



## A review of the pontoniine shrimp genus *Rapipontonia* Marin, 2007 (Decapoda: Caridea: Palaemonidae), with the description of a new species from the Indo-West Pacific

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### Abstract

A review of hydroid-associated pontoniine shrimp genus *Rapipontonia* Marin, 2007 is presented. The genus is characterized by a highly specific prehensile mechanism of the ambulatory pereopods that allows clinging to their hosts. A new species is described from Vietnam and Indonesia distinguished from the most similar species, *R. paragalene* Marin, 2007, by longer rostrum, longer carpus of the minor second pereopod in females and the number of unpaired spines on the distoventral margin of propodus of the ambulatory pereopods. A new record of *Rapipontonia galene* (Holthuis, 1951) from Hawaii significantly extends the known range of the species. A revised key for the identification of all species of the genus is given. Based on morphology of mature females and distribution of individuals per hosts observed in Vietnam, a sex-role reversal mechanism is suggested for the first time within the subfamily.

**Key words:** Crustacea, Decapoda, Palaemonidae, *Rapipontonia*, hydroid-associated, new records, new species, sexual dimorphism, sex-role reversal

### Introduction

Hydroid-associated shrimps are not numerous because of toxicity of hydroids for the majority of marine animals including caridean shrimps. Nevertheless, some shrimp species could adapt to such associations. Among them are representatives of the genus *Rapipontonia* (see Marin, 2007), *Manipontonia psamathe* (De Man, 1902) (Bruce et al., 2005) and *Periclimenes toloensis* Bruce 1969 (Bruce 1981), as well as 2 undescribed pontoniine species (Z. Āuriš, J. Okuno, pers. comm.). In contrast to species reported in associations with different cnidarian animals, and occasionally with hydroids (e.g. Bruce et al., 2005), most of species of the genus *Rapipontonia* have been exclusively recorded in association with hydroids (Marin, 2007), which seems to be their main hosts.

The pontoniine shrimp genus *Rapipontonia* Marin, 2007 includes 3 valid species, the type species *Rapipontonia paragalene* Marin, 2007, *R. platalea* (Holthuis, 1951) and *R. galene* (Holthuis, 1952). Species of the genus have been reported from the tropical western and eastern Atlantic (*R. platalea*) and the Indo-West Pacific (*R. galene*, *R. paragalene*) (e.g. Wirtz & d'Udekem d'Acoz, 2001; Wirtz, 2003; Hale & De Grave, 2007; Marin, 2007). These shrimps adapted to clinging to hydroids with the help of a highly specific prehensile mechanism of their ambulatory pereopods (Holthuis, 1951, Marin, 2007). Unfortunately, being small, transparent and cryptic animals, shrimps of the genus have been rarely collected and their natural distribution and ecology not well known.

The present study, based on redescription of type specimens and examination of new material from different localities, confirms or modifies the generic and specific diagnoses of all previously described species, as well as extending the known ranges of their distribution. However, 2 unusual female individuals