

Correspondence



urn:lsid:zoobank.org:pub:842B4524-3634-4453-A3A4-A2E1538DDAD4

The forgotten origin of *Acanthobothrium* Blanchard, 1848 (Tetraphyllidea: Onchobothriidae)

DENIS JACOB MACHADO1 & FERNANDO PORTELLA DE LUNA MARQUES2

Laboratório de Helmintologia Evolutiva, Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo, Rua do Matão, tv. 14, 101, Cidade Universitária, 05508-090, São Paulo, SP, Brazil. E-mail: ¹djmachado@ib.usp.br, ²fernando@ib.usp.br

The genus *Acanthobothrium* assembles a set of cosmopolitan onchobothriid tapeworms parasites of elasmobranchs. Despite its clear diagnostic features, which include a scolex with four bothridia each bearing three loculi and a pair of bipronged hooks, this genus is represented by species that possess a diversity of morphologies and host lineages (e.g. rays, skates, guitarfishes, and sharks; Campbell & Beveridge 2002; Zschoche *et al.* 2011). The wide distribution of this genus, its diverse morphology, and, perhaps most importantly, its lengthy and complex taxonomic history likely account for the fact that, to date, the absolute number of valid species, of potentially more than 200 nominal species, cannot be assigned to the genus with certainty. Clearly, a taxonomic revision of this group is overdue; a task that certainly will only be accomplished by collaborative efforts of cestodologists around the globe, given the widespread distribution of its species and the necessity of collecting new material to verify host identities and morphology in many cases. It is not our purpose here to provide such a revision. However, in order to get the basis for such a task, it is our intention to clarify the authorship, date of publication, type species, and type host of *Acanthobothrium*. To the best of our understanding, these have been mistakenly assigned throughout the taxonomic history of the genus.

Despite early taxonomic reviews (e.g. Williams 1969), there is still no consensus on the authority of *Acanthobothrium*. The first volume of the Nomenclatur Zoologicus (Neave 1939: 11) registers two entries for the genusgroup name: "Blanchard 1849 (Feb.)" and "*Acanthobothrium* van Beneden 1849 [apparently between Jan. & March]" (sic). This suggests that at least since 1939 the authorship of the genus is ambiguous. Contemporary authors disregard Blanchard as the author of *Acanthobothrium* and assign two possible dates for Van Beneden's authorship of the genus. Some (e.g. Euzet 1994; Vardo-Zalik & Campbell 2011) assign *Acanthobothrium* to Van Beneden (1849); others (e.g. Twohig *et al.* 2008; Zschoche *et al.* 2011) implicitly assume that the genus should be recognized as valid by the more detailed description provided by Van Beneden (1850).

However, to our knowledge, the first use of the name *Acanthobothrium* was actually by Blanchard (1848: 364) in the legend of Plate 12, Fig. 9, which reads "ACANTHOBOTHRIE COURONNÉ (*Acanthobothrium coronatum*), pour montrer la forme de la tête, la forme générale du corps, et le trajet dos tubes intestinaux." We argue here that the name *A. coronatum* was thereby made available by Blanchard at that time since this nomenclatural act satisfies the provisions of Articles 11 and 12 of the ICZN (1999) for a species-group name published before 1931; in this case the "indication" associated with the name satisfies Art. 12.2.7 as it is an illustration. Thus, despite the absence of a detailed description for the new species, Blanchard (1848) should be credited with the authorship of *A. coronatum* for his is the first published work to use the name (ICZN Art. 23.1). With respect to the genus, it is important to note that the availability of a new speciesgroup name is not dependent on the availability of the genus-group name (ICZN Art. 11.9.3.1). However, if the speciesgroup name is available, so is the genus-group name with which it is associated (see ICZN Art. 12 and 12.2.5). Thus, Blanchard (1848) should also be credited with the authorship of the genus-group name, *Acanthobothrium*.

In February of the next year, Blanchard (1849: 121–122) provided the first detailed description of the "Genre Acanthobothrie (*Acanthobothrium*)" in which he indicated "*Bothriocephali onchobothrii* Rud." as its type species. In the same month (date confirmed by Muquardt 1849, Ref. No. 118), Van Beneden (1849: 191) indicated a different type species for the genus using the term "*Acanthobothrium n. gen. Bothr. bifurcatus*" in a list of genera he considered to belong in "Bothroïdes." In the second revision of *Acanthobothrium*, which was accompanied by a detailed description of *A. coronatum*, Van Beneden (1850: 129) cited "*A. coronatum* Rud." as the type of *Acanthobothrium*. With such confusion associated with the first works dealing with *Acanthobothrium*, it is not surprising that the type species of the genus remains unclear. For example, while Yamaguti (1959: 83) claimed that the type species of *Acanthobothrium* was