



Unciolidae*

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Abstract

One genus and one species of unciolid are reported from the Great Barrier Reef. Unciols are worldwide in distribution, but only one genus is currently described from Australia.

Key words: Crustacea, Amphipoda, Unciolidae, Great Barrier Reef, Australia, taxonomy, *Wombalano yerang*

Introduction

The Unciolidae are distributed worldwide in both cold and warm waters. Within the Unciolidae, *Wombalano* is a member of the subfamily Acuminodeutopinae, found in tropical to sub-tropical waters. All members of this subfamily have acute lateral cephalic lobes.

Material and methods

The descriptions were generated from a DELTA database (Dallwitz 2005) to unciolid species. 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 website.

Unciolidae Myers & Lowry, 2003

Wombalano Thomas & Barnard, 1991

Wombalano yerang Thomas & Barnard, 1991

(Figs 1, 2)

Wombalano yerang Thomas & Barnard, 1991: 319, figs 1–4. —Lowry & Stoddart, 2003: 73 (catalogue).

Material examined. 1 male AM P79716 (QLD 1636); 1 male, 2 females AM P70702 (QLD 1636); 1 male AM P770727 (QLD 1646); 4 females AM P70901 (QLD 1654); 3 males, 1 female AM P70844 (QLD 1666); 1 unsexed, AM P75687 (QLD 1955); 10 males, 18 females, AM P75307 (QLD 1979).

Type locality. Orpheus Island, Queensland, Australia (~18°37'S 146°30'E).

Description. Based on male, 3.0 mm, AM P70844.

Head. Head lateral cephalic lobes apically acute. *Antenna 1* flagellum with 8–9 articles; accessory flagellum with two long articles. *Antenna 2* with few long setae. *Labium* with fine setae only. *Maxilla 1* inner plate without setae. *Mandible*, palp articles 2 and 3 subequal in length, article 3 rod-shaped, with distal setae only.

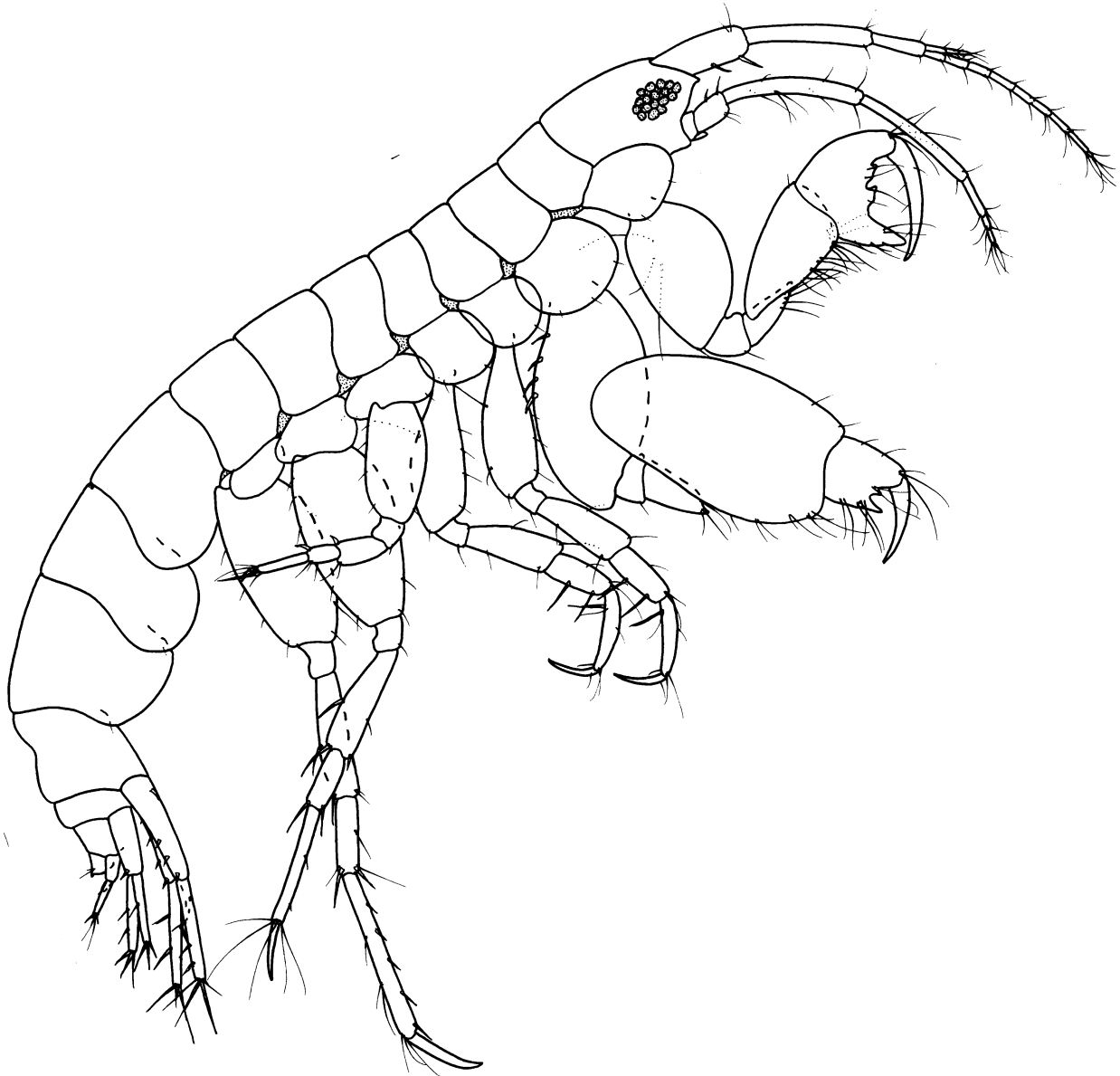


FIGURE 1. *Wombalano yerang* Thomas & Barnard, 1991, male, 3.0 mm, AM P70844, Cobia Hole, Lizard Island, Great Barrier Reef.

Pereon. *Pereonite 1* with small sternal spine. *Gnathopod 1* enlarged in males only; coxa not strongly produced anterodistally, rounded, ventral margin without spine; basis robust, half or more as broad as long, without a spine, anterior margin strongly convex, posterodistal margin with setae absent, anterodistal margin with strong flange; ischium anterior margin without flange, posterior margin with one setae; merus not greatly elongated, fused along its entire length with carpus, posterior margin with sparse setae, without posterodistal spine; carpus triangular, a little longer than propodus, anterior margin without setae and without spine;

without an oblique row of long setae on inner face, posterior margin without spines; propodus anterior margin without setae, posterior margin weakly sinuous, palm present, delimited from posterior margin, defined by strong outwardly deflected posterodistal spine and smaller, irregular distal spines, without robust seta defining palm; dactylus longer than propodus, slightly overlapping palm. *Gnathopod 2* subchelate; basis anterodistal margin convex, without flange, posterodistal margin with large robust setae; merus not enlarged or produced away from carpus; carpus subovoid, more than three times length of propodus, anterior margin not lobate, with short sparse setae, posterior margin without spines; propodus with sparse setae, palm defined by strong, acute posterodistal spine and smaller distal spine. *Pereopod 3* without brush of long setae on merus. *Pereopod 6* basis not produced posterodistally. *Pereopod 7* significantly less than 125% length of pereopod 6.

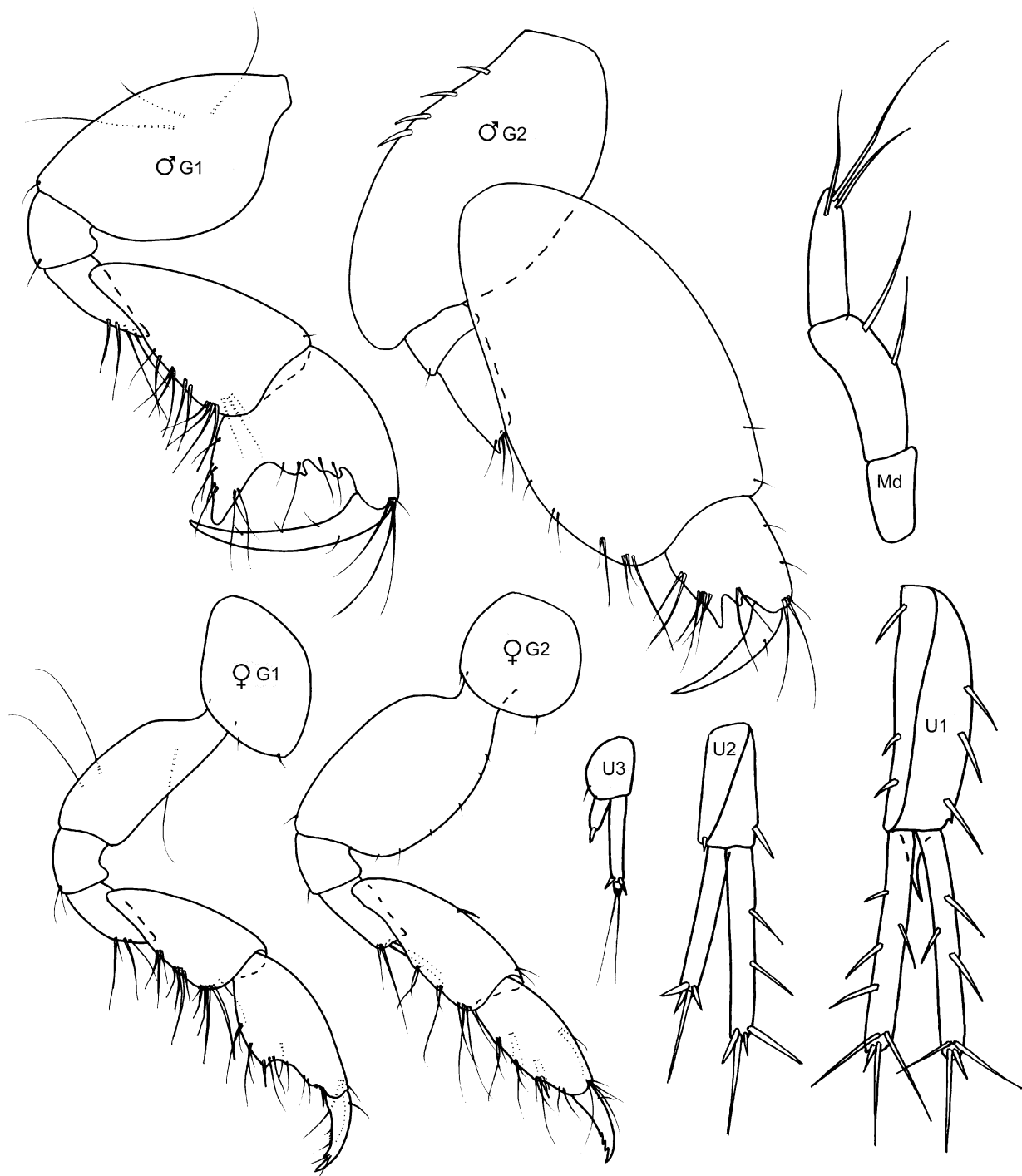


FIGURE 2. *Wombalano yerang* Thomas & Barnard, 1991, male, 3.0 mm, female, 3.2 mm, AM P70844, Cobia Hole, Lizard Island, Great Barrier Reef.

Pleon. *Epimeron 3* posterodistal margin rounded. *Uropod 1* rami subequal, peduncle much longer than broad, distoventral spine about one fifth length of peduncle. *Uropod 2* biramous, inner ramus longer than outer; peduncle without distoventral spine. *Uropod 3* biramous, inner ramus longer than peduncle and twice length of outer ramus. *Telson* with distal fine setae only.

Female (sexually dimorphic characters). Based on female, 3.0 mm, AM P70844. No sternal spines. *Gnathopod 1* basis a little more slender than in male; carpus more slender; propodus with very oblique palm defined by two robust setae, dactylus short, stout. *Gnathopod 2* basis slender, anterior margin straight; carpus slender, subtriangular, subequal in length with propodus; propodus slender, palm with round-bottomed excavation, defined by a robust seta.

Habitat. Grey carbonate sand with fine algal strands on surface, *Udotea* (green alga) and sand, scrapings from mooring block.

Remarks. Two species of *Wombalano* are currently known, *W. yerang* Thomas & Barnard, 1991 from the Great Barrier Reef, Australia and *W. rachayai* Myers, 2002 from Phuket, Thailand. *Protomedeia basilatissima* Ortiz & Lalana, 1999 from Indonesia also appears to be a species of *Wombalano*. The acute cephalic lobes of both sexes and the extraordinary gnathopods of the male, in *Wombalano yerang*, readily distinguish it from any other Great Barrier Reef taxon.

Distribution. *Australia.* Queensland: Watsons Bay, Cobia Hole, Lizard Island (current study); Orpheus Island (Thomas & Barnard 1991); No Tree Island, One Tree Island (current study).

References

- Dallwitz, M.J. (2005) Overview of the DELTA System. <http://delta-intkey.com>. Last accessed (8/9/2007).
- Thomas, J.D. & Barnard, J.L. (1991) *Wombalano yerang*, new genus and species of corophioid (Crustacea, Amphipoda) from the Great Barrier Reef, Australia. *Memoirs of the Museum of Victoria*, 52(2), 319–324.
- Lowry, J.K. & Myers, A.A. (2009) Foreword. In: Lowry, J.K. & Myers, A.A. (Eds), Benthic Amphipoda of the Great Barrier Reef, Australia. *Zootaxa*, 2260, 17–108.
- Lowry, J.K. & Stoddart, H.E. (2003) Crustacea: Malacostraca: Peracarida: Amphipoda, Cumacea, Mysidacea. In Beesley, P.L. & Houston, W.W.K. (Eds), *Zoological Catalogue of Australia*, Vol. 19.2B, 531 pp, Melbourne: CSIRO Publishing, Australia.
- Myers, A.A. (2002) Marine amphipods of the families Aoridae and Neomegamphopidae from Phuket, Thailand. *Phuket Marine Biological Center Special Publication*, 23(1), 213–228.
- Myers, A.A. & Lowry, J. K. (2003) A phylogeny and a new classification of the Corophioidea Leach, 1814 (Amphipoda). *Journal of Crustacean Biology*, 23(2), 443–485.
- Ortiz, M & Lalana, R. (1999) Amphipoda (Crustacea) from Indonesia collected by the expedition of “Grigore Antipa” Museum from Bucharest. *Travaux du Museum d’Histoire Naturelle “Grigore Antipa”*, 41, 155–198.