First report of *Artystone trysibia* (Isopoda: Cymothoidae) in *Caquetaia spectabilis* (Cichliformes: Cichlidae)

Primeiro relato de *Artystone trysibia* (Isopoda: Cymothoidae) em *Caquetaia spectabilis* (Cichliformes: Cichlidae)

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Abstract

The present study provides the first record of an isopod parasite (*Artystone trysibia*) on *Caquetaia spectabilis*, a cichlid from the eastern Amazon collected in the State of Amapá, northern Brazil. In May 2018, specimens of *C. spectabilis* were collected in the lower Jari River, and 33.3% were parasitized by *A. trysibia* on the tegument tissue between pelvic fins. No hemorrhage or injury signals were observed in the tegument of the host. This study also expanded the distribution of *A. trysibia* to the eastern Amazon.

Keywords: Freshwater fish, isopod, Jari river, parasitism, tegmental hole.

Resumo

O presente estudo fornece o primeiro registro de um isópode parasito (*Artystone trysibia*) em *Caquetaia spectabilis*, um ciclídeo da Amazônia coletado no estado do Amapá, norte do Brasil. Em maio de 2018, espécimes de *C. spectabilis* foram coletados no baixo Rio Jari e 33,3% estavam parasitados por *A. trysibia* dentro do orifício tegumentar localizado na região ventral, entre as nadadeiras pélvicas de *C. spectabilis*. Nenhuma hemorragia ou lesões foram observadas no tegumento dos hospedeiros. Este estudo amplia a distribuição de *A. trysibia* para a Amazônia oriental.

features. Mouthparts and appendages were carefully dissected for identification (THATCHER, 2006; JUNOY, 2016).

Three specimens of C. spectabilis, measuring 18.6 ± 0.8 cm and 251.7 ± 28.4 g (Figure 2A-B) were collected, from those only one specimen was parasitized (33.3%) by one specimen of A. trysibia (Figure 2C-G) found inside the tegument between the pelvic fins of the host (Figure 2B). The tegument damage showed a hole about 5 mm diameter and 25 mm deep forming a capsule (Figure 2B). No hemorrhage or internal organ injuries were detected macroscopically in the host.

For the Jari River basin, left-bank tributary of the lower Amazon River has been a total of 11 species of crustaceans parasitizing fish are known (see OLIVEIRA et al., 2017a, b; GONÇALVES et al., 2018). However, this is the first record of A. trysibia for fish of this basin.

Species of Artystone are known for perforating the tegument of hosts (HUIZINGA, 1972; THATCHER & SCHINDLER, 1999; JUNOY, 2016). This perforation causes hemorrhages by mechanical mutilation, in addition to necrosis and might cause organ injuries such as the eye loss (HUIZINGA, 1972). However, the penetration of A. trysibia in the tegument of C. spectabilis did not cause hemorrhage or injury signals in host of this study.

The present study contributes with: (i) distribution expansion of A. trysibia to the Jari River basin, in eastern Amazon and (ii) the first report of the occurrence of A. trysibia in C. spectabilis.

Figure 1. Site of study in the lower Jari River basin, between states of Amapá and Pará, in eastern Amazon, northern Brazil.
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References


Figure 2. Caquetaia spectabilis from the eastern Amazon, in Brazil (A). Tegumentorifice between pelvic fins area of Caquetaia spectabilis caused by Artystone tryisia (B). Artystone tryisia in views dorsal (C), ventral (D), lateral (E), frontal (F) and back (G).


