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Article



Neotropical Monogenoidea. 57. Nine new species of Dactylogyridae (Monogenoidea) from the gill of *Salminus brasiliensis* (Characidae, Characiformes) from the Paraná River, State of Paraná, Brazil

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Abstract

During a long-term study of the parasites of fishes from the Paraná River, both below and above the reservoir of the Itaipu Hydroelectric Power Station, State of Paraná, Brazil, specimens of 10 species of Dactylogyridae (9 new and one previously known) were collected from the gills of Salminus brasiliensis. The following species are described and illustrated: Anacanthorus douradensis sp. n., A. bicuspidatus sp. n., A. daulometrus sp. n., A. contortus sp. n., A. parakruidenieri sp. n., Annulotrematoides bryconi Cuglianna, Cordeiro and Luque, 2003, A. glossophallus sp. n., A. parisellei sp. n., Jainus iocensis sp. n. and Tereancistrum arcuatus sp. n. Anacanthorus douradensis sp. n. appears closely related to Anacanthorus colombianus by sharing a MCO composed of a loosely spiraled tube and an articulated and bifurcated accessory piece; the new species may be differentiated from A. colombianus by the bifurcation of the accessory piece at the proximal portion of the structure, the presence of subequal rami of the accessory piece, and by the number of coils in the MCO (6 in the new against 3 in the previously described species). Anacanthorus bicuspidatus sp. n. has great similarity to Anacanthorus cuticulovaginus but can be easily differentiated by presenting one of the rami hook shaped and with a subterminal thumb-like expansion and MCO more delicate and slender, distally pointed. Anacanthorus daulometrus sp. n. is similar to A. cuticulovaginus and A. biscuspidatus sp. n. but differs by presenting one of the branches of the accessory piece bifid and by the presence of a conspicuous metraterm with heavily sclerotized walls. Anacanthorus contortus sp. n. resembles A. quinqueramus in depicting an accessory piece composed by five branches; the new species differs from this species by an accessory piece composed of two main branches, one of them with 4 sub-branches. Anacanthorus parakruidenieri is morphologically similar to Anacanthorus kruidenieri; these species are easily distinguishable by the presence of a bifurcated accessory piece and a subcircular foramen in the shank bulb of the new species. Annulotrematoides glossophalllus sp. n. differs from the previously known species of the genus, A. amazonicus and A. bryconi, by a relatively more robust and slightly arcuate MCO with a distinctive tongue-shaped expansion at the distal opening and by the presence of the flaplike expansion near midlength of the accessory piece. Annulotrematoides parisellei sp. n. closely resembles A. bryconi and A. glossophallus from which it can be distinguished by the comparative morphology of the copulatory complex (arcuate and delicate in the new species and robust with a tongue-shape distal end in the other two species). The general morphology of the copulatory complex of A. parisellei **sp. n.** resembles that of A. amazonicus, but differs by the morphology of all haptoral sclerites, presenting both ventral and dorsal anchors with conspicuous points evenly curved with shafts. Jainus iocensis sp. n. resembles J. amazonensis by the morphology of anchors, differing from this species by having a large sclerotization on the superficial root of ventral anchor and by the shape of the accessory piece, which is hook-shaped in the new species and distally flabellate in J. amazonensis. Finally, Tereancistrum arcuatus sp. n. can be easily distinguished from the other species of the genus by the MCO, which is an arcuate tube, while the others present a coiled copulatory organ. The few specimens of Annulotrematoides bryconi collected from S. brasiliensis are in accordance with the general morphology and measurements of the original description and type specimens.

Key words: Monogenoidea, Anacanthorus douradensis sp. n., Anacanthorus bicuspidatus sp. n., Anacanthorus daulometrus sp. n., Anacanthorus contortus sp. n., Anacanthorus parakruidenieri sp. n., Annulotrematoides glossophallus sp. n., Annulotrematoides parisellei sp. n., Jainus iocensis sp. n., Tereancistrum arcuatus sp. n., Annulotrematoides bryconi, Salminus brasiliensis, Brazil