



## ***Pinnotherotonia rumphiusi* gen. et sp. nov., a new furry bivalve-associated pontoniine shrimp (Crustacea: Decapoda: Palaemonidae) from Palau**

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### **Abstract**

A new genus and species of a furry, bivalve-associated pontoniine shrimp is described from Palau. This is the second pontoniine shrimp known to be associated with bivalves burrowing into soft bottom, and the first record of a venus clam (*Bivalvia*, *Veneridae*) as host for caridean shrimps.

**Key words:** Decapoda, Caridea, Pontoniinae, new genus, new species, *Bivalvia*, *Veneridae*, *Periglypta*, Palau

### **Introduction**

Eleven genera of pontoniine shrimp are known as symbiotic in marine bivalves, and have been recorded from the following 10 bivalve families: Pteriidae, Pinnidae, Placunidae, Ostreidae, Spondylidae, Pectinidae, Isognomonidae, Cardiidae (including the Tridacninae), and Chamidae. Most bivalve hosts are epifaunal (or partly infaunal - Pinnidae), with only the cardiid *Vasticardium pectiniforme* (Born 1780), host for the pontoniine shrimp *Neoanchistus cardiodytes* Bruce, 1975, living fully, albeit shallowly buried in soft bottoms (Bruce 1975). Furthermore, mantle fusion, which may reduce access to the mantle cavity, is absent in the first 7 families (all Pteriomorpha), and present only in the Cardiidae and Chamidae, both of which have only limited (short) siphon development.

During the study of the pontoniine collection deposited in the University of Florida, Gainesville, FL, USA (UF), IM noted an ovigerous female of furry pontoniine shrimp associated with the venerid bivalve *Periglypta* Jukes-Browne, 1914. Venerids have not been previously recorded as hosts of pontoniines, and the specimen was found to represent a new genus and species. Postorbital carapace length (pcl, in mm) is used as a standard measurement of the size.

### **Systematics**

#### **Family Palaemonidae Rafinesque, 1815**

#### **Subfamily Pontoniinae Kingsley, 1878**

#### ***Pinnotherotonia* gen. nov.**

**Diagnosis.** Medium-sized pontoniine shrimp with swollen, slightly depressed body; body and appendages densely covered with small, simple setae. Carapace swollen, without teeth; rostrum well developed, broad, reaching to distal margin of antennular peduncle, curved downward, dorsally and ventrally unarmed, ventral