

CALANUS EUXINUS, NEW NAME, A REPLACEMENT
NAME FOR *CALANUS PONTICUS* KARAVAEV, 1894
(COPEPODA: CALANOIDA)

Kuni Hulsemann

Abstract. — The history of *Calanus ponticus* Karavaev, 1894 is presented and the new replacement name, *Calanus euxinus*, proposed.

The first author to distinguish the members of the genus *Calanus* Leach, 1819 living in the Black Sea from those found elsewhere was Karavaev (1894:37, pl. 3, figs. 1-18) (also transliterated Karawaiew). He named this population *Calanus finmarchicus* Günner var. *pontica*. Thereafter, he became aware of Giesbrecht's (1892) description of *C. finmarchicus* Gunnerus (p. 89) from the Mediterranean Sea which led Karavaev to re-examine his specimens and to compare these and additional specimens from the Black Sea to this description. The supposed differences upon which Karavaev had based the distinctiveness of the Black Sea population did not hold up; consequently, Karavaev (1895:121) withdrew his var. *pontica*.

Claus (1863:171) described a close relative of *Calanus finmarchicus* from the southern North Sea choosing to use for it the genus-group name *Cetochilus* Roussel de Vauzème, 1834 over the earlier *Calanus* Leach, thus disagreeing with Dana (1849:11) who had indicated the possible synonymy of *Cetochilus* with *Calanus*. The species to which Claus chose to apply the name *Calanus* are now divided among the genera *Paracalanus* Boeck, 1865, *Calocalanus* Giesbrecht, 1888 and *Clausocalanus* Giesbrecht, 1888. Claus named the new species from the southern North Sea *Cetochilus helgolandicus*. Nevertheless, Boeck (1865:230) included *Cetochilus* in *Calanus* Leach and synonymized the species-group name *helgolandicus* with *finmarchicus*. The prominent authors Brady (1883:30) and Gies-

brecht (1892:89) agreed with this synonymy. It is, therefore, not surprising that Karavaev (1894, 1895), too, considered it to be correct. However, Sars (1901:10, 12), while recognizing the genus-group name *Calanus* as valid, pointed out the separate status of *C. finmarchicus* and *C. helgolandicus*.

In various studies on morphology, distribution and systematics of *Calanus finmarchicus* s. l. Jashnov (1955, 1957, 1970) discussed differences between *C. finmarchicus* s. s. and *C. helgolandicus*. In the latter species he distinguished the population in the Black Sea as the new var. *ponticus* (1955:1216, 1957:194), later raised to subspecies *C. h. ponticus* (1970:204). Kovalev (1969:147) and Kovalev et al. (1975:195) presented further supporting evidence for the distinctiveness of the Black Sea specimens.

In their paper on geographical variation of *Calanus helgolandicus* s. l. Fleminger & Hulsemann (1987:76) proposed to give the Black Sea population the rank of species and the name *C. ponticus* Karavaev. Unknown to these authors Krichagin (1873:403) had already introduced the name *Calanus ponticus* for a species from the Black Sea. Krichagin used *Calanus* sensu Claus, 1863; his species belongs to the genus *Paracalanus* Boeck. Claus (1863:172) stated that the genus to which Leach (1819:539) first applied the name *Calanus* in no way conformed to the diagnosis he himself was giving for the genus. In spite of this statement his diagnosis and description are here deemed not to constitute the establishment of a nominal genus, but rather an erroneous assignment

of four species to *Calanus*. Consequently, *Calanus sensu* Leach and *Calanus sensu* Claus are not homonyms. The name *ponticus* Jashnov is a junior synonym of *ponticus* Karavaev; both names are junior primary homonyms of *ponticus* Krichagin (Article 57(b), International Code of Zoological Nomenclature) and hence invalid. A new name for *ponticus* Karavaev is required.

I hereby propose *Calanus euxinus* as a new replacement name for *C. ponticus* Karavaev, 1894. The species-group name is taken from the Greek *euxeinos* meaning hospitable, a classical epithet of the Black Sea.

In an obituary for A. Fleminger (Ferrari 1988:492) the authorship of *Calanus ponticus* was erroneously ascribed to Fleminger & Hulsemann, 1987.

Acknowledgments

I am grateful to Drs. J. W. Reid and T. E. Bowman, both National Museum of Natural History, Smithsonian Institution, Washington, D.C., for drawing my attention to the homonymy, and to T. E. Bowman for his valuable help with literature and discussion.

Literature Cited

- Boeck, A. 1865. Oversigt over de ved Norges Kyster iagt-tagne Copepoder hændørende til Calanidernes, Cyclopidernes og Harpactidernes Familier.—Forhandlinger i Videnskabs-Selskabet i Kristiania 1864:226–282.
- Brady, G. S. 1883. Report on the Copepoda collected by H.M.S. Challenger during the years 1873–76.—Report on the Scientific Results of the Voyage of H.M.S. Challenger during the years 1873–1876. Zoology 8, 23:1–142 + pls. 1–55.
- Claus, C. 1863. Die frei lebenden Copepoden. Leipzig. Wilhelm Engelmann, 230 pp. + pls. 1–37.
- Dana, J. D. 1849. Conspectus Crustaceorum quae in Orbis Terrarum circumnavigatione, Carolo Wilkes e Classe Reipublicae Foederatae Duce, pt. 2.—Proceedings of the American Academy of Arts and Sciences 2:9–61.
- Ferrari, F. D. 1988. Abraham Fleminger (1925–1988).—Journal of Crustacean Biology 8:490–492.
- Fleminger, A., & K. Hulsemann. 1987. Geographical variation in *Calanus helgolandicus* s. l. (Copepoda, Calanoida) and evidence of recent speciation in the Black Sea population.—Biological Oceanography 5:43–81.
- Giesbrecht, W. 1892. Systematik und Faunistik der pelagischen Copepoden des Golfes von Neapel.—Fauna und Flora des Golfes von Neapel 19:1–831 + pls. 1–54.
- Jashnov, V. A. 1955. Morphology, distribution and systematics of *Calanus finmarchicus* s. l.—Zoologicheskii Zhurnal 34(6):1210–1223.
- . 1957. Comparative morphology of the species of *Calanus finmarchicus* s. l.—Zoologicheskii Zhurnal 36(2):191–198.
- . 1970. Distribution of *Calanus* species in the Seas of the Northern Hemisphere.—Internationale Revue der Gesamten Hydrobiologie 55(2):197–212.
- Karavaev, V. 1894. Contributions to the Crustacean pelagic fauna of the Black Sea.—Kiev. Universitet. Obshchestvo estestvoispitatelei, Zapiski 13(1):35–61 + pls. 3–5.
- . 1895. Contributions to the copepod fauna of the Black Sea.—Kiev. Universitet. Obshchestvo estestvoispitatelei, Zapiski 14(1):117–174 + pls. 1–3.
- Kovalev, A. V. 1969. Variability in certain plankton Copepoda (Crustacea) in Mediterranean Sea Basins. Pp. 144–197, 231 in *Biologiya Moria* 17. Productive-biological processes in the plankton of Southern Seas. Akademiia Nauk Ukrainskoi SSR, Kiev.
- , E. P. Shelukhin, & V. N. Ivanov. 1975. On the taxonomic status of the Black Sea representative of the genus *Calanus* (Copepoda).—Zoologicheskii Zhurnal 54(2):195–199.
- Krichagin, N. 1873. Contributions to the knowledge of the fauna of the Black Sea. Copepoda.—Kiev. Universitet. Obshchestvo estestvoispitatelei, Zapiski 3(3):370–429 + pls. 10–14.
- Leach, W. E. 1819. Entomostraca. Pp. 524–543 in F. Cuvier, ed., Dictionnaire des Sciences Naturelles, volume 14. Paris, Strasbourg.
- Roussel de Vauzème, A. 1834. Description du *Cétichilus Australis*, nouveau genre du Crustacé branchiopode.—Annales des Sciences Naturelles, Paris 1:333–338.
- Sars, G. O. 1901. An account of the Crustacea of Norway. 4. Copepoda, Calanoida, parts I, II:1–28 + pls. 1–16. Bergen Museum, Bergen.

Biologische Anstalt Helgoland, Taxonomy Group, Notkestraße 31, 2000 Hamburg 52, Federal Republic of Germany.



1991. "Calanus euxinus, new name, a replacement name for Calanus ponticus Karavaev, 1894 (Copepoda: Calanoida)." *Proceedings of the Biological Society of Washington* 104, 620–621.

View This Item Online: <https://www.biodiversitylibrary.org/item/108199>

Permalink: <https://www.biodiversitylibrary.org/partpdf/46812>

Holding Institution

Smithsonian Libraries

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Biological Society of Washington

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.