Zootaxa 3499: 27–45 (2012)
www.mapress.com/zootaxa/

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

Article

urn:lsid:zoobank.org:pub:CEEE477A-5F39-417F-8DFA-09102398734A

New, mainly southern hemisphere, freshwater families of Amphipoda (Crustacea), together with a description of the first freshwater calliopiid, *Lutriwita bradburyi* gen. nov. et sp. nov.

J.K. LOWRY[1] & A.A. MYERS[2]

[1]*Crustacea Section, Australian Museum, 6 College Street, Sydney, New South Wales, 2010, Australia.*
E-mail: jim.lowry@austmus.gov.au
[2]*School of Biological, Environmental and Earth Sciences, National University of Ireland Cork, Enterprise Centre, Lee Fields, Cork, Ireland. E-mail: bavayia@gmail.com*

Abstract

Nine new freshwater amphipod families are described: Chillagoeidae **fam. nov.**; Crangoweckeliidae **fam. nov.**; Dussartiellidae **fam. nov.**; Falklandellidae **fam. nov.**; Giniphargidae **fam. nov.**; Pseudingolfiellidae **fam. nov.**; Sandroidae **fam. nov.**; Sensonatoridae **fam. nov.** and Uronyctidae **fam. nov.** The subfamily Seborgiinae Holsinger, 1980 is raised to family level and two families, Austroniphargidae Iannilli, Krapp & Ruffo, 2011 and Pseudoniphargidae Karaman, 1993, are revised. The first freshwater example of the extensive marine family Calliopiidae, *Lutriwita bradburyi* **gen. nov., sp. nov.**, is described from Australia.

Key words: Crustacea, Amphipoda, Tasmania, Australia, taxonomy, new family, new genus, new species, Austroniphargidae, Calliopiidae, Chillagoeidae, Crangoweckeliidae, Dussartiellidae, Falklandellidae, Giniphargidae, Pseudingolfiellidae, Pseudoniphargidae, Sandroidae, Seborgiidae, Sensonatoridae, Uronyctidae, *Lutriwita bradburyi*

Introduction

Including the new families proposed here there are currently 62 amphipod families with freshwater representatives. Thirty-three of these families occur in the southern hemisphere, but only 27 have freshwater representatives there. Eighteen families are restricted to the southern hemisphere and of those, twelve are confined to the post-gondwanan fragment they occupy. The majority (60%) of the southern hemisphere families have been described since 1970.

The most widely distributed family is the ancient Bogidiellidae that occurs in post-Laurasia and is found on five of the eight post-Gondwanan fragments (table 1). Other widely distributed post-Gondwanan families are the chiltoniids and paracalliopiids each of which occurs on three fragments. Corophiids, melitids, paraleptamphopids, paramelitids, phreatogammarids and pseudingolfiellids each occur on two post-gondwanan fragments.

More interesting are the southern hemisphere endemics such as the chiltoniids which show a post-Gondwanan distribution between Australia, New Zealand and South Africa; the paracalliopiids distributed between Australia, New Zealand and India; the paraleptamphopids and pseudingolfiellids which both occur in New Zealand and South America; the diverse paramelitids which occur in Australia and South Africa and the phreatogammarids found in New Caledonia and New Zealand. These are all ancient families in place at the time Gondwana began to fragment. All of the studied post-Gondwanan fragments have at least one endemic family-level taxon, but two fragments, Australia with five endemic families and Madagascar with three, have the highest diversity of family-level taxa in the southern hemisphere.

Accepted by S. Gerken: 14 Aug. 2012; published: 27 Sept. 2012