



## A new genus and species of cyproideid amphipod associated with unstalked crinoids on the Great Barrier Reef, Australia

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### Abstract

*Gbroidea dingaalana*, a new genus and species of cyproideid amphipod is described from Lizard Island, Great Barrier Reef, Australia. The species is associated with the unstalked crinoids, *Comathus briareus*, *Comatula rotalaria* and *Zygotmetra microdiscus*.

**Key words:** Crustacea, Amphipoda, Cyproideidae, *Gbroidea dingaalana*, new genus, new species, Great Barrier Reef, Australia, taxonomy

### Introduction

The Cyproideidae J.L. Barnard, 1974 is a well-defined family of 18 genera living mainly in the Indo-West Pacific (Fig. 1). They are small, brightly coloured amphipods, often associated with other invertebrates such as hydroids, sea fans, bryozoans, soft corals and crinoids (Potts 1915; Moore 1992), but some also occur on algae. There are currently approximately 43 species in the family, but many more species await discovery (J.L. Barnard 1972). For instance, although cyproideids are most diverse in the Indo-West Pacific, none are currently recorded from the South China Sea, the west coast of India or the east coast of Africa. The majority of cyproideid generic level diversity is in the Indo-West Pacific (11 of 18 genera). Within this region the greatest diversity occurs in Australia and the south-western Indian Ocean. In this paper we describe the first tropical Australian cyproideid, *Gbroidea dingaalana* **gen. et sp. nov.**

### Methods

The generic diagnosis was generated from a DELTA database (Dallwitz 2005) to the cyproideid genera of the world. All material is lodged in the Australian Museum, Sydney (AM). Crinoids were collected by diving and placed in individual bags. When placed in white enamel sorting trays the tiny, deep brown amphipods left the crinoids and were collected from the bottom of the tray. The following abbreviations are used on the plates: **A**, antenna; **G**, gnathopod; **HD**, head; **LL**, lower lip; **MD**, mandible; **MP**, maxilliped; **MX**, maxilla; **P**, pereopod; **PL**, pleopod; **T**, telson; **U**, uropod; **UR**, urosomite.