

***Gundlachia ticaga* (Mollusca: Planorbidae) as an intermediate host of *Posthodiplostomum* sp. (Trematoda: Diplostomidae) in Brazil**

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The species of the genus *Posthodiplostomum* Dubois 1936 are parasites of piscivorous birds with worldwide distribution. In Brazil, 5 species were described in the avian definitive hosts, and metacercariae were reported in some species of fish. Despite these reports in vertebrate hosts, the mollusc intermediate hosts remain unknown. In the present study, during a malacological survey carried out at a waterbody located at Lagoa do Nado Park, Belo Horizonte, Minas Gerais, Brazil, specimens of the freshwater limpet *Gundlachia ticaga* (Marcus & Marcus, 1962) were found infected with larval trematodes. The cercariae were morphologically characterized as a longifurcate cercariae with pigmented eyespots and post-acetabular penetration glands. Larvae were used in experimental infection of laboratory reared guppies (*Poecilia reticulata*) and metacercariae with thin-walled cyst ("Neascus" type) were recovered in the abdominal cavity after 4 weeks. Similar metacercariae were found in naturally infected *P. reticulata* that accidentally fell into the net during sampling of molluscs. Samples of the cercariae and metacercariae obtained were fixed in hot formalin for morphological and morphometric studies under a light microscope. Moreover, subsamples of larval stages were fixed in 95% ethanol for molecular analyzes. The complete ITS rDNA region (~1100bp) was amplified and sequences obtained were compared with data available in GenBank. The morphological and molecular analyses allow the identification of *Posthodiplostomum* sp. The molecular sequences of the cercariae found in ancyliid and metacercariae recovered from guppies are identical, and differ 5.9-7.2% from North American and European species of *Posthodiplostomum* with sequences available in GenBank. This is the first report of molluscs naturally infected with *Posthodiplostomum* in Brazil. The absence of reference sequences for the Neotropical species of these diplostomids preclude the specific identification of the parasites. Aiming to advance in this task, new experimental and molecular studies are in progress.

Key words: ancyliids, cercariae, diplostomids, molecular markers, trematodes.