

## Case 3198

***Heteromesus* Richardson, 1908 (Crustacea, Isopoda): proposed designation of *H. granulatus* Richardson, 1908 as the type species**

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**Abstract.** The purpose of this application is to conserve the accustomed usage of the marine isopod genus *Heteromesus* Richardson, 1908 (family ISCHNOMESIDAE), which currently contains 12 species. In 1962 *Ischnosoma thomsoni* Beddard, 1886 was designated as the type species, but this has the characters of the genus *Haplomesus* Richardson, 1908. It is proposed that *Heteromesus granulatus* Richardson, 1908 should be designated as the type species of *Heteromesus*.

**Keywords.** Nomenclature; taxonomy; Crustacea; Isopoda; ISCHNOMESIDAE; *Heteromesus*; *Haplomesus*; *Heteromesus granulatus*; *Haplomesus thomsoni*; marine.

1. Sars (1866, p. 115) established the genus *Ischnosoma* for a new species of deep-sea isopod, *I. bispinosum*. Richardson (1908, p. 81) divided the six species then included in *Ischnosoma* among four new genera: *Ischnomesus* (a replacement name for *Ischnosoma* Sars, a junior homonym of the name *Ischnosoma* as used twice in 1829 for genera of fish and beetles), *Haplomesus*, *Heteromesus* and *Rhabdomesus*.

2. The type species of *Ischnomesus* is *Ischnosoma bispinosum* Sars, 1866 (Article 67.8 of the Code), and that of *Haplomesus* is *Ischnosoma quadrispinosus* Sars, 1879 (p. 432) by monotypy. Richardson (1908) included five species in her genus *Heteromesus*: *Ischnosoma thomsoni* Beddard, 1886 (p. 169, fig. 1), *I. spinosum* Beddard, 1886, *I. greeni* Tattersall, 1906 and the two new species *Heteromesus granulatus* (p. 82, figs. 14–18) and *H. spinescens* (p. 83, fig. 19). No type species was selected for *Heteromesus*.

3. In a revision of many crustacean families, Hansen (1916) synonymised *Rhabdomesus* with *Ischnomesus*. Hansen placed *Ischnomesus*, *Haplomesus* and *Heteromesus* in a new family-group taxon, the ISCHNOMESINI (p. 54), which has subsequently been used at family rank. Hansen's diagnoses of these genera (pp. 56, 59 and 66 respectively) are widely accepted today.

4. Birstein (1960, p. 6) transferred *Ischnosoma thomsoni* from *Heteromesus* to *Haplomesus*, and included in the latter genus the two new species *Haplomesus brevispinis* (p. 11, fig. 7) and *Haplomesus cornutus* (p. 12, figs. 8, 9); see also Birstein (1963). Wolff (1962) referred to the type specimen of *Ischnosoma thomsoni* in The Natural History Museum, London, and supported Birstein's placement of this

species in *Haplomesus*. The taxonomic differences between *Haplomesus* and *Heteromesus* given by Richardson (1908) and Hansen (1916) have formed the basis of the keys (Wolff, 1962; Menzies, 1962) to genera and species which are in current use.

5. Twelve species belong to *Heteromesus* as now understood, the most recently described being *H. wolffi* and *H. drachi* Chardy, 1974 (p. 1543, figs. 4, 5 and p. 1546, figs. 6, 7). *Heteromesus* has appeared in other recent works on the taxonomic diversity and ecology of the deep sea (e.g. Menzies, George & Rowe, 1973; Wolff, 1976; Gooday, 1984; Thistle & Wilson, 1987; Kussakin, 1988; Svavarsson, Strömberg & Brattegard, 1993; Svavarsson & Davidsdóttir, 1994; Brandt, 1997).

6. Although Birstein (1960) had transferred *Ischnosoma thomsoni* Beddard, 1886 from *Heteromesus* to *Haplomesus*, a placement supported by Wolff (1962) (see para. 4 above) and by later authors. Menzies (1962, p. 121) designated *I. thomsoni* as the type species of *Heteromesus*. This action effectively made *Heteromesus* a subjective synonym of *Haplomesus* and, if accepted, would leave the 12 species currently thought to belong to *Heteromesus* outside any named genus.

7. No authors have referred to Menzies' (1962) designation of *I. thomsoni* as the type species for *Heteromesus*. His action would require the creation of a new generic name for what is currently accepted as *Heteromesus*. In order to preserve current usage and avoid instability or confusion we propose, under Article 70.2 of the Code, that *I. thomsoni* should be set aside as the type species and be replaced by the originally included species *Heteromesus granulatus* Richardson, 1908. The holotype of *H. granulatus*, from south of Martha's Vineyard, Massachusetts, U.S.A., is specimen No. 38969 in the U.S. National Museum of Natural History, Washington, D.C.

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

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Heteromesus* Richardson, 1908 and to designate *Heteromesus granulatus* Richardson, 1908 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Heteromesus* Richardson, 1908 (gender: masculine), type species by designation in (1) above *Heteromesus granulatus* Richardson, 1908;
- (3) to place on the Official List of Specific Names in Zoology the name *granulatus* Richardson, 1908, as published in the binomen *Heteromesus granulatus* (specific name of the type species of *Heteromesus* Richardson, 1908).

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### References

- Beddard, F.E. 1886. Preliminary notice of the Isopoda collected during the voyage of H.M.S. *Challenger*. Part III. *Proceedings of the Zoological Society of London*, **1886**: 97–122.
- Birstein, J.A. 1960. The family Ischnomesidae (Crustacea, Isopoda, Asellota) in the north-western part of the Pacific and the problem of amphiboreal and bipolar distribution of the deep sea fauna. *Zoologicheskii Zhurnal*, **34**: 3–28.
- Birstein, J.A. 1963. *Deep water isopods (Crustacea, Isopoda) of the north-western part of the Pacific Ocean*. 213 pp. Akademia Nauk SSSR, Moscow. [In Russian. English translation by the Indian National Scientific Documentation Centre, New Dehli, 1973].

- Brandt, A.** 1997. Biodiversity of peracarid crustaceans (Malacostraca) from the shelf down to the deep Arctic Ocean. *Biodiversity and Conservation*, **6**: 1533–1556.
- Chardy, P.** 1974. Compléments à l'étude systématique des Ischnomesidae (Isopodes Asellotes) de l'Atlantique. Description de quatre espèces nouvelles. *Bulletin Mensuel de la Société Linnéenne de Lyon*, **179**(3): 1537–1552.
- Gooday, A.** 1984. Records of deep-sea rhizopod tests inhabited by metazoans in the North-East Atlantic. *Sarsia*, **69**: 45–53.
- Hansen, H.J.** 1916. Crustacea Malacostraca III, part 5. The Order Isopoda. *Danish Ingolf-Expedition*, **3**: 1–262, pls. 1–16.
- Kussakin, O.G.** 1988. Marine and brackish-water Crustacea (Isopoda) of cold and temperate waters of the Northern Hemisphere. 3. Suborder Asellota 1. Janiridae, Santiidae, Dendrotonidae, Munnidae, Haplomunnidae, Mesosignidae, Haplomiscidae, Mictosomatidae, Ischnomesidae. *Opredeliteli po Faune SSR*, **152**: 1–501. [In Russian].
- Menzies, R.J.** 1962. The isopods of abyssal depths in the Atlantic Ocean. *Vema Research Series*, **1**: 79–206.
- Menzies, R.J., George, R.Y. & Rowe, G.T.** 1973. *Abyssal environment and ecology of the world oceans*. 488 pp. Wiley, New York.
- Richardson, H.** 1908. Some new Isopoda of the superfamily Aselloidea from the Atlantic coast of North America. *Proceedings of the United States National Museum*, **35**: 71–86.
- Sars, G.O.** 1866. Beretning om en i Sommeren 1865 foretagen zoologisk Reise ved Kysterne af Christianias og Christiansands Stifter. *Nyt Magazin for Naturvidenskaberne*, **15**: 84–128.
- Sars, G.O.** 1879. Crustacea et Pycnogonida nova in itinere 2-do et 3-tio Expeditionis norvegicae anno 1877 et 78 collecta. *Archiv för Matematik og Naturvidenskab*, **4**: 427–476.
- Svavarsson, J. & Davidsdóttir, B.** 1994. Foraminiferan (Protozoa) epizoites on Arctic isopods (Crustacea) as indicators of isopod behaviour. *Marine Biology*, **118**: 239–246.
- Svavarsson, J., Strömberg, J.-O. & Brattegard, T.** 1993. The deep-sea asellote (Isopoda, Crustacea) fauna of the northern seas: species composition, distributional patterns and origin. *Journal of Biogeography*, **20**: 537–555.
- Tattersall, W.M.** 1906. The marine fauna of the coast of Ireland. Part V. Isopoda. *Reports of the Department of Agriculture and Technical Instruction for Ireland, Scientific Investigations of the Fisheries Branch*, **2**: 53–142.
- Thistle, D. & Wilson, G.D.F.** 1987. A hydrodynamically modified abyssal isopod fauna. *Deep-Sea Research*, **34**: 73–87.
- Wolff, T.** 1962. The systematics and biology of bathyal and abyssal Isopoda Asellota. *Galathea Reports*, **6**: 1–320.
- Wolff, T.** 1976. Utilisation of seagrass in the deep sea. *Aquatic Botany*, **2**: 161–174.

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