NOTES ON SOME INDO-PACIFIC PONTONIINAE, XLVII.
RE-EVALUATION OF THE GENERA APOPONTONIA BRUCE, 1976,
PARACLIMENAEUS BRUCE, 1988 AND CLIMENIPERAEUS BRUCE, 1996

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ABSTRACT

The holotype specimen of the pontoniine shrimp, *Periclimenaeus spinicaudata* Bruce, 1969, is
described and illustrated for the first time. It is found to closely resemble *Paraclimenaeus fimbriatus*
(Borradaile, 1915) and is transferred to the genus *Paraclimenaeus* Bruce, 1988b. *Apopontonia dubia*
Bruce, 1981b is found to be a junior synonym of *Paraclimenaeus spinicauda* (Bruce, 1969). The
pontoniine genera *Apopontonia* Bruce, 1976, *Paraclimenaeus* Bruce, 1988, and *Climeniperaeus*
Bruce, 1996 are re-defined. *Apopontonia* is restricted to the single species *Apopontonia falcirostris*
Bruce, 1976. *Apopontonia orbitospinata* Bruce, 2001, is transferred to the genus *Climeniperaeus*,
together with *Periclimenaeus truncatus* (Rathbun, 1906) and *Periclimenaeus orbitospinatus* Bruce,
1969. *Apopontonia seticauda* Bruce, 2008, is also transferred to the genus *Paraclimenaeus* Bruce.

INTRODUCTION

Many years ago, the author presented a paper providing preliminary descriptions
of several species of the genus *Periclimenaeus* Borradaile, 1915, mainly from East

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African waters (Bruce, 1969). The type material was generally deposited in the collections of the Rijksmuseum van Natuurlijke Historie [now National Museum of Natural History], Leiden. Fuller descriptions of most of these species have since been made available. One species in this paper, *Periclimenaeus spinicauda* Bruce, 1969, was overlooked. There have been no further reports of this species in the intervening 45 years since its initial capture. Recent further examination of this specimen has allowed its systematic position to be more accurately assessed. It cannot be referred to the genus *Periclimenaeus* Borradaile, 1915, and it should be placed in the genus *Paraclimenaeus* Bruce, 1988b. It also became apparent that *Apopontonia dubia* Bruce, 1981, is a junior synonym of this species.

In the course of this study some anomalies were noted in the morphologically similar genera *Apopontonia* Bruce, 1976, *Paraclimenaeus* Bruce, 1988, and *Climeniperaeus* Bruce, 1996. These genera share the following characters: rostrum well developed, dentate, lateral carinae expanded, hepatic spine absent, orbit well developed, maxillipeds with well developed exopods, fourth thoracic sternite without median process, ambulatory dactyls compressed, biunguiculate, corpus ventrally dentate, uropodal exopod laterally multispinose.

The three genera may then be distinguished as follows:

1. Second pereiopods subequal and similar, small ........................................... *Apopontonia*
   – Second pereiopods unequal and dissimilar, large .................................................. 2

2. Large supraorbital teeth present ................................................................. *Climeniperaeus*
   – Supraorbital teeth absent .............................................................................. *Paraclimenaeus*

The genus *Apopontonia* is here restricted to the single species, *A. falcirostris* Bruce, 1976. *Periclimenaeus spinicauda* Bruce, 1969 is transferred to the genus *Paraclimenaeus*, as is *Apopontonia seticauda* Bruce (2008). *Apopontonia orbitospinatus* Bruce, 1969 is transferred to the genus *Climeniperaeus*, in which genus *Coralliocaris truncatus* Rathbun, 1906, is also now included.

Little is known of the biology of these shrimps. Several species have been reported from unidentified sponge hosts. *Apopontonia falcirostris* has been reported from *Psammascus* sp. (cf. Bruce, 1981a) and *Xestospongia testudinaria* (Lamarck, 1815) (cf. De Grave, 2000); *Climeniperaeus truncoides* (Chace & Bruce, 1993) from *Biemmna foritis* (Topsent, 1897) (cf. Bruce, 1976) and *Paraclimenaeus spinicauda* from *Ircinia* sp. cf. *echinata* (Keller, 1889) (cf. Bruce, 1982) and *Spongia* sp. (cf. Bruce, 1983). It is likely that all species are obligatory sponge associates.

CL refers to the postorbital carapace length (mm); MNHN, Muséum national d’Histoire naturelle, Paris; NMV, National Museum of Victoria, Melbourne; NTM, Museums and Art Galleries of the Northern Territory, Darwin; RMNH, Nationaal Natuurhistorisch Museum — Naturalis, Leiden; QM, Queensland Museum, Brisbane; USNM, United States National Museum, Washington, D.C.; ZMA, Zoology