

Case 2589***Hypsibius* Ehrenberg, 1848 (Tardigrada): proposed designation of *Macrobiotus dujardini* Doyère, 1840 as type species**

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Abstract. The purpose of this application is the designation of *Macrobiotus dujardini* Doyère, 1840 (original spelling of specific name emended from *dujardin*) as the nominal type species of the tardigrade genus *Hypsibius* Ehrenberg, 1848.

1. Ehrenberg (1848, p. 381) established the genus *Hypsibius* for the Eutardigrades without eyes, including the new species *H. hemprichii* and also *Macrobiotus oberhaeuseri* [sic] and *M. dujardini* [sic] Doyère, 1840.

2. Thulin (1911, p. 24–27) gave a new diagnosis of *Hypsibius* based on the claws and the bucco-pharyngeal apparatus and stated that the absence of eyes was no longer considered a significant character at generic level. He made no mention of the type species.

3. Marcus (1928, p. 164) accepted Thulin's definition of *Hypsibius* and stated that *H. hemprichii* (first species included by Ehrenberg in the genus *Hypsibius*) should be considered as a species dubia, and proposed *Macrobiotus oberhaeuseri* [sic] as type species.

4. Thulin (1928) revised *Hypsibius* and other genera, examining the shape of claws (mentioning three types) and the shape of apophyses for the insertion of the stylet muscles (distinguishing a hook-like and ridge-like type). He gave (p. 240) the following definition of *Hypsibius*: 'Claws of the third type. Buccal tube short. Apophyses for the insertion of the muscles of the stylets hook-like (fig. 17). Type species: *Macrobiotus oberhaeuseri* Doyère, 1840.'

5. However, in this fig. 17 (p. 236) the buccal apparatus is that of *Hypsibius dujardini* (Doyère, 1840) and not that of *H. oberhaeuseri*. Also figs. 24b and 25b cited for the third type of claw (p. 238) do not show those of *H. oberhaeuseri* but those of *H. microps* Thulin, 1928 and *H. pallidus* Thulin, 1911, respectively.

6. Since 1928 tardigradologists have used without exception (e.g. Ramazzotti & Maucci, 1983) the description and figures given by Thulin (1928) as diagnostic of *Hypsibius*.

7. Specialists have remarked that the claws of *H. oberhaeuseri* have a distinctive shape of their own. This fact and the shape of the apophyses for the insertion of the muscle stylets have led us (Binda & Pilato, in press) to erect a new genus *Ramazzottius*, with *Macrobiotus oberhaeuseri* Doyère, 1840 as type species.

8. It may be argued that the generic name *Hypsibius* should be kept for those species resembling *H. oberhaeuseri*, since it was listed by Marcus (1928) and Thulin (1928) as the nominal type species. However, the definition of the genus *Hypsibius* accepted for nearly 60 years is that based on the species typified by *H. dujardini* (as given in Thulin, 1928, p. 236, fig. 17) and not by *H. oberhaeuseri*. The Commission is therefore asked to

designate *Macrobiotus dujardini* Doyère, 1840 as the type species of *Hypsibius* (as already mentioned, the original type species *Hypsibius hemprichii* Ehrenberg, 1848 is unidentifiable).

9. Doyère (1840) originally published the specific names in the spellings *dujardin* (p. 288) and *oberhaeuser* (p. 286) but since 1928 they have always been cited as *dujardini* and *oberhaeuseri*. The Commission is asked to rule that the latter are deemed to be the correct spellings and hence conserve usage (and also accord with Recommendation 31A of the Code).

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that the correct spelling of the following specific names:
 - (a) *dujardin* Doyère, 1840, as published in the binomen *Macrobiotus dujardin*, is *dujardini*;
 - (b) *oberhaeuser* Doyère, 1840, as published in the binomen *Macrobiotus oberhaeuser*, is *oberhaeuseri*;
- (2) to use its plenary powers to set aside all previous designations of type species for *Hypsibius* Ehrenberg, 1848, and to designate *Macrobiotus dujardini* Doyère, 1840 (original spelling emended in (1) (a) above) as type species;
- (3) to place on the Official List of Generic Names in Zoology the name *Hypsibius* Ehrenberg, 1848 (gender: masculine), type species by designation in (2) above, *Macrobiotus dujardini* Doyère, 1840;
- (4) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *dujardini* Doyère, 1840, as published in the binomen *Macrobiotus dujardin* (spelling emended in (1) (a) above), specific name of the type species of *Hypsibius* Ehrenberg, 1848;
 - (b) *oberhaeuseri* Doyère, 1840, as published in the binomen *Macrobiotus oberhaeuser* (spelling emended in (1) (b) above);
- (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *dujardin* Doyère, 1840, as published in the binomen *Macrobiotus dujardin* (original spelling emended to *dujardini*);
 - (b) *oberhaeuser* Doyère, 1840, as published in the binomen *Macrobiotus oberhaeuser* (original spelling emended to *oberhaeuseri*).

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