CERATOMYXA SPP. PARASITIZING FISH OF THE FAMILY PIMELODIDAE FROM THE AMAZON

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Pimelodids, commonly known as catfish, are fish of the order Siluriformes with significant importance for commercial, ornamental, and sport fishing in South America. Myxozoa is a class within Cnidaria that includes species adapted to endoparasitism, characterized by significant simplifications and reductions in body size compared to free-living cnidarians during their evolutionary transition to parasitic life. South America, known for its rich freshwater ichthyofauna, has seen growing interest in the study of Myxozoa parasites of fish in this region.

In a study of fish parasites from the Amazon Basin, in the waters near the confluence of the Tapajós and Amazon Rivers, in Santarém-PA, specimens of the following pimelodid species were examined: *Brachyplatystoma filamentosum*, *B. vaillantii*, *B. rousseauxii*, *B. juruense*, *B. platynema*, *Platynematichthys notatus*, and *Phractocephalus hemioliopterus*. Myxozoans infecting the gallbladder were observed in some specimens of all these species. The parasites were characterized through light microscopy, transmission electron microscopy, and small subunit ribosomal DNA (SSU rDNA) sequencing.

Light microscopy revealed vermiform plasmodia with motility, containing myxospores characteristic of the genus *Ceratomyxa*. In *B. filamentosum*, *B. vaillantii*, *B. rousseauxii*, and *P. notatus*, the analyses identified the parasite as *Ceratomyxa gracillima* Zatti, Atkinson, Maia, Bartholomew & Adriano, 2018, originally described parasitizing *B. rousseauxii*. In *B. juruense* and *B. platynema*, morphological and molecular analyses revealed an undescribed species, provisionally identified as *Ceratomyxa sp. 1*. Similarly, for *P. hemioliopterus*, the analyses indicated a second undescribed species, provisionally named *Ceratomyxa sp. 2*.

This study highlights the diversity and distribution of different *Ceratomyxa* lineages among Amazonian pimelodid species.

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