



<http://dx.doi.org/10.11646/zootaxa.3626.4.9>

<http://zoobank.org/urn:lsid:zoobank.org:pub:3F1600C4-23A9-4777-9410-0BA20D3E1C20>

***Stoibocephalum* n. gen. (Cestoda: Lecanicephalidea) from the sharkray, *Rhina ancylostoma* Bloch & Schneider (Elasmobranchii: Rhinopristiformes), from northern Australia**

JOANNA J. CIELOCHA¹ & KIRSTEN JENSEN²

Department of Ecology and Evolutionary Biology and Biodiversity Institute, University of Kansas, Lawrence, Kansas, 66045, USA.

E-mail: ¹jjcielocha@hotmail.com; ²jensen@ku.edu

Abstract

A new genus and species of lecanicephalidean cestode, *Stoibocephalum arafurens* n. gen., n. sp., is described from the sharkray, *Rhina ancylostoma* Bloch & Schneider, off northern Australia. *Stoibocephalum arafurens* n. gen., n. sp. is apolytic, and possesses a large, muscular, retractable apical organ, 3 pairs of excretory vessels, and testes in several columns and layers. The presence of 3 pairs of excretory vessels distinguishes this new genus from all other valid lecanicephalidean genera, except *Hexacanal* Perrenoud, 1931, from which it can be distinguished based on ovary shape and egg morphology. *Stoibocephalum* n. gen. most closely resembles *Tylocephalum* Linton, 1890 but differs from that genus in its ability to completely retract its apical organ into the scolex proper. Scolex microthrix pattern and histological sections of scoleces attached *in situ* suggest *S. arafurens* n. gen., n. sp. to attach to the host's intestinal mucosa with apical organ and scolex proper surfaces, rather than just the apical organ surface. This is the third lecanicephalidean species described from the sharkray.

Key words: new species, Arafura Sea, Batoidea, tapeworm, attachment

Introduction

In this study, lecanicephalideans parasitizing the sharkray, *Rhina ancylostoma* Bloch & Schneider (Rhinopristiformes *sensu* Naylor *et al.* 2012a: Rhinidae), caught off the Northern Territory, Australia, were studied. To date, 5 species of cestodes representing 3 orders have been reported from *R. ancylostoma* from across its distribution in the Indo-Pacific region (see Last & Stevens 2009). These are as follows: the trypanorhynch *Mixonybelinia southwelli* (Palm & Walter, 1999) Palm, 1999 collected off Sri Lanka (Palm & Walter 1999) and *Dollfusiella michiae* (Southwell, 1929) Beveridge, Neifar, & Euzet, 2004 collected off Australia (in Campbell & Beveridge 2009); the tetraphyllidean *Phyllobothrium dagnallium* Southwell, 1927 collected off Sri Lanka (Southwell 1927; considered to be *incertae sedis* by Ruhnke [2011]); and the lecanicephalideans *Tylocephalum campanulatum* Butler, 1987 from off Australia (Butler 1987) and *Cephalobothrium neoetobatidis* Sarada, Vijaya Lakshmi, & Hanumantha Rao, 1992 from waters off India (Sarada *et al.* 1992; considered to be a *species inquirenda* by Jensen [2005]). Among the cestodes parasitizing *R. ancylostoma* from Australian waters were specimens representing a new lecanicephalidean genus possessing 3 pairs of excretory vessels. Of the 17 valid genera of Lecanicephalidea recognized to date, only species of *Hexacanal* Perrenoud, 1931 have been described as possessing 3 pairs of excretory vessels (Cielocha & Jensen 2011), while the majority of species of the remaining genera have been described as possessing either a single pair or 2 pairs of excretory vessels. The new genus and new species is described herein, and a detailed description of the nature of attachment of the new species to the intestinal mucosa of its host is presented.