Thulinius, new generic name substituting for Thulinia Bertolani, 1981 (Tardigrada, Eutardigrada)

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Abstract

Due to a homonymy with a genus of Trematoda described two years before, the name Thulinia Bertolani, 1981 cannot be used for a genus of tardigrades. Therefore, Thulinius nomen novum is proposed for a genus of tardigrades (Eutardigrada, Hypsibiidae), in substitution of Thulinia, junior homonym. The complicated taxonomic history of the genus Thulinius and especially of one of its species is discussed. The characteristics of the genus and the main distinctive characters of the species are also reported.

Key words: Tardigrada, Eutardigrada, Thulinius, Thulinia

A new genus of Hypsibiidae (Eutardigrada, Parachela) was erected about twenty years ago (Bertolani 1981) and dedicated to Gustav Thulin, a very good and too often neglected expert on tardigrades during the early part of the past century, who first approached the study of tardigrades from a phylogenetical point of view. Unfortunately, I did not note that two years earlier Gibson and Bray (1979) erected a new genus of Trematoda with the name Thulinia. The tardigrade genus Thulinia was erected on the basis of the presence of 12 peribuccal lamellae (Bertolani 1981). Subsequently, using scanning electron microscopy, Bertolani et al. (1999) emphasized that the buccal lamellae of Thulinia are partly fused together. The first time that peribuccal lamellae were used as a distinctive character for a genus was in Schuster et al. (1980), who separated the Hypsibiidae Pseudobiotus Nelson, 1980 (with about 30 irregular lamellae) from Isohypsibius Thulin, 1928 (without lamellae) and the Macrobiotidae Minibiotos Schuster, 1980 (with 10 papulae instead of 10 lamellae) from Macrobiotus C.A.S. Schultze, 1834 (with 10 lamellae). The presence of 12 lamellae in Thulinia was considered a distinctive character with respect to Pseudobiotus (with Isohypsibius-type claws like those of Thulinia but with about 30 irregular lamellae around the mouth opening, as previously stated) and to all other genera of Hypsibiidae (which always lack peribuccal lamellae). On the other hand, peribuccal lamellae are present in other families of Parachela (Macrobiotidae and Eohypsibiidae) and in all the genera of the order Apochela. The peribuccal lamellae of Apochela, even though probably homologous to those of Parachela, are quite different in shape and number with respect to those of Parachela. Within the Parachela, the peribuccal lamellae of Macrobiotidae are 10 in number, those of Eohypsibiidae 14 in number. Therefore, the presence of lamellae should be considered...