

New families and subfamilies of amphipod crustaceans

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Abstract

Cleonardopsis K.H. Barnard, 1916, has been incorrectly placed in the Eusiridae. Based on mouthpart morphology, body carination and the shape of the gnathopods it is reassigned to the Amathillopsidae in the new subfamily Cleonardopsinae. Cleonardopsinae is cosmopolitan in the deep sea. *Parepimeria* Chevreux, 1911, has been incorrectly placed in the Epimeriidae. Coleman & Barnard (1991) suggested that it be moved to the Pleustidae. Bousfield & Hendrycks (1994) rejected this suggestion. It is excluded from the Pleustidae because of the progressively larger and ventrally acute coxae 1 to 4, simple first and second gnathopods and carinate urosomites. *Parepimeria* appears to be a sister taxon of *Amathillopsis* Heller, 1875, and forms the basis of a new monotypic subfamily, Parepimeriinae, within the Amathillopsidae. Parepimeriinae appears to be a Southern Ocean endemic. *Miramarassa* Ortiz, Lalana & Lio (1999) was originally placed in the Aristiidae mainly because it has an elongate ischium on gnathopod 2. It is excluded from the aristiids and the lysianassoids, because of the slender antenna 1 which is characteristically non-lysianassoid, the mandibular incisor which is curved and serrate and the lacinia mobilis which occurs on both mandibles. A monotypic family, Miramarassidae, is established which may have affinities with iphimerioid taxa. Miramarassidae is currently known only from Cuba. *Regalia* K.H. Barnard (1930) has generally been considered as a calliopiid amphipod, although some workers have discussed its similarity to the Pleustidae. A fresh evaluation of the genus has shown that characters not considered by earlier workers, such as a callynophore on antenna 1, brush setae on antenna 2 and a straight, minutely serrate incisor on the mandible, indicate that *Regalia* cannot be a calliopiid or a pleustid. *Regalia* appears to be most similar to members of the Pardaliscidae, but a number of characters such as the lack of an accessory flagellum, the presence of a left and right lacinia mobilis, a well developed molar and lateral ridging on the pleosome exclude it from this family. Consequently Regaliidae is established as a new monotypic family for *Regalia*, with an Indo-West Pacific distribution. *Sancho* Stebbing, 1897, has most recently been placed in the Eusiridae (*sensu lato*), but might be more suited to the Calliopiidae (*sensu stricto*) because of its entire telson. Unlike eusirids or calliopiids, species of *Sancho* have a non-recessed head and a dorsoventrally flattened urosome. Sanchoidae is established as a new monotypic family for *Sancho*, currently known from shallow water in south-eastern Australia.

Key words: Amphipoda, new families, new subfamilies, taxonomy, Amathillopsidae,

Amathillopsinae (**new status**), Cleonardopsinae **subfam. nov.**, Parepimeriinae **subfam. nov.**, Miramarassidae **fam. nov.**, Regaliidae **fam. nov.**, Sanchoidae **fam. nov.**

Introduction

Martin & Davis (2001) listed 154 families of amphipods in the latest amphipod family level classification. Since then an additional 22 new families have been described (table 1) and about 13 families have had their status changed, either re-established or synonymised, bringing the total to between 183 and 189 families depending on which classifications are accepted.

TABLE 1. New amphipod families described since Martin & Davis (2001).

Aetiopedesidae	Myers & Lowry, 2003
Amaryllididae	Lowry & Stoddart, 2002
Baikalogammaridae	Kamaltynov, 2001
Behningiellidae	Kamaltynov, 2001
Bougisidae	Zeidler, 2004b
Carinogammaridae	Tachteew, 2000
Chevaliidae	Myers & Lowry, 2003
Crymostygidae	Kristjansson & Svavarsson, 2004
Eurytheneidae	Stoddart & Lowry, 2004
Iphigeniellidae	Kamaltynov, 2001
Iulopididae	Zeidler, 2004b
Kamakidae	Myers & Lowry, 2003
Lestrigonidae	Zeidler, 2004b
Microprotopidae	Myers & Lowry, 2003
Miramarassidae	fam. nov.
Pallaseidae	Tachteew, 2000
Paragammaropsidae	Myers & Lowry, 2003
Rakiroidae	Myers & Lowry, 2003
Regaliidae	fam. nov.
Sanchoidae	fam. nov.
Sicafodiidae	Just, 2004
Unciolidae	Myers & Lowry, 2003

During this time the main works on family level taxa have been the revision of the Lake Baikal “gammaridean” amphipods by Tachteew (2000) and Kamaltynov (1999, 2001), the revision of corophiidean amphipods by Myers & Lowry (2003); the revision of talitroidean amphipods by Bousfield & Hendrycks (2002), Bousfield & Marcoux (2004) and Serejo (2004) and the continuing revision of hyperiidean amphipods (Zeidler 2003a, b; 2004a, b; 2006) and lysianassoid amphipods (Lowry & Stoddart 2002; Stoddart & Lowry 2004). In addition Kristjansson & Svavarsson (2004) described a remarkable