

Investigation of *Acanthobothrium* (Cestoda: Tetraphyllidea) diversity from two species of guitarfish (*Rhinobatos*) off coastal Senegal  
C. A. FYLER

Spiral intestines were collected from a total of thirty-two species of elasmobranchs during three, two-week collecting trips to Senegal in January 2002, 2003 and 2004. Study sites included six fishing villages along the Senegalese coast from St. Louis in the north to Djifer in the south. Subsequent spiral intestine examinations revealed more than 70 species of cestodes parasitizing the elasmobranchs of this region. These collections provided an opportunity to examine the *Acanthobothrium* faunas of two *Rhinobatos* species, *Rhinobatos* c.f. *cemiculus* and *Rhinobatos* sp. Presently little is known of the tetraphyllidean tapeworm fauna of either species, and these results include the first record of *Acanthobothrium* from *Rhinobatos* species in the Eastern Atlantic Ocean. Investigation of the *Acanthobothrium* species in four individuals of each *Rhinobatos* species has exposed an interesting dichotomy of cestode diversity. *Rhinobatos* c.f. *cemiculus* and *Rhinobatos* sp., although closely related and both commonly found in this locality, hosted a series of non-overlapping species of *Acanthobothrium*. This was not entirely unexpected given existing data on the host specificity of *Acanthobothrium* species in general. However, it was surprising to see that at least 6 different species of *Acanthobothrium* parasitized *Rhinobatos* c.f. *cemiculus* with at least 3 congeners per individual host, while *Rhinobatos* sp. had a conspicuously smaller parasite diversity with only one species of *Acanthobothrium* occurring in each individual host. This phenomenon of the existence of multiple congeners of cestodes in a single host species raises interesting questions. For example, it remains unclear whether such congeners belong to a single clade, suggesting one host invasion with subsequent diversification within the host, or if synhospitalic congeners represent separate lineages, suggesting multiple, independent, and perhaps more recent host invasions.