RESEARCH NOTE

Senga sp., Occurrence of a Pseudophyllid Cestode in a Brazilian Freshwater Fish

Amilcar Arandas Rego

Departamento de Helmintologia, Instituto Oswaldo Cruz, Av. Brasil 4365, 21045-900 Rio de Janeiro, RJ, Brasil

Key words: Senga - pseudophyllid - fish parasite - freshwater

Freshwater fishes in Brazil are usually parasitized by proteocephalids; representatives of other orders of Cestoda, such as Caryophyllidea and Pseudophyllidea have not been recorded so far.

Four flattened specimens, mounted in Canada balsam were studied for identification; unfortunately it was not possible to obtain sections from the specimens; important anatomical features are therefore not described. However, the apical bilobed disc with hooks is characteristic of the genus Senga, a group of pseudophyllids classified in Bothriocephalidae (LF Khalil et al. 1994 Order Pseudophyllidea Carus, 1863, p. 205-251. In Keys to the Cestode Parasites of Vertebrates, CAB, St Albans, England).

I abstain from naming the species, but it is important to give a short description of the specimens for future reference.

Host: Astyanax scabripinnis (Jenyns, 1842)
Locality: Campinas, SP, Brazil
Slides deposited in Helminthological Collection of Oswaldo Cruz Institute, No. 33.694 a-d.

Strobila 60.8-68.4 long with secondary segmentation. Strobila anapolytic with 80-100 proglottids. Most proglottids are much wider than long, apart from the gravid proglottids, which have a square shape. Scolex rectangular, 0.93 x 0.44 (mean), with an apical bilobed disc whose margins carry a row of hooks, divided in two half-circles of hooks (Fig.). Each half has 14-15 hooks of different size and form, 0.007-0.015, and also some vestigial and rudimentary hooks intercalated between the others, as described to Senga besnardi (RP Dollfus 1934 Bull Soc Zool France 59 476-490). Eggs thin-shelled, not operculated, not embryonated, measuring 0.046 x 0.028 (mean).

Remarks - Tapeworms from the Orders Caryophyllidea and Pseudophyllidea are frequently found in freshwater fishes from other continents. Curiously, in South America the proteocephalids are the only representatives of Cestodes in these fishes (with the exceptions here referred).

Recently, a pseudophyllid, Bothriocephalus acheilognathi Yamaguti, 1934, was reported from the carp Cyprinus carpio L., an exotic fish species, introduced to Brazil some 50 years ago (GC Pavanelli et al. 1995 p. 267. In Congresso Brasileiro de Parasitologia, Goiânia, Brazil). It is a case of translocation of a species.

On examining the literature concerning pseudophyllideans, we found a paper (WNF Woodland 1935 Proc Zool Soc London 105: 619-623) where Woodland described a Ptychobothriid from the pescada Plagioscion squamosissima from the Amazon. He did not name the worm, as the scolex was missing. However, the drawings of the reproductive system, convinced us that Woodland’s specimens are very close to the specimens described in this paper.

GD Schmidt (1986 CRC Handbook of Tapeworm Identification, CRC press Inc., Boca Raton, FL, USA, 675 pp.) related five species of Senga, S. besnardi Dollfus, 1934, S. pycnomera (Woodland, 1924), S. lucknowensis (Johri, 1956), S. ophiocephalinae Tseng, 1933 and S. kaunsaensis (Zaidi & Kahn, 1976). Recently, several new species of this genera have been described from India. They are doubtful species; some were described from the same local host (cf. Helm Abstr 1984, 1989, 1992, 1994).

Research fellow of CNPq (Cat. 1-A).
Fax: +55-21-264.8974
Received 11 November 1996
Accepted 23 May 1997