



Article

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Zoanthid housekeeping: some nomenclatural notes on the Zoantharia (Cnidaria: Anthozoa: Hexacorallia)

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Abstract

The identities, authorship and/or spellings of three genus- and three family-group names in the order Zoantharia (= Zoanthidea), are clarified. *Palythoa axinellae* Schmidt, 1862, is designated as the type species of *Heterozoanthus* Verrill, 1870, making this genus-group name an objective synonym of *Parazoanthus* Haddon & Shackleton, 1891, with prevailing usage of the latter maintained by a reversal of precedence. The family-group name Heterozoanthidae was inadvertently established by Pax & Müller (1956), and is a junior objective synonym of Parazoanthidae Delage & Hérouard, 1901. The genus- and family-groups names *Mardoell* and Mardoellidae (both established by Danielssen 1890) are respective synonyms of *Epizoanthus* Gray, 1867, and Epizoanthidae Delage & Hérouard, 1901, with prevailing usage of the last-named family-group conserved by a reversal of precedence. The genus-group name *Mardoellia* Blanchard, 1893, is an unjustified emendation and objective synonym of *Mardoell* Danielssen, 1890. Rafinesque (1815) and not Gray (1832, 1840) is the author of the family-group name Zoanthidae.

Keywords: Zoantharia, Zoanthidea, type species designation, Article 23.9, ICZN, nomenclature.

Introduction

The taxonomy of the order Zoantharia (= Zoanthidea) remains far from resolved, with many new taxa being discovered and described (e.g. Fujii & Reimer 2011). In addition to this, the order is filled with many species- and genus-group names of doubtful validity (Burnett *et al.* 1997; Reimer *et al.* 2006b). Two recent publications (Low & Reimer 2011a, b) address this ‘synonymy load’ from a nomenclatural viewpoint, and this publication builds on this effort to further resolve and stabilise the nomenclature and taxonomy of the zoanthids. Herein, the current (fourth) edition of the *International Code of Zoological Nomenclature* is referred to as the Code (ICZN 1999).

***Heterozoanthus* Verrill, 1870 (*nomen oblitum*), and Heterozoanthidae Pax & Müller, 1956, objective synonyms of *Parazoanthus* Haddon & Shackleton, 1891 (*nomen protectum*), and Parazoanthidae Delage & Hérouard, 1901: reversal of precedence**

Verrill (1870: 371) established the genus-group name *Heterozoanthus* with the inclusion of three species—*Palythoa axinellae* Schmidt, 1862, *Parazoanthus swiftii* Duchassaing & Michelotti, 1860, and the new species *Heterozoanthus scandens*. No type species was designated. *Palythoa axinellae* Schmidt, 1862, and