

Mesostylus Bronn and Roemer, 1852, a senior subjective synonym of Protocallianassa Beurlen, 1930 (Crustacea: Decapoda: Thalassinidea): reversal of precedence

Author: Karasawa, Hiroaki

Source: Paleontological Research, 7(2) : 181-182

Published By: The Palaeontological Society of Japan

URL: <https://doi.org/10.2517/prpsj.7.181>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

SHORT NOTES

***Mesostylus* Bronn and Roemer, 1852, a senior subjective synonym of *Protocallianassa* Beurlen, 1930 (Crustacea: Decapoda: Thalassinidea): reversal of precedence**

HIROAKI KARASAWA

Mizunami Fossil Museum, Yamanouchi, Akeyo, Mizunami, Gifu, 509–6132, Japan (e-mail: GHA06103@nifty.ne.jp)

Received January 3, 2003; Revised manuscript accepted February 5, 2003

Key words: Crustacea, Decapoda, *Mesostylus*, nomenclature, *Protocallianassa*

Bronn and Roemer (1852) erected the new monotypic genus *Mesostylus* (Thalassinidae) for *Pagurus faujasi* Desmarest, 1822. Subsequently, A. Milne Edwards (1860) noted that *Mesostylus* was a junior subjective synonym of *Callianassa* Leach, 1814 and removed *M. faujasi* to *Callianassa*. Beurlen (1930) described the new thalassinid genus, *Protocallianassa* (type species: *Callianassa archiaci* A. Milne Edwards, 1860, by monotypy). Subsequently, Mertin (1941) removed *Callianassa faujasi* from *Callianassa* to *Protocallianassa*. Therefore, it can be seen that *Mesostylus* is a senior subjective synonym of *Protocallianassa*.

However, *Protocallianassa* is a name that is well established by many paleontologists. A presumed valid name, *Protocallianassa* has been used in 27 works by 20 authors in the immediately preceding 50 years (Table 1). The senior synonym, *Mesostylus*, has been used by only two authors, Bronn and Roemer (1852) and Bosquet (1854), and has not been used as a valid name after 1899. Thus, *Mesostylus* precedes *Protocallianassa*, but priority is suppressed under Arts. 23.9. 1.1 and 23.9.1.2 of the International Zoological Nomenclature (1999). Herein, the senior synonym, *Mesostylus*, becomes *nomen oblitum* and the junior synonym, *Protocallianassa*, is a *nomem protectum* under Art. 23.9.2.

Acknowledgments

Warmest thanks are extended to L. B. Holthuis (Nationaal Natuurhistorisch Museum, Leiden), T. Nishikawa (Nagoya University Museum, Nagoya), J. S. H. Collins (Natural History Museum, London), C. E. Schweitzer (Kent State University, U.S.A.), R. Fraaije (Oertijdmuseum de Groene Poort, Boxtel), A. Garassino (Natural History Museum, Milano), and G. Schweigert (Staatliches Museum

für Naturkunde, Stuttgart) for useful comments on the manuscript. I thank C. E. Schweitzer, A. I. Kafanov (Far East Branch of the Russian Academy of Sciences, Vladivostok), H. Kato (Natural History Museum and Institute, Chiba), and G. Schweigert for providing literature.

References

- Aguirre Urreta, M.B., 1983: Crustáceos decápodos barremanos de la región del Tucu-Tucu, Provincia de Santa Cruz. *Ameghiniana*, vol. 19, p. 303–317.
- Aguirre Urreta, M.B., 1989: The Cretaceous decapod Crustacea of Argentina and the Antarctic Peninsula. *Palaeontology*, vol. 32, p. 499–552.
- Aliev, O.B. and Aliev, R.A., 1980: Burrowing shrimp from the upper Cretaceous of the Malyi Kavkaz Mountains, USSR. *Paleontological Zhurnal*, no. 5, p. 141–143.
- Balss, H., 1957: Decapoda. In, Dr. H.G. Bronns *Klassen und Ordnungen des Tierreichs* Band 5, Arthropoda, Abteilung 1, Buch 7, Lieferung 12, p. 1505–1672.
- Beikirch, D.W. and Feldmann, R.M., 1980: Decapod crustaceans from the Pelugerville Member, Austin Formation (late Cretaceous: Campanian) of Texas. *Journal of Paleontology*, vol. 54, p. 309–324.
- Beurlen, K., 1930: Vergleichende Stammesgeschichte, Grundlagen, Methoden, Probleme unter besonderer Berücksichtigung der höheren Krebse. *Fortschritte in der Geologie und Paläontologie*, vol. 8, p. 317–586.
- Bishop, G.A., 1983: Fossil decapod crustaceans from the Lower Cretaceous, Glen Rose Limestone of Central Texas. *Transactions of the San Diego Society of Natural History*, vol. 20, p. 27–55.
- Bishop, G.A., 1985: Fossil decapod crustaceans from the Gammon Ferruginous Member, Pierre Shale (late Campanian), Black Hills, South Dakota. *Journal of Paleontology*, vol. 59, p. 605–624.
- Bishop, G.A., 1986a: Occurrence, preservation and biogeography of the Cretaceous crabs of North America. In, Gore, R.H. and Heck, K.L. eds., *Crustacean Biogeography, Crustacean Issues*

Table 1. List of authors who used the generic name *Protocallianassa* in the immediately preceding 50 years.

Author(s)
Glaessner (1956)
Balss (1957)
Roberts (1962)
Glaessner (1969)
Förster (1973)
Kriz and Cech (1974)
Förster (1977)
Taylor (1979)
Beikirch and Feldmann (1980)
Aliev and Aliev (1980)
Bishop (1983)
Aguirre Urreta (1983)
Bishop (1985)
Bishop (1986a)
Bishop (1986b)
Bishop (1986c)
Stinnesbeck (1986)
Feldmann and Wilson (1988)
Aguirre Urreta (1989)
Feldmann and Keyes (1992)
Vega, Feldmann, and Sour-Tovar (1995)
Feldmann, Casadío, Chirino-Gálvez, and Aguirre Urreta (1995)
Toolson and Kues (1996)
Felder and Jagt (1998)
Karasawa (1998)
Swen, Fraaije, and Gijsbert (2001)
Feldmann, Schweitzer, and Marensi (2003)

4, p. 111–141. A. A. Balkema, Rotterdam, Boston.

Bishop, G.A., 1986b: Two new crabs, *Parapaguristes tuberculatus* and *Palaeoxantho libertiensis* from the Prairie Bluff Formation (Middle Maastrichtian) Union County Mississippi. *Proceedings of the Biological Society of Washington*, vol. 99, p. 602–609.

Bishop, G.A., 1986c: Taphonomy of the North American decapods. *Journal of Crustacean Biology*, vol. 6, p. 326–355.

Bosquet, J., 1854: Les Crustacés fossiles du terrain crétacé du Limbourg. *Verhandelingen van de Commission van de Geologische Kaart van Nederland*, vol. 2, p. 13–138.

Bronn, H.G. and Roemer, F., 1852: *Lethaea geognostica, oder Abbildung und Beschreibung der für die Gebirgs-Formationen bezeichnendsten Versteinerungen*, viii + 124 p. Stuttgart.

Desmarest, A.G., 1822: *Histoire naturelle des crustacés fossiles, sous les rapports zoologiques et les crustacés proprement dites*, viii+685 p. Paris.

Felder, P.J. and Jagt, J.M.W., 1998: De stratigrafie van het type exemplaar van *Mosasaurus hoffmanni* Mantell, 1829, 'het grote dier van Maastricht', bepaald. *Publicaties van het Natuurhistorisch Genootschap in Limburg*, vol. 41, p. 49–51.

Feldmann, R.M. and Keyes, I.W., 1992: Systematic and stratigraphic review with catalogue and locality index of the Mesozoic and Cenozoic decapod Crustacea of New Zealand. *New Zealand Geological Survey Record*, no. 45, p. 1–73.

Feldmann, R.M. and Wilson, M., 1988: Eocene decapod crustaceans from Antarctica. *Geological Society of America Memoir*, vol. 169, p. 465–488.

Feldmann, R.M., Schweitzer, C.E. and Marensi, S.A., 2003: Decapod crustaceans from the Eocene La Meseta Formation, Seymour Island, Antarctica: A model for preservation of

decapods. *Journal of the Geological Society of London*, vol. 160, p. 151–160.

Feldmann, R.M., Casadío, S., Chirino-Gálvez, L. and Aguirre Urreta, M., 1995: Fossil decapod crustaceans from the Jaguel and Roca formations (Maastrichtian-Danian) of the Neuquén Basin, Argentina. *Paleontological Society Memoir (Supplement to Journal of Paleontology)*, vol. 69, no. 43, p. 1–22.

Förster, R., 1973: Die Krebse und ihre Bauten aus dem Santon der Gehrdenener Berge. *Bericht der Naturhistorischen Gesellschaft zu Hannover*, vol. 117, p. 149–162.

Förster, R., 1977: Untersuchungen an jurassischen Thalassinoidea (Crustacea, Decapoda). *Mitteilungen der Bayerische Staatssammlung für Paläontologie und historische Geologie*, vol. 17, p. 137–156.

Glaessner, M.F., 1956: Crustacea from the Cretaceous and Eocene of Western Australia. *Journal of the Royal Society of Western Australia*, vol. 40, p. 33–35.

Glaessner, M.F., 1969: Decapoda, In, Moore, R. C. ed., *Treatise on Invertebrate Paleontology, Part R, Arthropoda 4*, p. R399–R533, R626–R628. Geological Society of America, Boulder, and University of Kansas Press, Lawrence.

International Commission on Zoological Nomenclature, 1999: *International Code of Zoological Nomenclature, Fourth Edition*, 306 p. The International Trust for Zoological Nomenclature, London.

Karasawa, H., 1998: Two new species of Decapoda (Crustacea) from the Upper Cretaceous Izumi Group, Japan. *Paleontological Research*, vol. 2, no. 4, p. 217–223.

Kriz, J. and Cech, S., 1974: *Protocallianassa* burrows from the Bohemian upper Cretaceous. *Casopis pro Mineralogii a Geologii*, vol. 19, p. 419–424.

Leach, W.E., 1814: Crustaceology. In, Brewster, D. ed., *Edinburgh Encyclopedia*, vol. 7, 385–437.

Mertin, H., 1941: Decapode Krebse aus dem subherzynen und Braunschweiger Emscher und Unterse non sowie Bemerkungen über einige verwandte Formen in der Oberkreide. *Nova Acta Leopoldina, Neue Folge*, Bd. 10, vol. 68, 149–264.

Milne Edwards, A., 1860: Monographie des décapodes macrures fossiles de la famille des thalassiniens, *Annales des Sciences Naturelles, Zoologie, série 4*, vol. 14, p. 294–357.

Roberts, H.B., 1962: The upper Cretaceous decapod crustaceans of New Jersey and Delaware. *New Jersey Geological Survey Bulletin*, vol. 61, p. 163–191.

Stinnesbeck, W., 1986: Zu den faunistischen und palökologischen Verhältnissen in der Quiriquina Formation (Maastrichtium) Zentral-Chiles. *Palaeontographica, Abt. A*, vol. 194, p. 99–237.

Swen, K., Fraaije, R.H.B., and Gijsbert, J. van der Z., 2001: Polymorphy and extinction of the Late Cretaceous burrowing shrimp *Protocallianassa faujasi*: and first record of the genera *Corallianassa* and *Calliax* (Crustacea Decapoda Thalassinoidea) from the Cretaceous. *Contributions to Zoology*, vol. 70, p. 85–98.

Taylor, B.J., 1979: Macrurous Decapoda from the lower Cretaceous of south-eastern Alexander Island, Antarctica. *British Antarctic Survey Scientific Reports*, vol. 81, p. 1–39.

Toolson, E.K. and Kues, B.K., 1996: Decapod crustaceans from the Semilla Sandstone Member, Mancos Shale (Upper Cretaceous), north-central New Mexico. *Journal of Paleontology*, vol. 70, p. 111–116.

Vega, F.J., Feldmann, R.M. and Sour-Tovar, F., 1995: Fossil crabs (Crustacea: Decapoda) from the late Cretaceous Cárdenas Formation, East-Central Mexico. *Journal of Paleontology*, vol. 69, p. 340–350.