



## Revision of the genus *Iphiplateia* (Crustacea, Amphipoda, Phliantidae) from Australia

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### Abstract

The new species *Iphiplateia marleneae*, *Iphiplateia jakei* and *Iphiplateia verенаae* are described and the similar taxon *Iphiplateia whiteleggei* is redescribed. *Iphiplateia marleneae* differs from *I. whiteleggei* in the subcircular body shape, the slender articles 4–5 of the peduncle of antenna 2, the medially expanded maxilliped palp articles 2 and 3, notches on the merus of all pereopods and pereopod 7 basis is drawn out into a subacute angle. Both *I. jakei* and *I. verенаae* differ from *I. marleneae* and *I. whiteleggei* in having a dorsal pereon keel. *Iphiplateia verенаae* can be distinguished from *I. jakei* by its significantly smaller basis of pereopod 7.

**Key words:** taxonomy, revision, new species, coral rubble, algae, shallow water

### Introduction

The Circum-Australian Amphipod Project (CAAP) started in 2007 with the aim to document the species in seven dominant amphipod families and 17 dominant genera from the shallow waters of Australia. In this project thousands of identifications have been made from specimens found along the coasts of all Australian states, Territories and significant tropical off-shore islands. So far nearly 400 species have been documented, including more than 120 new species. On the shores of the north-western region of Australia, numerous amphipods were collected during the 2008 campaign. The phliantid species we are describing herein were among them.

Phliantidae have an unusual morphology. The bodies of some genera, such as *Iphiplateia*, are radically flattened dorsoventrally, similar in habitus to aphids, and their coxal plates are laterally splayed. They usually live on algae.

Only one species, *Iphiplateia whiteleggei* Stebbing, 1899, is currently known from Australian waters (Lowry & Stoddart 2003). A second species of the genus, *Iphiplateia orientalis*, was described by Tzetskova (1976) from the Sea of Japan. In this paper we describe three new species *I. marleneae*, *I. jakei* and *I. verенаae*. Additionally *I. whiteleggei* is redescribed.

### Material and methods

The material was hand collected by SCUBA diving. It was fixed in 70% ethanol and later transferred into glycerol and mounted on slides for the preparation of the drawings. Pencil drawings were made with a camera lucida on a Leica M 205c dissecting microscope and a Leica DMLB compound microscope. The line drawings were made using the technique described in Coleman (2003, 2009). In order to avoid the disruption of the animals by stretching the strongly flexed pleosome, length measurements were made beginning at the tip of the rostrum to the end of the posterior process of pleonite 1. The material is deposited in the Australian Museum, Sydney (AM) and National Museum Victoria, Melbourne (NMV).