

# **Article**



# Hyalidae\*

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#### **Abstract**

As a result of the Amphipod Lizard Island workshop (2005) three species of Hyalidae were found: two new species are described, *Hyachelia lowryi* **sp. nov.** and *Lelehua myersi* **sp. nov.** and *Parhyale hawaiensis* is recorded for the first time for Australia.

**Key words**: Amphipoda, Hyalidae, new species, Great Barrier Reef, Australia, *Hyachelia lowryi, Lelehua myersi, Parhyale hawaiensis* 

#### Introduction

Hyalidae Bulycheva, 1957 is part of the superfamily Talitroidea, which according to Serejo (2004) also includes three other families – Chiltoniidae J.L. Barnard, 1972, Dogielinotidae Gurjanova, 1953 and Talitridae Rafinesque, 1815. The family Hyalidae is predominantly found among algae of tropical and subtropical zones inhabiting the intertidal and shallow infralittoral areas of the world. Bousfield & Hendrycks (2002) revised the hyalids, based on the North Pacific fauna and split the large *Hyale* Rathke, 1837 genus into five additional new genera, and created a further 13 new species. They considered the Hyalidae to include about 110 species distributed in 12 genera and three subfamilies. However, according to Serejo's (2004) classification, Hyalidae encompasses 11 genera in two subfamilies (Hyacheliinae Bousfield & Hendrycks, 2002 and Hyalinae Bulycheva, 1957).

The first studies to describe hyalids for Australia were those of Dana (1852) and Haswell (1879a, 1879b). Sheard (1937) included 19 species of Talitridae (*sensu lato*, Hyalidae + Talitridae + Chiltoniidae) in his Australian catalogue. J.L. Barnard (1974) studied the Australian *Hyale* (*sensu lato*) genus, redescribing some Haswell species and describing four new species. A key to the 12 known species was presented at that time. More recently, Lowry & Stoddart (2003) catalogued the Australian amphipod fauna and updated our knowledge of the Hyalidae. Twenty species of Hyalidae (including chiltoniids, *Allorchestes* Dana, 1849 and *Hyale* (*sensu lato*)) were recorded.

### Material and methods

The descriptions were generated from a DELTA database (Dallwitz 2005) based on the Hyalidae world genera and Australian species. Material was hand-collected from sea turtles or on snorkel or SCUBA and is lodged in the Australian Museum, Sydney (AM), the Queensland Museum (QM) and Museu Nacional, Universidade