

- Cicolani, B.** 1979. The intrinsic rate of natural increase in dung macrochelid mites, predators of *Musca domestica* eggs. *Bollettino di Zoologia*, **46**: 171–178.
- Costa, M.** 1966. Notes on macrochelids associated with manure and coprid beetles in Israel. I. *Macrocheles robustulus* (Berlese, 1904), development and biology. *Acarologia*, **8**: 532–548.
- Emberson, R. M.** 1980. Macrochelidae from the Kermadec Islands and a key to species of *Macrocheles* Latreille from the New Zealand region (Acari: Mesostigmata). *New Zealand Entomologist*, **7**: 135–138.
- Filippini, A.** 1964. The feasibility of mass producing macrochelid mites for field trials against houseflies. *Bulletin of the World Health Organization*, **31**: 499–501.
- Filippini, A. & Pegazzano, F.** 1962. Specie Italiane del gruppo-*glaber* (Acarina, Mesostigmata, Macrochelidae, *Macrocheles*). *Redia*, **47**: 211–238.
- Filippini, A. & Mosna, B.** 1968. Influenza di fattori ecologici e genetici sulla natalità e mortalità di *Macrocheles robustulus* (Berlese, 1904). *Annali dell'Istituto Superiore Sanità*, **4**: 551–571.
- Halfiter, G. & Matthews, E. G.** 1971. The natural history of dung beetles. A supplement on associated biota. *Revista Latino-Americana de Microbiologia*, **13**: 147–163.
- Halliday, R. B. & Holm, E.** 1987. Mites of the family Macrochelidae as predators of two species of dung-breeding pest flies. *Entomophaga*, **32**: 333–338.
- Hyatt, K. H. & Emberson, R. M.** 1988. A review of the Macrochelidae (Acari: Mesostigmata) of the British Isles. *Bulletin of the British Museum (Natural History) (Zoology)*, **54**: 63–125.
- Krauss, W.** 1970. Die europäischen Arten der Gattungen *Macrocheles* Latreille 1829 und *Geholaspis* Berlese 1918. *Acarologie. Schriftenreihe für Vergleichende Milbenkunde*, **14**: 2–43, 59–60.
- Leitner, E.** 1946. Zur Kenntnis der Milbenfauna auf Düngerstätten. *Zentralblatt für das Gesamtgebiet der Entomologie*, **1**: 75–96, 129–156.
- Luxton, M.** 1982. Studies on the invertebrate fauna of New Zealand peat soils. II. — Restiad peats. *Revue d'Écologie et de Biologie du Sol*, **19**: 553–578.
- Prasad, V.** 1974. *A Catalogue of Mites of India*. 320 pp. Indira, Ludhiana, India.
- Sellnick, M.** 1940. Die Milbenfauna Islands. *Meddelanden från Göteborgs Musei Zoologiska Avdelning*, No. 83. *Göteborgs Kungl. Vetenskaps- och Vitterhets-Samhälles Handlingar*, (5), **B,6(14)**: 1–129.
- Sellnick, M.** 1958. Milben aus landwirtschaftlichen Betrieben Nordschwedens. *Meddelanden från Staten Växtskyddsanstalt. Stockholm*, **11**: 9–59.
- Wallace, M. M. H.** 1986. Some macrochelid mites (Acari: Macrochelidae) associated with Australian dung beetles (Coleoptera: Scarabaeidae). *Acarologia*, **27**: 3–15.

Case 2721***Bathynomus* A. Milne Edwards, 1879 (Crustacea, Isopoda): proposed precedence over *Palaega* Woodward, 1870**

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Abstract. The purpose of this application is to conserve the name of a well known genus of deep-sea isopods, *Bathynomus* A. Milne Edwards, 1879. It is threatened by the fossil genus *Palaega* Woodward, 1870, with which it is sometimes synonymized.

1. Alphonse Milne Edwards (1879, p. 21) first recognized the genus *Bathynomus* and described the genus and its type species, *Bathynomus giganteus*, from a single immature male, which is therefore the holotype. No illustration was given until the publication of Filhol's popular account of deep-sea life (Filhol, 1885, p. 147). About nine extant species and several possible fossil species are known (see Bruce, 1986, p. 126; Hessler, 1969, p. R374; Wetzer, 1986, p. 26). Because of the large size of species in this genus (up to 46 cm body length in *B. giganteus*; Wetzer, 1986), *Bathynomus* is a widely recognized name in deep-sea biology and is often included in popular accounts of Crustacea and of deep-sea life (e.g. Schmitt, 1965; Holthuis & Mikulka, 1972; Wetzer, 1986). The genus is included as an example of the Isopoda and as an example of deep-sea crustaceans in most invertebrate text books (e.g. Barnes, 1987, p. 769). The large size has also made *Bathynomus* an ideal subject for demonstrating isopod morphology and has facilitated studies on isopod physiology. It is probably the most widely known marine isopod genus. As far as we know, *Bathynomus* is the only name that has been used for these isopods since 1879 (Richardson, 1905, p. 130; Holthuis & Mikulka, 1972, p. 575).

2. The genus *Palaega* was established by Woodward (1870, p. 496), based on four specimens of the posterior part of a Cretaceous isopod for which he established the species *P. carteri* (p. 496). Because the posterior part of isopods is similar in a great variety of genera and families, many fossil isopods have subsequently been placed in the genus *Palaega* (see Hessler, 1969, p. R380; Wieder & Feldmann, 1989). *Palaega* is of doubtful validity (Hessler, 1969, p. R380) and is acknowledged by paleontologists to be 'a form genus including individuals from several flabelliferan families distinguished from one another by parts rarely seen in fossil specimens such as the mouthparts' (Wieder & Feldmann, 1989, p. 78).

3. Imaizumi (1953) placed fossil fragments of a pleon from the Miocene of Japan in *Bathynomus* and suggested that Woodward's specimens should be placed in *Bathynomus* rather than *Palaega*. Recent finds of well preserved fossils described as *Palaega* (*P. goedertorum* Wieder & Feldmann, 1989) suggest that at least some fossils currently placed in *Palaega* and the extant genus *Bathynomus* might be equivalent, although the principal distinguishing characters needed for precise generic placement are not visible in the fossils. For example, even on the best preserved fossils, no ventral morphology



Froeschner, R C and Kormilev, Nicholas A. 1990. "Carcinochelis Fieber 1861 Insecta Heteroptera Proposed Designation Of Carcinochelis alutaceus Handlirsch 1897 As The Type Species." *The Bulletin of zoological nomenclature* 47, 30–31. <https://doi.org/10.5962/bhl.part.2650>.

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