

COMUNICAÇÃO CIENTÍFICA

Hatschekia *quadrabdominalis* Yu, 1933 (Copepoda, Hatschekiidae), a parasite of *Priacanthus* *arenatus* (Cuvier, 1829) (Osteichthyes, Priacanthidae) in the Brazilian coast

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Hatschekia quadrabdominalis Yu, 1933 is a highly modified parasitic copepoda belonging to the Hatschekiidae (Siphonostomatoida). This species is unique of the genus with the trunk being constantly curved to one side (YAMAGUTI & YAMASU, 1959). According to VILLALBA (1986) the curvature of trunk depends in fact, of the fixation site of this copepods.

The big-eye, *Priacanthus arenatus* Cuvier, 1829 is a medium-sized (37,7±6,1cm) fish with large distribution in the

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Hatschekia quadrabdominalis
Yu, 1933
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Western Atlantic Ocean, extended from Canada (MACKAY & GILHEN, 1973) to Argentine (CARVALHO-FILHO, 1999). This is a common and abundant species in the coast of Rio de Janeiro state and constitutes an important local fisheries resource.

Previous reports of a *H. quadrabdominalis* in a few fish hosts show a restricted distribution of this species in the waters of the Pacific Ocean with only one report from the Caribbean Sea. All specimens were collected on the branchial arch of the Priacanthid fishes *Priacanthus macracanthus* (Cuvier, 1829) from Japanese waters (YAMAGUTI & YAMASU, 1959), *Priacanthus cruentatus* (Lacépède, 1801) and *Cookeolus boops* (Bloch & Scheider, 1801) from Chilean waters (VILALBA, 1986).

Therefore, *H. quadrabdominalis* has not been previously collected from Brazilian waters and *P. arenatus* has not been validly reported as host for this species. From December 1999 through April 2000, 1530 specimens of *H. quadrabdominalis* were collected from the gills of 58 big-eyes *P. arenatus* captured by fishermen in coastal waters from the Rio de Janeiro state (22°55'S, 43°12'W). The copepods were fixed and stored in 70% ethanol, clarified in lactic acid and observed by light microscopy. After close examination, the copepods were identified as adult females of *H. quadrabdominalis* Yu, 1933. A complete and comparative description of this species can be found in VILALBA (1986) and YAMAGUTI & YAMASU (1959).

From a zoogeographical point of view is interesting to outline that possibly as a dispersion strategy (SUÁREZ-MORALES & HO, 1994), the copepod *H. quadrabdominalis* has become a parasite of at least four species from Priacanthidae family (*Priacanthus macracanthus*, *P. cruentatus*, *P. arenatus* and *Cookeolus boops*) with a complementary range of distribution in the Pacific and Atlantic oceans, where this species from Priacanthid have broad distribution. Is also interesting that possibly to make an amphi-oceanic approximation between the infrapopulations of *H. quadrabdominalis* parasite of *Priacanthus* genus from Pacific Ocean and from Atlantic Ocean, in order to compare this infrapopulations dynamics.

In conclusion, the presence of the parasitic copepod *H. quadrabdominalis* is reported for the first time in Brazilian Atlantic waters. This is also the first report of the big-eye *P.*

arenatus as a host for *H. quadrabdominalis*.

The studied specimens are deposited in the National Museum from Quinta da Boa Vista Carcinological Collection (MNRJ15338; MNRJ 15339), Rio de Janeiro, Brazil.

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