

# INTEGRATIVE TAXONOMY OF A NEW SPECIES OF THERODAMAS (ERGASILIDAE) INFECTING THE AMAZONIAN FRESHWATER FISH LEPORINUS FASCIATUS (ANOSTOMIDAE)

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## RESUMO

Crustaceans of the subclass Copepoda are an important component of the invertebrate aquatic fauna. They occur in all aquatic environments and include some representatives that are free-living organisms and others that have a parasitic lifestyle. The genus *Therodamas* comprises marine and freshwater copepods whose females are parasites of fish in their adult phase, with only seven species described so far. During a field survey of fish parasites from the Jari River, a large tributary of the Amazon River system, in Brazil, we found a new species of the genus *Therodamas* infecting *Leporinus fasciatus*. *Therodamas longicollum* n. sp. is the second strictly freshwater species known. Phylogenetic analysis showed that the new species is grouped in the family Ergasilidae, and divergence estimates showed that *T. longicollum* n. sp. diverged from its ancestor at around 66.34 Ma, in the late Upper Cretaceous. *Therodamas longicollum* n. sp. differs from its congeneric in that it does not have lobes and/or expansion of the anterior neck region. Besides describing a new *Therodamas* species, thereby increasing the diversity of the genus to eight species, this study points out the existence of a lineage of these copepods that has adapted to the freshwater environment of the Amazon. This study also corroborates the genus *Therodamas* as part of the family Ergasilidae.

**PALAVRAS-CHAVE:** Copepoda, Fish parasite, Characiformes, Phylogeny

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