NOMENCLATURAL PROBLEMS ASSOCIATED WITH THE GENUS
COENOBITA LATREILLE, 1829 (DECAPODA, ANOMURA)

BY

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RÉSUMÉ


The terrestrial hermit crabs of the genus Coenobita Latreille have a long taxonomic history. Perusal of the literature reveals that there is considerable confusion regarding the date and authorship of the genus, its type species and the gender of the generic name. There are also problems regarding the synonymy of the genus.

Latreille (1825: 277) erected the genus with the French vernacular name, Cénobite. The date of Latreille’s work, ‘Familles naturelles du règne animal’, is often inaccurately cited as 1826 (e.g., by Henderson, 1888; Alcock, 1905; Fize & Serène, 1955; McLaughlin, 1974; Miyake, 1978). However, on p. 255 of the issue of June 1825 of the Bulletin universel des sciences et de l’industrie: Sciences naturelles et géologie (vol. 5 no. 2), the publication of Latreille’s ‘Familles naturelles du Règne Animal’ is announced (‘Nous nous empressons d’annoncer la publication de cet important ouvrage...’), while in the July issue of the same journal (vol. 5 no. 3) it is more extensively reviewed. Therefore there can be no doubt that the year of publication is 1825, and the date can even be narrowed down to June 1825.

As a vernacular name, Cénobite is not available under Articles 11b and 12c of the International Code of Zoological Nomenclature. Latreille (1829: 77) in Cuvier’s ‘Le Règne Animal’ latinized the name to Coenobita and hence Coenobita Latreille, 1829, should not be regarded as an emendation but rather the original citation of that available name.
Latreille (1825) did not establish a new species but noted ‘Le g. Cénobite (Pagurus clypeatus)’ and in 1829 placed Pagurus clypeatus in the newly named genus Coenobita. Latreille (1825, 1829) did not redescribe the species Coenobita clypeatus. The author of Coenobita clypeatus is usually cited as Herbst (1791: 22) (e.g., by Dana, 1852; Heller, 1865; Ortmann, 1892; Gordan, 1956; Provenzano, 1959; Chace & Hobbs, 1969; Miyake, 1978) but Cancer clypeatus Herbst, 1791, is actually a new combination of Pagurus clypeatus of Fabricius (1787: 328) and hence Fabricius, 1787 is the original author of this species name. Fabricius’ authorship generally has been overlooked in the literature and in fact Pagurus clypeatus in Fabricius (1798: 413) has been incorrectly cited as a new combination of Herbst’s Cancer clypeatus (e.g., by Stimpson, 1858; Borradaile, 1903; Alcock, 1905; Thompson, 1943; Fize & Serène, 1955; Yaldwyn & Wodzicki, 1979). The authorship of C. clypeatus has also been ascribed to H. Milne Edwards, 1837 (e.g., by Whitelegge, 1897).

The type species by monotypy of Coenobita Latreille, 1829, is therefore Pagurus clypeatus Fabricius, 1787. As noted above, Latreille did not name the species although Coenobita clypeatus (or C. clypea) Latreille is often cited (e.g., by Stimpson, 1858; Borradaile, 1903; Alcock, 1905; Thompson, 1943; Fize & Serène, 1955; Yaldwyn & Wodzicki, 1979). The authorship of C. clypeatus has also been ascribed to H. Milne Edwards, 1837 (e.g., by Whitelegge, 1897).

The gender of the generic name Coenobita Latreille, 1829 has been regarded historically as either feminine or masculine. This is particularly evident in the use of -a and -us suffixes for the names of several species of Coenobita, including C. clypeata/clypeatus (Fabricius, 1787), C. rugosa/rugosus H. Milne Edwards, 1837, C. compressa/compressus H. Milne Edwards, 1837, C. spinosa/spinosus H. Milne Edwards, 1837, C. perlata/perlatus H. Milne Edwards, 1837 and C. brevimanus/brevimanus Dana, 1852. Authors using the feminine termination include H. Milne Edwards (1837), Owen (1839), Dana (1852), Haswell (1882), Henderson (1888), Whitelegge (1897), McCulloch (1918), Estampador (1937), Fize & Serène (1955) and Yaldwyn & Wodzicki (1979). Authors using the masculine termination include Ortmann (1892), Faxon (1895), Alcock (1905), McCulloch (1909), Boone (1931), Holthuis (1954), Forest (1954), Provenzano (1959), Lewinsohn (1969), Ball & Haig (1972), Miyake (1978) and Haig (1984).

The name Coenobita is later ecclesiastical Latin meaning ‘a monk’, derived from the Greek κοινώμων for ‘communal life’ (κοινός, ‘common’ and βίος, ‘life’) (Lewis & Short, 1890; Souter, 1949). The majority of Latin nouns ending in -a are feminine in gender, but Coenobita is masculine, as are poeta ‘a maker (of verse)’, and nauta ‘a sailor’. Under Article 31(b) of the International Code of Zoological Nomenclature, species-group names which are, or end in, a Latin adjective, or are latinized, must agree in gender with the respective genus and hence the masculine suffix -us rather than the feminine -a is correctly employed with Coenobita. The masculine gender of Coenobita was previously noted by Eduard von Martens in a footnote in the paper by Hilgendorf (1869: 98). This footnote is as follows: ‘Coenobita wird fälschlich von den Meisten als
Femininum gebraucht, es ist Masculinum so gut wie poëta und andere dem Griechischen entlehnte Nomina der lateinischen ersten Deklination. Latreille scheint bei der Wahl dieses Namens von den Begriff Einsiedler, Eremit, durch den Doppelsinn des Wortes Mönch, monachus, von μονάς, allein, verführt, auf den des Klosterbewohners übergesprungen zu sein und hat unglücklicher Weise ein Wort gewählt, dessen Etymologie (μονάς, βίος) gerade die Gemeinschaftlichkeit des Lebens bezeichnet, was auf die Einsiedlerkrebse schlecht passt. (E. v. Martens).” The limited availability of Hilgendorf’s work and the consequent widespread ignorance of Von Martens’ comment prompted the present discussion of gender.

Although the name Coenobita Latreille is universally accepted and is the only name used for the genus since the middle of last century, it is threatened by two, possibly three, older names. Berthold (1827) in his book, ‘Latreille, Natürliche Familien des Thierreichs’, a German translation of Latreille (1825), latinized many of Latreille’s French vernacular names and thereby became the author of these names (e.g. the genus Gonodactylus in Stomatopoda). Berthold (1827: 263) latinized Cénobite, using the latin name Cenobites. Cenobites Berthold, 1827, type species Pagurus clypeatus Fabricius, 1787, is therefore an older objective synonym of Coenobita Latreille, 1829, and should be used in its stead. However, such a name change would cause great confusion and serve no useful purpose so that an application now will be submitted to the International Commission on Zoological Nomenclature for the suppression of Cenobites Berthold, 1827.

The second name that threatens Coenobita is even older than Cenobites. It is Carcinion Jarocki, 1825. Felix Paul von Jarocki, a Polish zoologist published between 1821 and 1838 the six volumes of his treatise “Zoologiia”. The fifth volume, published in 1825, deals with the Crustacea. Here on p. 108 the following paragraph is found:


The next paragraph deals with “b. Muszlowiec. Pagurus.” The name Carcinion is an available generic name, the type species of the genus (by monotypy) is Pagurus clypeatus Fabricius, 1787. The generic name has not been used previously and it is an objective senior synonym of both Coenobites Berthold, 1827, and of Coenobita Latreille, 1829. The genus is listed in the main nomenclators, but has almost been completely overlooked by carcinologists. The only reference to it in carcinological literature that we have been able to find is that by De Haan (1849: 212) in the Crustacean volume of Fauna Japonica, where it is cited as a synonym of Coenobita. Probably De Haan considered Coenobita Latreille to date from 1825 and treated therefore Carcinion as a junior synonym. In no other work dealing with Coenobita did we find any
reference to Carcinion. The reintroduction of Carcinion at this late date would greatly upset nomenclatural stability, and therefore the suppression of the name has been requested.

A third name which poses a possible threat to Coenobita is Eremita Osbeck, 1765. In his ‘Reise nach Ostindien und China’, Osbeck (1765: 365) described from the Meeuwenbaai, southwest Java, the following species: “Der Schneckenfisch oder Eremita javanica ward in einer Schneckenanschale angetroffen; die linke Klauen desselben war grösser, es ist aber doch eine andere Gattung, als unser gemeiner Cancer bernhardus’. Osbeck’s generic name has been overlooked and is not in any nomenclator that we consulted (e.g. C. D. Sherborn’s ‘Index Animalium’ and S. A. Neave’s ‘Nomenclator Zoologicus’). The name is available as it is accompanied by a description, albeit a very short and unsatisfactory one. Osbeck evidently found the species on the shore, which he described in the previous paragraph as covered almost everywhere with corals, especially madrepores and tubipores, as well as fossilized sponges and mollusks. If the hermit crab was found between these dead corals out of the water it could very well be Coenobita, C. rugosus being quite common on the Javanese coast. However, this cannot be proven. Both the names Eremita Osbeck, 1765 and javanica Osbeck, 1765, have never been used since for a hermit crab. Eremita, is the oldest generic name for a hermit crab, being even older than Pagurus Fabr., 1775. In the interest of stability, the Commission will be asked to suppress these two names proposed by Osbeck.

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REFERENCES

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