



## Saving an octocoral genus from a “zoanthid” genus: reversal of precedence of *Palythoe* Lamouroux, 1812, and *Muricea* Lamouroux, 1821 (Cnidaria: Anthozoa: Octocorallia)

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Lamouroux (1812: 360) established the genus-group name *Palythoe*, with the following diagnosis in French: “Palythoe [...] P[olypiers] dendroïde rameux; axe presque toujours comprimé, recouvert d’une écorce très épaisse, en partie calcaire, parsemé de mammelous saillans, chacun terminé par une cellule polypifère”. This translates as: “A group dendroid in branching; almost always axially compressed, covered with very thick ectoderm, partly calcareous dotted with prominent bumps, each terminated by a polyp”.

Within this genus-group, Lamouroux included three available species-group names—*Gorgonia antipathes* Linnaeus, 1758, *Gorgonia muricata* Pallas, 1766, and *Gorgonia papillosa* Esper, 1797. No type species was designated.

Four years later, in his treatise *Histoire des Polypiers Coralligènes*, Lamouroux (1816: 359) established the genus-group name *Palythoa*, with the following diagnosis in French: “Palythoé. *Palythoa*. [...] Polypier en plaque étendue, couverte de mamelons nombreux, cylindriques, de plus d’un centimètre de hauteur, réunis entre eux; les cavités ou cellules isolées, presque cloisonnées longitudinalement et ne contenant qu’un seul polype”, which translates as “platelike, covered in a number of nipples that are cylindrical and more than one centimetre in height, joined together, the cavities or cells are isolated almost longitudinally partitioned containing only one polyp”.

Two available species-group names were included in *Palythoa* by Lamouroux (1816: 359–362)—*Alcyonium mammillosum* Ellis & Solander, 1786, and *Alcyonium ocellatum* Ellis & Solander, 1786. Haddon & Shackelton (1891b: 691) designated *Alcyonium mammillosum* as the type species of *Palythoa*.

It would appear that the name “*Palythoe*” (as used by Lamouroux 1812) was simply the French vernacular (and thus unavailable) name of *Palythoa* (as used by Lamouroux 1816). However, the style and format in which the name was printed in Lamouroux (1812) is indicative that it was indeed a Latinised name. Firstly, there is no accent on the last letter “e” of *Palythoe* (as used in Lamouroux 1812), despite accents being used on other “e”s in the rest of the text, as consistent with their use in French language. Secondly, no French vernacular names for any of the other genera are given in Lamouroux (1812). All the other genus-group names (e.g. *Isis*, *Melitea*, *Adeona*) are clearly in Latin. Finally, the descriptions of the 1812 and 1816 genus-groups are clearly different. Thus, the genus-group names *Palythoe* and *Palythoa* are two separate and distinct names proposed by Lamouroux in 1812 and 1816, respectively.

Article 56.2 of The International Code of Zoological Nomenclature (hereafter the Code, ICZN 1999: 60) states that a one-letter difference between two genus-group names is sufficient to prevent homonymy. Thus, both *Palythoe* and *Palythoa* are available names.

It is clear from the respective diagnoses of *Palythoe* and *Palythoa* that they are distinct taxonomic entities. *Palythoe* is clearly a “partially calcareous”, branching octocoral group, while *Palythoa* is clearly a colonial zoanthid.

*Palythoa* is currently considered to be a valid zoanthid genus and is in widespread use (e.g. Burnett *et al.* 1997: 55, 57–59, 63–67; Reimer *et al.* 2006: 87–93; Ryland & Lancaster 2003: 407–411, 416, 420, 422, 426–428). The genus-group name *Palythoe* as defined by Lamouroux (1812) has not been used as a valid genus in over 100 years. Furthermore, all instances of the name “*Palythoe*” in post-1899 literature are clearly incorrect spellings of *Palythoa* and refer to zoanthids and not octocorals (e.g. Branch *et al.* 2007: 16; Stimson 1974: 445). To prevent future confusion and