



## Amaryllididae\*

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\* *In*: Lowry, J.K. & Myers, A.A. (Eds) (2009) Benthic Amphipoda (Crustacea: Peracarida) of the Great Barrier Reef, Australia. *Zootaxa*, 2260, 1–930.

### Abstract

One species of amaryllidid amphipod, *Bamarooka tropicalis* Lowry & Stoddart, 2002, is reported from the Great Barrier Reef, Queensland, Australia.

**Key words:** Crustacea, Amphipoda, Amaryllididae, Great Barrier Reef, Australia, taxonomy, *Bamarooka tropicalis*

### Introduction

Lowry & Stoddart (2002) recently established the family Amaryllididae. They also established the genus *Bamarooka* Lowry & Stoddart, 2002, with six species from Australia and New Caledonia. In this paper we report one species, *Bamarooka tropicalis* Lowry & Stoddart, 2002, from the northern part of the Great Barrier Reef.

### Materials and methods

The description was generated from a DELTA database (Dallwitz 2005) to the amaryllidid genera and species of the world. All material 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 website.

### Amaryllididae Lowry & Stoddart, 2002

#### *Bamarooka* Lowry & Stoddart, 2002

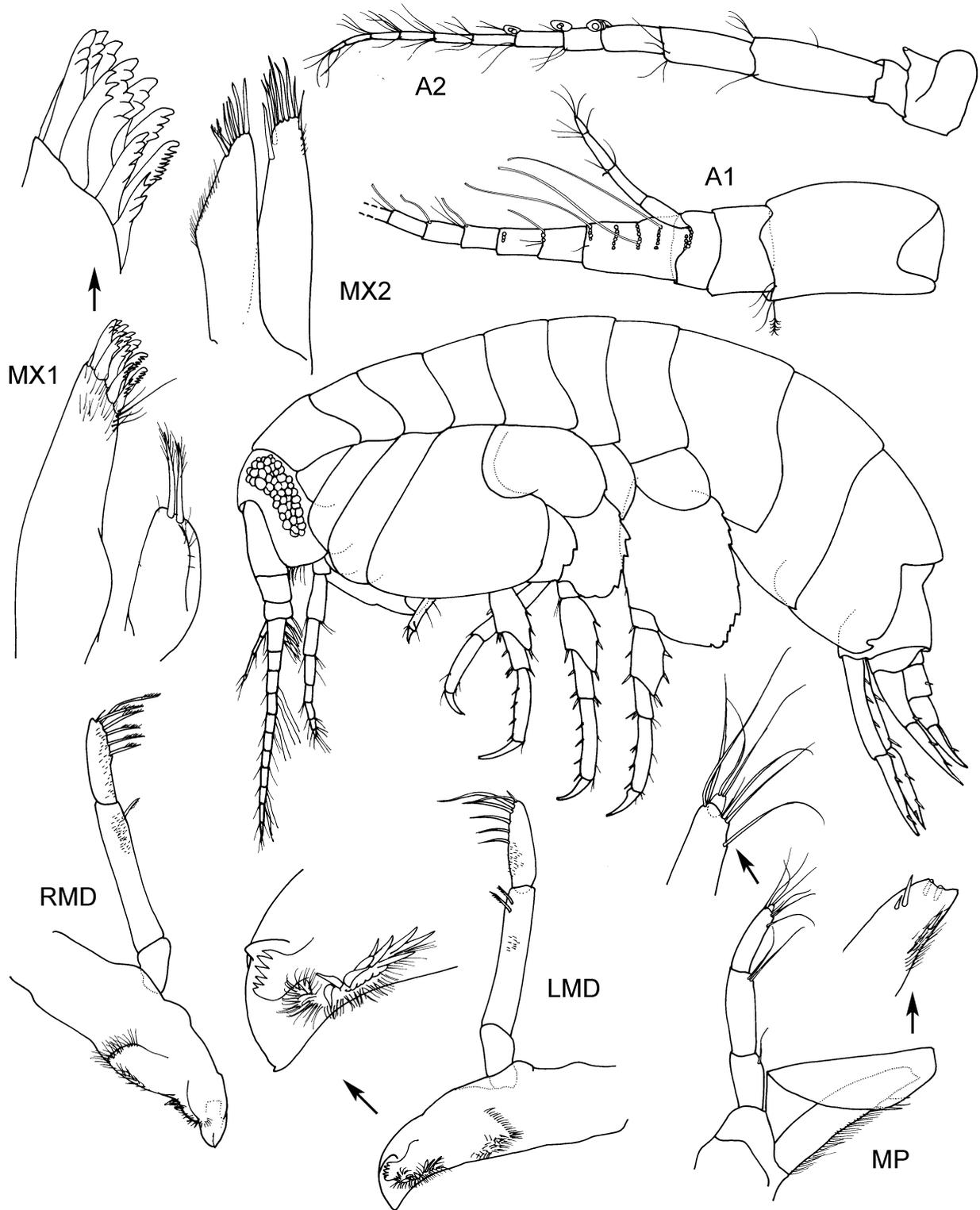
#### *Bamarooka tropicalis* Lowry & Stoddart, 2002

(Figs 1, 2, Pl. 1A)

*Bamarooka tropicalis* Lowry & Stoddart, 2002: 192, figs 58–60. —Lowry & Stoddart, 2003: 44.

**Type locality.** North-west of Port Hedland, North West Shelf, Western Australia, eastern Indian Ocean (19°29'S 118°52'E).

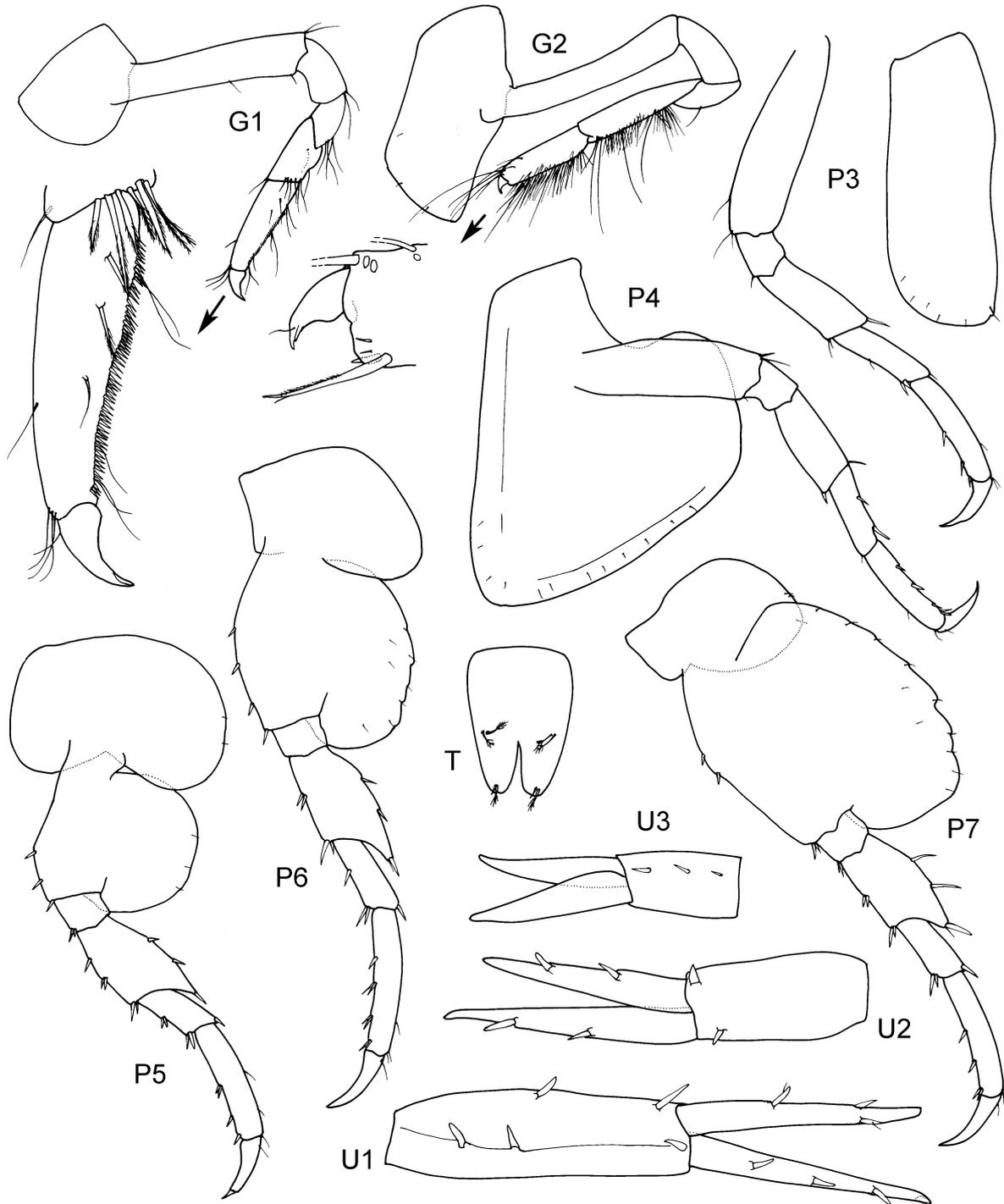
**Material examined.** 1 unsexed, AM P37094 (JML 17-10-2); 1 unsexed, AM P37095 (JML 81-26-11-4); 1 unsexed, AM P37092 (QLD 21); 4 unsexed, AM P37093 (QLD 27/28); 1 unsexed, AM P70987, 1 unsexed, AM P71010, 3 unsexed, AM P71143 and 1 male, 4.0 mm, AM P78940 (QLD 1707); 2 unsexed, AM P71114 (QLD 1710); 3 unsexed, AM P78499 (QLD 1852); 2 unsexed, AM P78498 (QLD 1869); 1 unsexed, AM P78497 (QLD 1893); 1 unsexed, AM P75656 (QLD 1918); 1 unsexed, AM P75655 (QLD 1920).



**FIGURE 1.** *Bamarooka tropicalis* Lowry & Stoddart, 2002, male, 4.0 mm, AM P78940, north-east of North Point, Lizard Island, Great Barrier Reef.

**Description.** Based on male, 4.0 mm, AM P78940.

**Head.** *Head* much deeper than long, anterior margin with notch extended into a slit; rostrum absent; eye elongate, reniform. *Antenna 1* peduncular article 1 not ball-shaped proximally, distal margin with small medial spine; peduncular article 2 medium length; flagellum with weak 1-field callynophore, calceoli absent. *Antenna 2* flagellum about as long as that of antenna 1, with calceoli on proximal articles. *Mouthpart bundle* subconical. *Epistome/upper lip* almost straight in lateral view. *Mandible* lacinia mobilis a stemmed, distally-cusped blade; accessory setal row with intermediate setae; palp article 2 with 1 posterodistal seta, article 3 without A3-setae. *Maxilliped* outer plate with distal margin smooth, medial margin without notch.



**FIGURE 2.** *Bamarooka tropicalis* Lowry & Stoddart, 2002, male, 4.0 mm, AM P78940, north-east of North Point, Lizard Island, Great Barrier Reef.

**Pereon.** *Gnathopod 1* carpus shorter than (0.8 x) propodus; propodus, posterior margin without robust setae. *Gnathopod 2* palm slightly acute, with no lateral robust setae, 1 medial robust seta. *Pereopods 3 and 4* merus and carpus without setal fringe. *Pereopod 4* coxa with anterior margin slightly obtuse, posterior margin rounded, anteroventral corner rounded. *Pereopods 5–7* with distal articles elongate, dactyli short and stocky. *Pereopod 5* basis expanded posteriorly, rounded with sloping posteroproximal shoulder. *Pereopod 7* basis rounded posteriorly, posteroventral corner rounded, posteroventral margin straight.

**Pleon.** *Epimeron 3* posterior margin smooth, with notch well above rounded posteroventral corner. *Uropod 1* peduncle dorsolateral margin with 3 robust setae. *Uropod 2* inner ramus slightly constricted. *Uropod 3* rami lanceolate; without plumose setae; outer ramus 1-articulate. *Telson* moderately cleft (about 36%).

**Female** (sexually dimorphic characters). *Antenna 1* flagellum without callynophore. *Mandible* palp article 2 without posterodistal seta.

**Habitat.** *Bamarooka tropicalis* has been found with algae, seagrasses, sediments, ascidians, bryozoans and hydroids, but most commonly among corals and coral rubble in 3–40 m depth.

**Remarks.** *Bamarooka tropicalis* is a widespread species in tropical Australia. It is currently the only species of *Bamarooka* known from the GBR. It can be separated from other GBR lysianassoids by its elongate head. *Bamarooka anomala* and *B. tropicalis* are the only species in the genus with elongate, reniform eyes. They are easily distinguished from each other by their fifth pereopods, which have a linear basis in *B. anomala* and an expanded basis in *B. tropicalis*.

The shape of pereopod 7 basis is slightly variable within the species. In populations from the North West Shelf the posteroventral margin is almost always rounded; in east coast populations it varies from rounded to almost straight (as in illustrated specimen).

**Distribution.** *Australia.* Queensland: Northwest Islet, Hammond Island and Goodes Island, Torres Strait (current study); Lizard Island (Lowry & Stoddart 2002, current study). Western Australia: North West Shelf (Lowry & Stoddart 2002). Northern Territory: Darwin, New Year Island, McCluer Island (Lowry & Stoddart 2002).

## Acknowledgements

Thanks to Roger Springthorpe for technical assistance.

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