

Article



Nomenclatural emendations of the family-group names Cylindrolepadinae, Stomatolepadinae, Chelolepadinae, Cryptolepadinae, and Tubicinellinae of Ross & Frick, 2007—including current definitions of family-groups within the Coronuloidea (Cirripedia: Balanomorpha)

ARNOLD ROSS^{1†} & MICHAEL G. FRICK²

¹Scripps Institution of Oceanography, La Jolla, California 92093, USA (†deceased)

²Archie Carr Center for Sea Turtle Research, Department of Biology, University of Florida, Gainesville, Florida, USA. E-mail: caretta05@aol.com

Abstract

The coronuloid barnacle family-group names Cylindrolepadinae, Stomatolepadinae, Chelolepadinae, Cryptolepadinae and Tubicinellinae of Ross & Frick, 2007 are considered *nomen nudum* according to Article 8.6 of the International Code of Zoological Nomenclature, but appear in several subsequent published works and internet taxonomic databases. It is the purpose of this communication to rectify this situation. These five subfamilial names are proposed and defined herein anew, as Cylindrolepadinae **subfam. nov.**, Stomatolepadinae **subfam. nov.**, Chelolepadinae **subfam. nov.**, Cryptolepadinae **subfam. nov.** and Tubicinellinae **subfam. nov.** The remaining valid family-group names within the Coronuloidea are also listed and defined herein.

Key words: Coronuloidea, Cylindrolepadinae **subfam. nov.**, Stomatolepadinae **subfam. nov.**, Chelolepadinae **subfam. nov.**, Cryptolepadinae **subfam. nov.**, Tubicinellinae **subfam. nov.**

Introduction

In 1999, the late cirripedologist Arnold Ross (1936-2006) and Michael Frick embarked on a collaborative examination of the biology and systematics of the turtle and whale barnacles (Cirripedia: Balanomorpha: Coronuloidea). The specimens examined were collected by Ross and Frick as well as by numerous colleagues and have been catalogued and deposited in the collections of Scripps Institution of Oceanography (La Jolla, California), the California Academy of Sciences (San Francisco, California) and the Peabody Museum of Natural History at Yale University (New Haven, Connecticut). Numerous specimens from national and international museum collections, including the type specimens of many coronuloid species, were also examined.

At the time of the untimely death of Arnold Ross, their work on the coronuloid barnacles, although incomplete, allowed them to ascertain certain new taxonomic relationships among the turtle and whale barnacles. They published on a new genus of turtle barnacles, *Chelolepas* **gen. nov.** Ross & Frick, 2007 and, under the aegis of the Epibiont Research Cooperative (ERC), reviewed and amended the classification of the turtle and whale barnacles (Ross & Frick 2007b, available only in electronic format), defining and illustrating five new subfamilies of the Coronuloidea: the Cylindrolepadinae, Stomatolepadinae, Chelolepadinae, Cryptolepadinae and Tubicinellinae.

Three of these new subfamilies (Cylindrolepadinae, Stomatolepadinae and Chelolepadinae) have appeared in four later publications (Frick and Zardus 2010; Frick et al. 2010a, b; Frick et al. 2011) and the overall coronuloid classification has been included in on-line taxonomic databases on the internet (i.e. www.BioLib.cz; gniglobalnames.org; www.gbrmpa.gov.au). However, according to the International Code of Zoological Nomenclature, Article 8.6, "For a work produced after 1999 by a method other than printing on paper to be accepted as published within the meaning of the Code, it must contain a statement that copies (in the form in which it is published) have been deposited in at least 5 major publicly accessible libraries which are identified by name in the work itself"