

## **A new anchialine shrimp of the genus *Procaris* from Christmas Island: the first occurrence of the Procarididae in the Indian Ocean (Crustacea: Decapoda: Caridea)**

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### **Abstract**

A fifth species of the anchialine shrimp genus *Procaris* is described from Christmas Island, northeast Indian Ocean. This marks the first record of the Procarididae from the Indian Ocean. The closest known congeneric species, and the only other known from the Indo-West Pacific region, is *P. hawaiiiana* Holthuis, 1973, from Hawaii. The new species can be separated from other described species by its angular fifth abdominal pleuron, having the medial eye lobe longer than the lateral, and by having a distolateral tooth on the scaphocerite. A cladistic analysis suggests the new species is sister to the clade containing the Pacific, *P. hawaiiiana*, and the Atlantic *P. chacei*.

**Key words:** Anchialine, Procarididae, *Procaris*, Indian Ocean, new species, Christmas Island

### **Introduction**

The family Procarididae includes a group of aberrant shrimps apparently restricted to anchialine caves in both the Atlantic and Indo-Pacific Oceans, but until the publication of the present paper, no species of the Procarididae has been known from the Indian Ocean. Two genera are recognised, *Procaris* Chace & Manning, 1972, and the monotypic *Vetericaris* Kensley & Williams, 1986. All are relatively poorly known. Four species have been placed in *Procaris*: *P. ascensionis* Chace & Manning, 1972, *P. chacei* Hart & Manning, 1986, and *P. mexicana* Sternberg & Schotte, 2004, from the Atlantic region; and *P. hawaiiiana* Holthuis, 1973, from the Central Pacific. The discovery of a new species in the Indian Ocean is therefore of particular interest. The present species is known only from