

A new species of *Tripartiella* (Ciliophora: Trichodinidae) from *Aequidens tetramerus* (Perciformes: Cichlidae) in north Brazil

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Abstract

A new species of *Tripartiella* is described from the gills of the wild saddle cichlid *Aequidens tetramerus* in north Brazil. Wet smears of skin and gills of examined fish were air-dried at room temperature and impregnated with Klein's dry silver method for examination of the adhesive disc's structures and denticles. Total prevalence of parasitism was 65%. This ciliate is characterized as a small-sized trichodinid, body diameter $37.03 \pm 4.9 \mu\text{m}$, adhesive disc $30.50 \pm 2.71 \mu\text{m}$, denticulate ring $13.28 \pm 0.8 \mu\text{m}$ and 24 ± 2.0 denticles. Taxonomic and morphometric data for the new species are discussed.

Keywords: fish, protozoan, parasite, trichodinid, morphology.

Uma nova espécie de *Tripartiella* (Ciliophora: Trichodinidae) em *Aequidens tetramerus* no norte do Brasil

Resumo

Um nova espécie de *Tripartiella* encontrada nas brânquias de *Aequidens tetramerus* da região Norte do Brasil é descrita. Esfregaços de pele e brânquias de peixes examinados foram secos à temperatura ambiente e impregnados pelo método de Klein para observação das estruturas do disco adesivo e denticulos. A prevalência do parasitismo foi de 65%. Este ciliado é caracterizado como pequeno trichodinídeo, com corpo medindo $37,03 \pm 4,9 \mu\text{m}$ de diâmetro, disco adesivo com $30,50 \pm 2,71 \mu\text{m}$, anel denticulado com $13,28 \pm 0,8 \mu\text{m}$ e $24 \pm 2,0$ denticulos. Dados taxonômicos e morfométricos para a nova espécie são discutidos.

Palavras-chave: peixe, protozoário, parasito, trichodinídeo, morfologia.

1. Introduction

Trichodinids (Trichodinidae Claus, 1874) are a widely distributed group of ciliated ectoparasites of mollusks, fishes and amphibians (Mittra et al., 2013). Representatives of the genus *Tripartiella* Lom 1959, however, are only found on the gills of marine and freshwater fish (Tang et al., 2013). Up to now, there is only one *Tripartiella* species reported in Brazil, which is *Tripartiella pseudoplatystomae* Pinto, Garcia, Figueiredo, Rodrigues and Martins 2009, parasite of the pintado *Pseudoplatystoma corruscans* in the state of Mato Grosso do Sul, Central-Western Brazil. However, considering the wide variety of fish species in Brazil and the great abundance of fish trichodinids, it

is reasonable to accept that much more species are yet to be reported.

The saddle cichlid *Aequidens tetramerus* (Heckel 1840) (Cichlidae) is endemic to South America and is commonly used as ornamental fish, sport fishing and also as food for the Amazon riverine populations (Tavares-Dias et al., 2014). In course of a parasitological survey of the protozoan parasites of this cichlid in north Brazil, a new *Tripartiella* species was found.

This study characterizes morphologically *Tripartiella tetramerii* n.sp. parasite of *A. tetramerus* from north Brazil. Taxonomic and morphometric data for the new species are discussed.