de Inspeção e Tecnologia do Pescado - UFF, Rio de Janeiro, RJ, Brasil.

Digenetic trematodes that belonging to Hemiuridae and Lecithasteridae families when adults occur as fish parasite of digestive system. Some species can parasite flounders, depreciating their commercial value. Flounders, *Paralichthys patagonicus* Jordan, 1889, have been recorded occurring in the Atlantic ocean, from Rio de Janeiro to Argentina and in the south Pacific ocean, in Chile. They are fish of recognized economic value due your meat is well appreciated. The aims of this study was identify the digenetic trematodes parasites of *P. patagonicus*, parasitary indices and sites of infection. For this study were acquired 36 *P. patagonicus* specimens in small markets selling only fish caught offshore of Cabo Frio, Niteroi, Rio de Janeiro in Rio de Janeiro State, Brazil. Fish were carried in isothermal containers with ice to the Laboratório de Helmintos Parasitos de Vertebrados, Instituto Oswaldo Cruz (IOC), Fundação Oswaldo Cruz (FIOCRUZ), Rio de Janeiro - RJ, Brazil, in order to be identified and measured. After, the hosts were submitted for necropsy, and filleted. Digenetic trematodes collected from digestive system, were processed according to the usual techniques in Helminthology to proceed with the identifications and observed by bright-field microscopy (Olympus BX-41). Voucher specimens were preserved in ethanol 70° GL and will be deposited in the Coleção Helmintológica do Instituto Oswaldo Cruz (CHIOC), FIOCRUZ, Rio de Janeiro, RJ, Brazil. In the present study, a total of 24 (66,66%) flounders were parasitized, and of these, were collected 391 digenetic trematodes, that were identified as belonging to *Lecithochirium* Lühe, 1901 (Hemiuridae) and *Aponurus* Looss, 1907 (Lecithasteridae) genera. Of a total of 36 studied hosts, 19 were parasitized by 270 specimens of *Lecithochirium* sp., with prevalence = 52.8%, mean intensity = 14.2, mean abundance = 7.5, range of infection = 1-62, sites of infection = stomach and intestine; and 12 by 121 specimens of *Aponurus* sp., with prevalence = 33.3%, mean intensity = 10.1, mean abundance = 3.3, range of infection = 1-20 and sites of infection = stomach and intestine. Single infections occurred in 18 (50%) specimens, being, 13 (36.11%) with *Lecithochirium* sp. and five (13,88%) with *Aponurus* sp. Co-infections with both species were observed in six flounders (16,66%). Some *Lecithochirium* and *Aponurus* species have been recorded in marine teleostean fish in South America, including Brazil. In the coast of Argentina, there is a record of the species *Lecithochirium microstomum* Chandler, 1935 parasitizing another kind of flounders *X. rasile*; and *Aponurus laguncula* Loos, 1907 parasitizing *P. patagonicus*. Both species presented lower parasitic indices of prevalence and mean abundance. And they presented as sites of infection, only the stomach. This is the first record of specimens belonging to *Lecithochirium* and *Aponurus* genera parasitizing *P. patagonicus*.

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