DIVERSITY OF TREMATODA (DIGENEA: DIDYMOZOIDAE) PARASITIZING *Euthynnus alletteratus* (SCOMBRIDAE: THUNNINI) FROM THE COAST OF RIO DE JANEIRO, BRAZIL

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Abstract

As studies on the ichthyological fauna of the Brazilian coast increase, a great diversity of parasites is being revealed. Fish play a fundamental role in the ecosystem, in human nutrition and in the economy. However, vulnerability to parasitism can result in economic losses, as well as putting human health at risk. Migratory fish, such *Euthynnus allettaratus* (Rafinesque, 1810) are epipelagic, with a very varied diet, and are considered opportunistic predators, feeding on hosts that will be act as intermediate and paratenic of different helminths, and are therefore indirectly responsible for the dispersal of parasites in different locations, a fact that increases parasitism rates. Trematodes belonging to the family Didymozoidae Monticelli, 1888 have a unique morphology, a poorly studied life cycle and are among the main parasites of Scombridae. They are usually found encapsulated in pairs in the tissue of marine teleosts, rarely in freshwater fish. At the present time, 14 species from 11 different genera of Didymozoidae have been recorded in *E. alletteratus* around the world. Therefore, the aim of this work is to contribute to the knowledge of the diversity of these parasites of *E. alletteratus* on the coast of Rio de Janeiro. The hosts were obtained from markets selling fresh fish in Rio de Janeiro, packed in thermal boxes containing ice and taken to the Laboratory of Helminth Parasites of Fish, Rio de Janeiro/Fiocruz. The parasites found were processed and identified according to the appropriate methodology of the group. In this study, 32 specimens of *E. alletteratus* were studied, 27 of which were parasitized by 10 different species of Didymozoidae, a fact that is noteworthy due to the great diversity of parasites belong this family, in a single species of scombrid. Furthermore, it was observed that parasitism levels decreased depending on the length of the fish. This work contributes to increasing knowledge about the diversity of helminth parasites of *E. alletteratus* in the Western South Atlantic.

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