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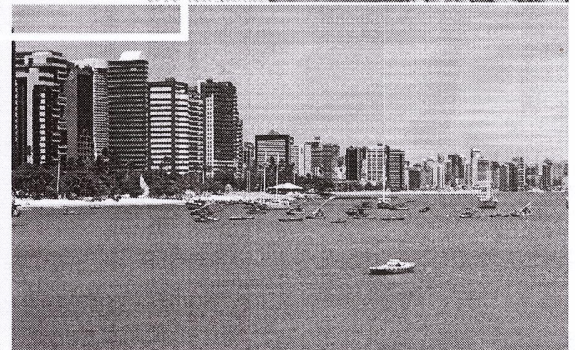


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PRELIMINARY DATA OF INTENSE PARASITIC INFECTION ON *Anisotremus virginicus*

Eduardo L. T. Gonçalves*, Karen R. Tancredo, Michele C. Vieira, Natalia da C. Marchiori, Eduardo G. Sanches, Maurício L. Martins and Monica Y. Tsuzuki

* Laboratório de Peixes e Ornamentais Marinhos (LAPOM), Departamento de Aquicultura, Universidade Federal de Santa Catarina (UFSC), Servidão dos Coroas S/N, Barra da Lagoa, Florianópolis, SC, Brasil
eltgoncalves@gmail.com

Anisotremus virginicus, also known as porkfish, is a representative of the Haemulidae (Actinopterygii: Perciformes) commonly found in public aquariums due to its distinctive striped pattern. As an ornamental fish it is mostly commercialized as juvenile, therefore there is a growing interest for breeding in captivity, which combined with the increased awareness of marine ornamental aquaculture as an alternative to capture of wild fish and porkfish's adaptation to culture conditions makes the species an important candidate for aquaculture. In this study, we report an unusually high infection by mixed parasite species in porkfish.

From May 2014 to February 2015, seventeen specimens of *A. virginicus* were collected using fish traps in the southeast coast of Brazil. Specimens were anesthetized, biometrically measured and euthanized for parasitological analysis. Gills were fixed in 10% formalin, scraped and analyzed under stereomicroscope for detection of parasites. Parasites were mounted in Hoyer's medium on a slide for identification. Fish had total length of 19.81 ± 2.53 (mean \pm standard deviation) and weight of 152.35 ± 55.98 . Prevalence of parasitism by Monogenea was 100 %, and all fish showed high parasitic burden (Figure 1).

The most prevalent Monogenea species was *Mexicana anisotremum* Cezar, Paschoal et Luque, 2012, with infection intensities in excess of 1200 parasites in a single fish gill and over 400 in a single gill arch. *Mexicana anisotremum* presented aggregated pattern of distribution among gill microhabitats, showing preference for the base of primary lamellae (Figure 1). The parasitic copepod *Hatschekia* sp. and at least one species of Polyopisthocotylea Monogenea were found in co-occurrence with *M. anisotremum* on the gills of porkfish. The Capsalidae monogenean *Neobenedenia* sp. was also found in the body surface of one specimen, with an infection intensity of 76.

With 33 different parasite species from different taxa already recorded in *A. virginicus*, this fish species appears to be particularly susceptible to parasitism. High values of prevalence and intensities, such as the ones found in this study, may pose a threat to aquaculture of this species. Nevertheless this may also suggest the possible use of *A. virginicus* as host species for monitoring marine ecosystems using parasites as biological indicators.

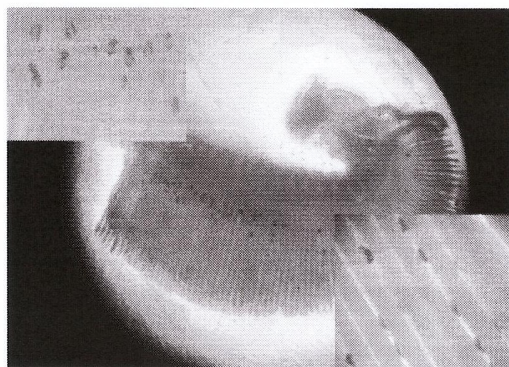


Figure 1: High parasitic burden of *Mexicana anisotremum* on gill arch of *Anisotremus virginicus*.