



Wandinidae*

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Abstract

One species of wandinid amphipod is reported from the Great Barrier Reef, Queensland, Australia. *Wandin griffini* Lowry & Stoddart is known from Lizard Island, One Tree Island and reefs on the Outer Barrier, living among rubble usually at the base of living coral. The species is rare in this habitat.

Key words: Crustacea, Amphipoda, Wandinidae, Great Barrier Reef, Australia, taxonomy, *Wandin griffini*

Introduction

Lowry & Stoddart (1990) described the family Wandinidae to include the genera *Pseudocyphocaris* Ledoyer, 1986 from Madagascar and *Wandin* Lowry & Stoddart, 1990 from Lizard Island on the Great Barrier Reef, Australia. Later Lowry & Stoddart (1995) described two additional species of *Pseudocyphocaris* from northern Papua New Guinea. In this paper we redescribe *Wandin griffini* and extend its range to One Tree Island towards the southern end of the Great Barrier Reef and east to New Caledonia.

Materials and methods

The descriptions were generated from a DELTA database (Dallwitz 2005) of lysianassoid species. Material was hand-collected on scuba dives or by epibenthic sled, 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.

Wandinidae Lowry & Stoddart, 1990

Wandin Lowry & Stoddart, 1990

Wandin griffini Lowry & Stoddart, 1990

(Figs 1, 2)

Wandin griffini Lowry & Stoddart, 1990: 161, figs 1–3, 8D. —Lowry & Stoddart, 2003: 295 (catalogue).

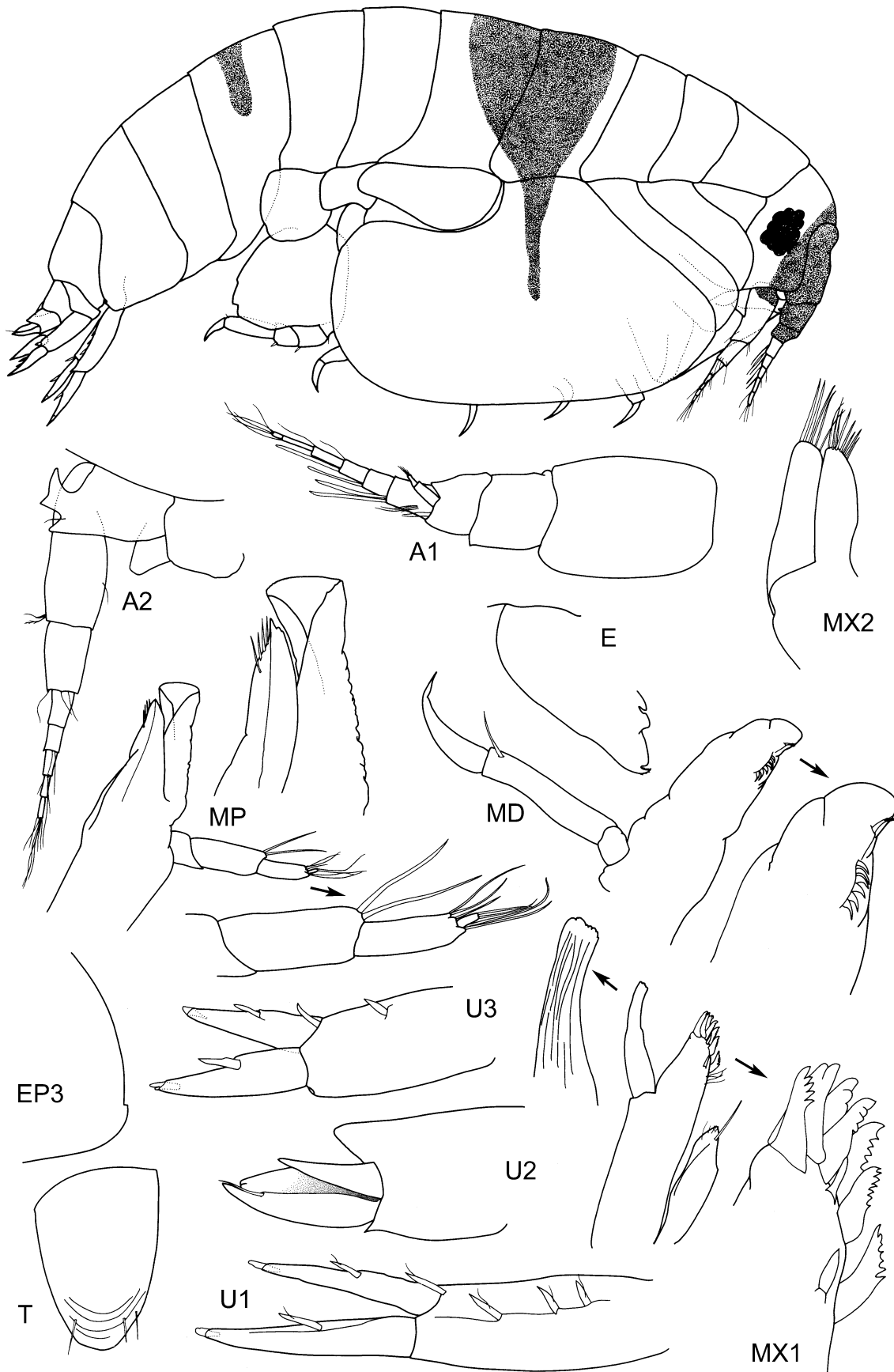


FIGURE 1. *Wandin griffini* Lowry & Stoddart, 1990, holotype, 2.0 mm, AM P39209, Ferguson Reef, Great Barrier Reef; whole animal: paratype, AM P39212, Lizard Island, Great Barrier Reef. (after Lowry & Stoddart, 1990).

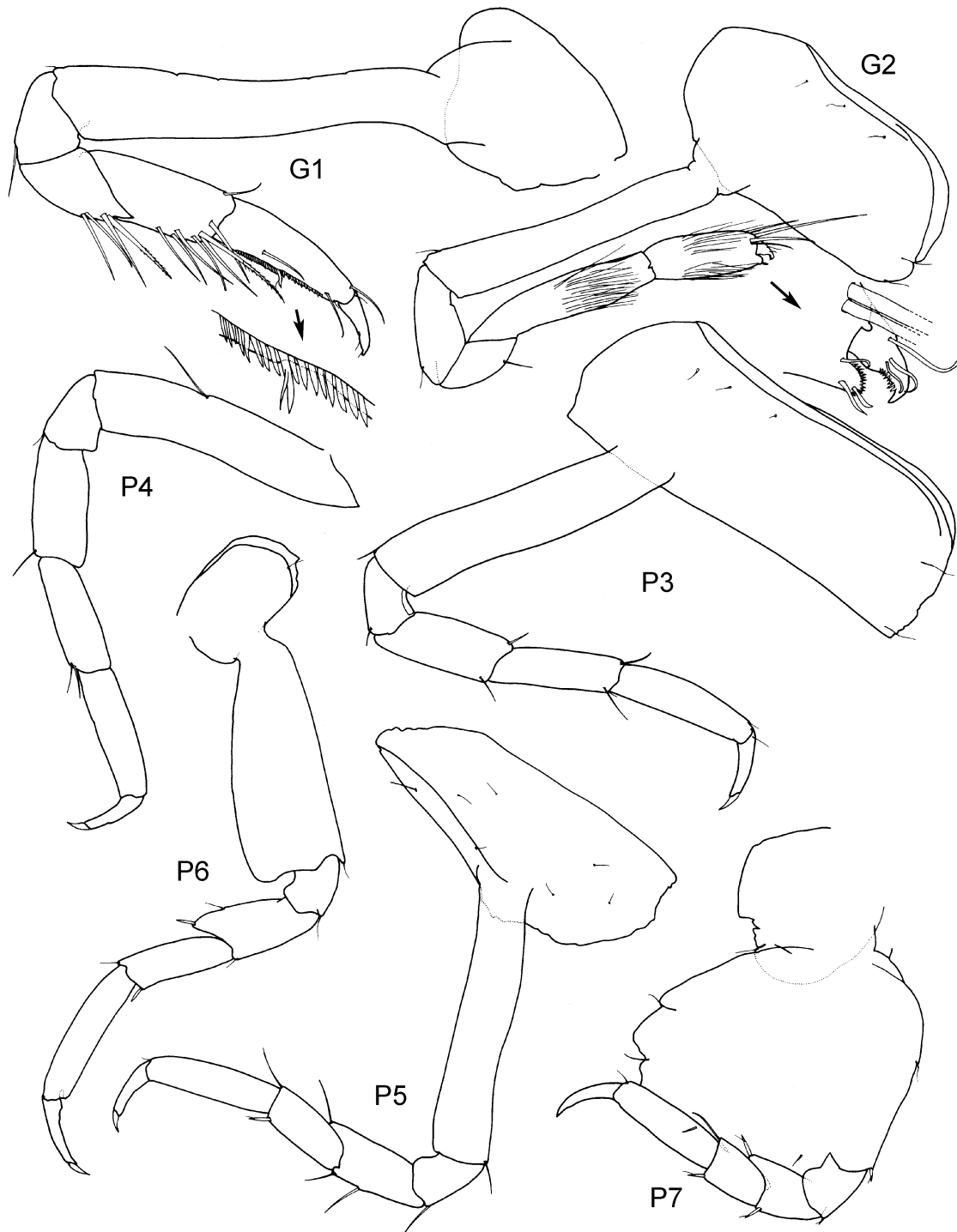


FIGURE 2. *Wandin griffini* Lowry & Stoddart, 1990, holotype, 2.0 mm, Ferguson Reef, Great Barrier Reef (after Lowry & Stoddart, 1990).

Type locality. South end of reef north of Ferguson Reef, Great Barrier Reef, Australia (12°20'S 143°51'E), 10–12 m.

Material examined. That of Lowry & Stoddart (1990) and 1 specimen, AM P69483 and 2 specimens AM P69484 (NCL 156); 1 specimen, AM P71484 (QLD 1819); 1 specimen, AM P71444 (QLD 1820); 1 specimen, AM P71547 (QLD 1823); 1 specimen, AM P71561 (QLD 1823); 1 specimen, AM P75811 (QLD 2006); 1 specimen, SEL/LZI-1-3; 1 specimen, SEL/LZI-3-2.

Description. Based on holotype, sex indeterminate, 2.0 mm, AM P39209 (QLD 88).

Head. *Head* deeper than long, lateral cephalic lobe large, broad, subacute; rostrum small. *Antenna 1* medium length; accessory flagellum short, 2- or 3-articulate; flagellum 6-articulate, without callynophore. *Antenna 2* subequal to antenna 1; peduncle strongly geniculate between articles 3–4; peduncular article 3 with large distal hook on lateral face; flagellum 5-articulate. *Mouthpart bundle* conical. *Epistome* and *upper lip* fused, straight. *Mandible* incisors symmetrical, small, with slightly convex margins; lacinia mobilis a small, apically acute peg; accessory setal row with 6 short, slender, simple setae; mandibular palp attached extremely proximally. *Maxilla 1*: inner plate with 1 simple apical seta; outer plate with 9 setal-teeth in modified 6/5 arrangement, left and right ST7 asymmetrical, left ST7 with elongate inner margin, right ST7 with short inner margin; palp 1-articulate, with minutely serrate apical margin. *Maxilla 2*: inner and outer plates narrow, inner plate length 1 x outer plate. *Maxilliped*: inner plate without apical nodular setae; outer plate without slender or robust setae; palp small, 4-articulate, dactylus vestigial.

Pereon. *Gnathopod 1* simple; coxa vestigial; basis very long, anterior margin without setae; ischium short; carpus subequal in length to propodus; propodus margins slightly converging distally, posterior margin serrate. *Gnathopod 2* minutely subchelate; carpus very long (length 4.8 x breadth); palm obtuse, with convex, serrate margin; dactylus posterior margin serrate. *Pereopod 3* coxa large. *Pereopod 4* coxa large, extending anteriorly and posteriorly. *Pereopod 5* coxa shallow, broader than deep, tapering posteriorly, not lobate; basis linear. *Pereopod 6* coxa small, not lobate posteriorly; basis slightly expanded. *Pereopod 7* basis expanded posteriorly, subtriangular.

Pleon. *Pleonites 1 to 3* dorsally smooth. *Epimeron 3* posteroventral corner subquadrate. *Urosomites* dorsally smooth. *Uropod 1* outer ramus slightly longer than inner ramus. *Uropod 2* outer ramus slightly longer than inner ramus; inner ramus without constriction. *Uropod 3* peduncle short with dorsolateral flange; biramous, inner ramus about 0.7 x outer ramus; outer ramus 1-articulate, broad with subapical incision; rami without plumose setae. *Telson* longer than broad, entire, distal margin rounded, without robust setae.

Male (sexually dimorphic characters). Based on paratype, male, 2.2 mm, AM P39214 (JDT/LIZ 13). Antenna 1 with weak 1-field callynophore.

Habitat. Mainly coral rubble and coralline algae such as *Halimeda* sp., in 1–38 m depth.

Colour. Eye black. Head and body translucent white with deep red colouring on the peduncle of antenna 1, anterior portion of the head, middle of the body (as a ventrally tapering saddle on the posterior half of pereonite 4, the anterior half of pereonite 5 and the central part of coxa 4) and the dorsum of pleonite 1.

Remarks. *Wandin griffini* can be distinguished from any other lysianassoid taxon on the Great Barrier Reef by its reduced coxa 1 and greatly enlarged coxa 4.

Distribution. *Australia.* Queensland: Ferguson Reef (Lowry & Stoddart 1990); Yonge Reef (current study); Lizard Island (Lowry & Stoddart 1990); One Tree Island (current study). *New Caledonia.* Grand Recif Mberé (current study).

References

- Dallwitz, M.J. (2005) Overview of the DELTA System. <http://delta-intkey.com>. Last accessed (8/9/2007).
- 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. (1990) The Wandinidae, a new Indo-Pacific family of lysianassoid Amphipoda (Crustacea). *Records of the Australian Museum* 42(2), 159–171.
- Lowry, J.K. & Stoddart, H.E. (1995). The Amphipoda (Crustacea) of Madang Lagoon: Lysianassidae, Opisidae, Uristidae, Wandinidae and Stegocephalidae. *Records of the Australian Museum, Supplement*, 22, 97–174.
- 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.