

## Article



Designation of *Ancylomenes* gen. nov., for the '*Periclimenes aesopius* species group' (Crustacea: Decapoda: Palaemonidae), with the description of a new species and a checklist of congeneric species\*

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## **Abstract**

A new genus of the subfamily Pontoniinae, Ancylomenes gen. nov. is established for the 'Periclimenes aesopius species group' of the genus Periclimenes Costa. The new genus is distinguished from other genera of Pontoniinae on account of the strongly produced inferior orbital margin with reflected inner flange, and the basicerite of the antenna armed with an angular dorsal process. Fourteen species have been previously recognized as belonging to the 'P. aesopius species group'. One Eastern Pacific species (P. lucasi Chace), and two Atlantic species (P. anthophilus Holthuis & Eibl-Eibesfeldt, and P. pedersoni Chace) are now also placed in Ancylomenes gen. nov. A further new species associated with a cerianthid sea anemone, A. luteomaculatus sp. nov. is described and illustrated on the basis of specimens from the Ryukyu Islands, southern Japan, and Philippines. A key for their identification, and a checklist of the species of Ancylomenes gen. nov. are provided.

Key words: Crustacea, Decapoda, Palaemonidae, Periclimenes, Ancylomenes, new genus, new species

## Introduction

In 1993 and 1994, important references for taxonomic studies on the subfamily Pontoniinae were proposed; a partial revision for the Philippine-Indonesian species of Palaemonoidea (Chace & Bruce 1993), and the synopsis of the Indo-Pacific genera of Pontoniinae (Bruce 1994). In these articles, *Periclimenes* Costa, 1844 was considered the largest genus in Pontoniinae, containing over 140 species worldwide at that time. Bruce (1994) suggested that *Periclimenes* might be polyphyletic in origin because several distinct species groups have been recognized in the genus (Kemp 1922; Bruce 1987, 1989, 1990b; Berggren 1994; Okuno 2002). Since 2004, indeed, several *Periclimenes* species have been removed, 8 genera newly established (Bruce 2006, 2007b, c; Bruce *et al.* 2005; Marin 2006, 2007; Marin & Chan 2006; Li 2009) and 4 resurrected genera (Bruce 2004, 2007a, d; Okuno & Fujita 2007; Okuno 2009). Furthermore, the generic position of some of the remaining species of *Periclimenes* remains unclear.

One of the species groups within *Periclimenes*, the '*Periclimenes aesopius* species group' is characterized by the reflected infraorbital angle on carapace, an interocular process on the ophthalmic somite, and an angular process on the dorsal margin of the antennal basicerite. These morphological particulars are lacking not only in other *Periclimenes* species but also in other genera of the Pontoniinae, we consider, therefore, that this species group should be elevated to full generic status. In this paper, we establish a new genus, *Ancylomenes*, for the '*P. aesopius* species group'. Fourteen Indo-West Pacific species previously considered

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