



## Pleustidae\*

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### Abstract

The austropleustine *Tepidopleustes acromatius* **sp. nov.** (Pleustidae) is described from the outer Great Barrier Reef off Lizard Island. The species is similar to two tropical species from Madagascar, Mauritius and Hawaii, but differs in several characters from two species previously reported from Australia.

**Key words:** Crustacea, Amphipoda, Pleustidae, Austropleustinae, Great Barrier Reef, Australia, taxonomy, new species, *Tepidopleustes acromatius*

### Introduction

A single species of Pleustidae: Austropleustinae, *Tepidopleustes acromatius* **sp. nov.**, was found near Lizard Island. Species of *Tepidopleustes* (type species *T. barnardi* (Ledoyer, 1972); Madagascar and Mauritius) fall into two distinct groups. One group comprises *T. barnardi*, *T. honomu* (Barnard, 1970; Hawaii) and *T. acromatius* **sp. nov.** (below), and an as yet undescribed species from the Gulf of Thailand (personal observation). This group is characterised by a posteriorly serrate epimeron 3 and a tapering, entire telson; the group is widespread in the Indo-Pacific tropics, and indeed appears to be the only truly tropical component of the large family Pleustidae. The second group comprises two recently described species from subtropical waters off northern New South Wales, Australia, *T. juliana* (Lowry & Springthorpe, 2005) and *T. coffsiana* Hughes & Lowry, 2006. These two species lack serration on epimeron 3, and the tapering telson is narrowly cleft a quarter to one third its length. *Tepidopleustes coffsiana* further differs from other species of *Tepidopleustes* by having a labium with distinct inner lobes and closely set large outer lobes as opposed to widely spaced, small outer lobes with no or vestigial inner lobes.

### Material and methods

The descriptions were generated from a DELTA database (Dallwitz 2005). Material was hand-collected on scuba and is lodged in the Australian Museum, Sydney (AM). A set of colour plates, a list of standard abbreviations and detailed station data is available in Lowry & Myers (2009). A CD (*Benthic Amphipoda (Crustacea: Peracarida) of the Great Barrier Reef: Interactive Keys*) is available with the book or the keys can be accessed at the [crustacea.net](http://crustacea.net) website.