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Ceinidae*

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Abstract

Ceina gerlachae **sp. nov.** is described. It differs in the habitus from the closely related *Ceina carinata* (Pirlot) in the rounded anterior process of pereonite 1, an upright carina on pleonite 1, a short process on pleonite 3 and a few characters on the maxillipeds.

Key words: Crustacea, Amphipoda, Ceinidae, Great Barrier Reef, Australia, taxonomy, new species, *Ceina gerlachae*

Introduction

The genus *Ceina* previously comprised only four species, which were classified until 1972 as Phliantidae. From these they differ by laterally compressed rather than dorsoventrally depressed bodies and an unflexed urosome. J.L. Barnard 1972 erected the family Ceinidae.

Only one species of *Ceina* has been previously recorded from Australia: *Ceina wannape* Barnard, 1972.

Materials and methods

The descriptions were generated from a DELTA database (Dallwitz 2005). 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). Illustrations were made using the methods described in Coleman (2003, 2006). 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.

Ceinidae J.L. Barnard, 1972

Ceina Della Valle, 1893

Ceina gerlachae sp. nov.

(Figs 1, 2)

Type material. Holotype male, 5 mm, AM P75543, Steves bommie, near Two Trees Islet, outer reef, One Tree Island (23º29.059’S 152º5.452’E), coral rubble, 13.6 m, L. Hughes & J.K. Lowry, 27 October 2006 (QLD 1971).

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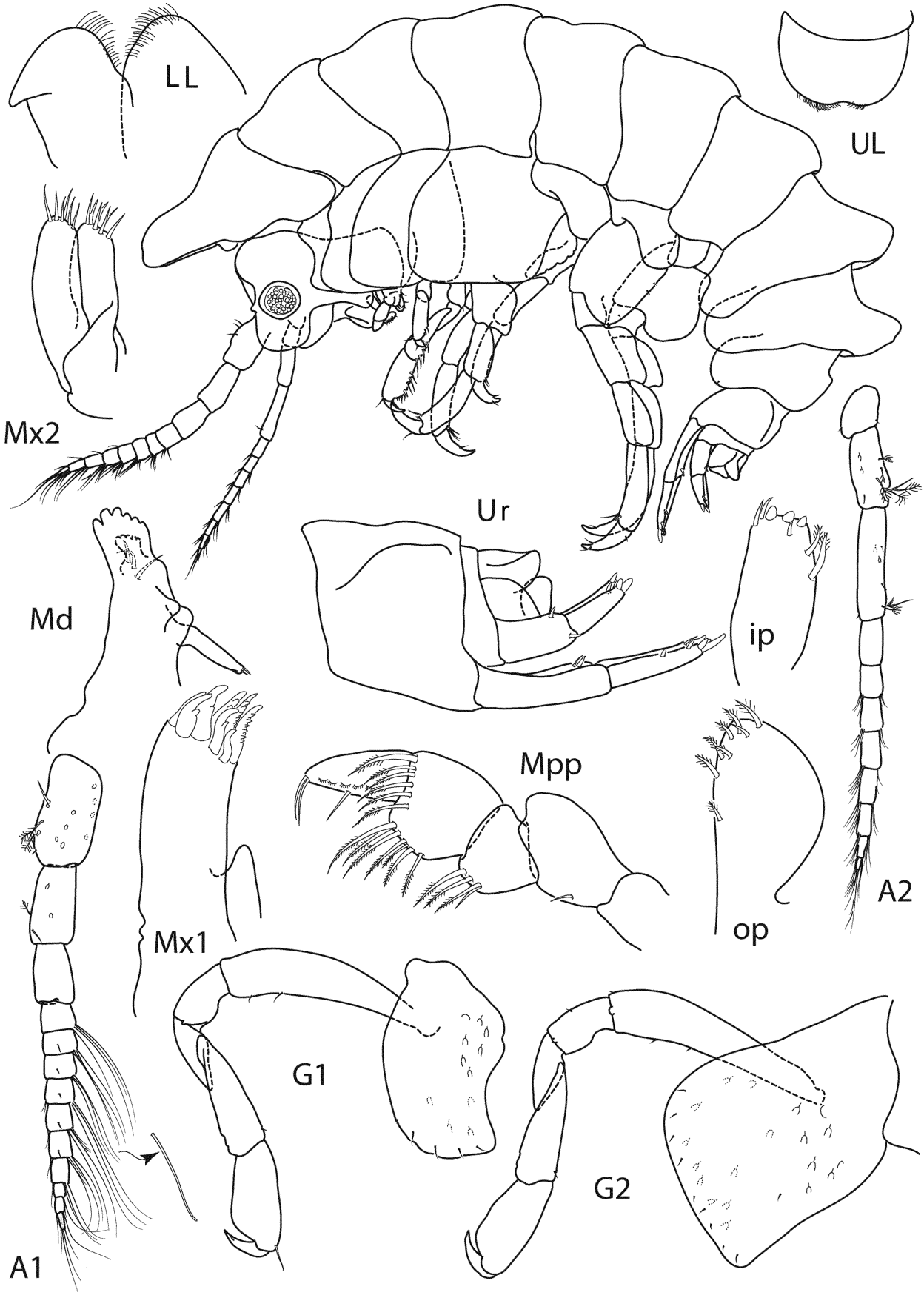

FIGURE 1. *Ceina gerlachae* **sp. nov.**, holotype, male, 5 mm, AM P75543, One Tree Island, Great Barrier reef.

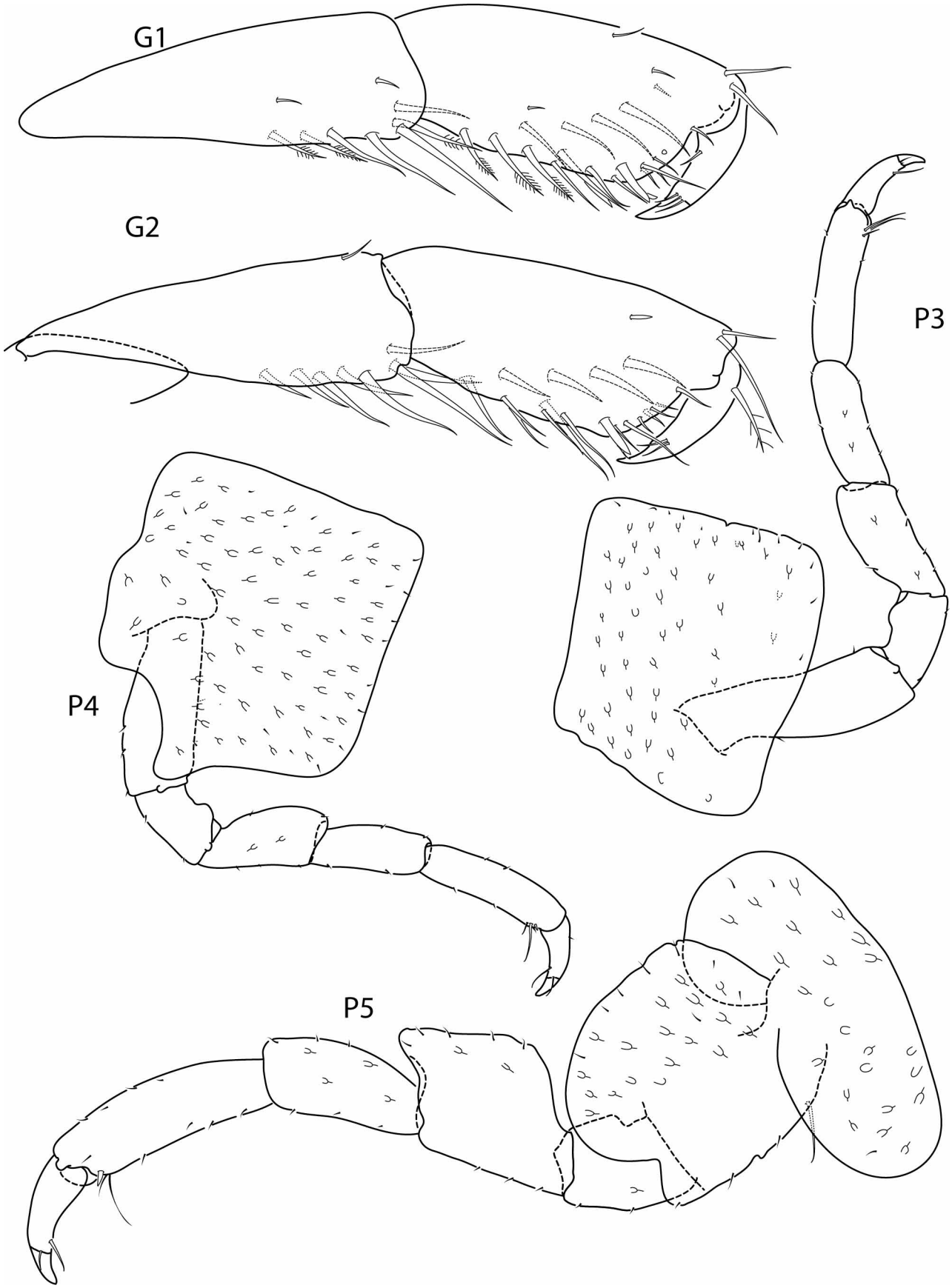

FIGURE 2. *Ceina gerlachae* **sp. nov.**, holotype, male, 5 mm, AM P75543, One Tree Island, Great Barrier Reef.

Type locality. Steves bommie, near Two Trees Islet, outer reef, One Tree Island, Queensland, Australia (23º29.059'S 152º5.452'E).

Etymology. This species is named for the artist Ms. Julia Gerlach, to thank her for producing the great art performance "HUM" at the Museum für Naturkunde Berlin in the spring of 2008.

Description. Based on holotype male, 5 mm, AM P75543.

Head and body. *Body* covered with Y-shaped sensory pits and microtrichs; keeled dorsally; pereonite 1 with dorsal carina produced above and anterior to head; pereonites shallowly hunchbacked. *Pleonites* 1 and 2 with elevated dorsal rounded carinae; pleonite 3 with short shallow tooth. *Head* strongly bent below the body; anterior head margin deeply excavate; eyes round. *Antenna 1* stouter and slightly longer than 2 and with long aesthetascs on flagellum. *Upper lip* emarginate. *Mandible* incisor and lacinia mobilis dentate; molar long and narrow; palp lacking. *Maxilla 1* inner plate small, without setae; outer plate with 8 terminal robust setae; palp lacking. *Maxilla 2* both plates with terminal setae only. *Maxillipeds* inner plate rectangular with 3 nodular setae apically; outer plate ovoid; palp 4-articulate, article 1 twice as long as 2; article 3 subquadrate; article 4 about half as wide as 3.

Pereon. *Gnathopod 1* coxa excavate anteriorly, basis curved anteriorly; ischium elongate, as long as merus; carpus evenly widened distally, slightly longer than propodus. Gnathopod *2* coxa subrectangular; basis to dactylus similar to gnathopod 1. *Pereopod 3* coxa similar shape to that of pereopod 2, but wider; ischium long; merus slightly expanded distally; carpus as long as merus; propodus slightly shorter than basis. *Pereopod 4* coxa wider than deep, subquadrate with posterior subacute process; basis to dactylus as for pereopod 3. *Pereopod 5* coxa bilobed, anterior lobe partly hidden by coxa 4; basis with lobate posterior margin; merus subrectangular, strongly expanded posteriorly; carpus weakly expanded distally. *Pereopod 6* coxa anterior lobe much small than posterior; basis to dactylus similar in shape and dimensions as on pereopod 5, except merus not so expanded posteriorly. *Pereopod 7* coxa small, subquadrate; basis expanded and posteroventrally lobate; ischium to propodus similar to that of pereopod 6.

Pleon. *Pleonites 1–3* epimera ventrally rounded. *Urosomite* 1 longer than 2 and 3 combined. *Uropod 1* rami slightly shorter than peduncle, with stout terminal setae. *Uropod 2* peduncle and rami subequal in length, each with 2 stout terminal setae. *Uropod 3* plate-like. *Telson* thick, entire.

Habitat. Subtidal, sand and rubble.

Remarks. There are several differences between the new species and *Ceina carinata* (Pirlot, 1936), originally collected at Sulu (Philippines), which are summarized in table 1.

TABLE 1. Differences between *Ceina gerlachae* **sp. nov.** and *Ceina carinata* (Pirlot, 1936).

	Ceina gerlachae **sp. nov.**	*Ceina carinata* (Pirlot, 1936)
Pereonite 1, anterior process	rounded	truncate
Pleonite 1, dorsal process	upright	curved posteriorly
Pleonite 3, dorsal process	small	rather large
Maxillipeds, outer plate	wide	narrow
Maxillipeds, palp article 3	wide	narrower
Maxillipeds, palp article 4	stout	falcate
Pereopods 5 and 6 merus	posterior margin straight widest near midpoint	evenly expanded

Ceina wannape Barnard, 1972 is another Australian species. It differs in that the dorsally inflated pereonite 1 extends anteriorly much less, the anterior head margin is rounded (vs produced ocular lobe and anteroventral deep excavation), and coxa 1 is rudimentary in *C. wannape* (vs long in the new species).

Distribution. *Australia*. Queensland: One Tree Island (current study).

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