



<http://dx.doi.org/10.11646/zootaxa.3856.4.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:80ABB2A3-8144-44AA-9C1E-575A1EB82B8F>

***Paramoguai kavieng*, a new genus and species of camptandriid crab from Papua New Guinea (Crustacea: Brachyura)**

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Abstract

Paramoguai kavieng is recognised as a new genus and species of camptandriid crab, recently discovered in Papua New Guinea. The new genus closely resembles *Moguai* Tan & Ng, 1999, from the western Pacific, sharing similar carapace and pereopod structure, but is distinguished chiefly by the fusion of the maxilliped 3 ischiomerus, features of the epistome and front, and position of the anterolateral margins of the carapace. The new genus is unique in the Camptandriidae Stimpson, 1858, in having an epistome with a bilobed buccal margin. *Moguai pyriforme* Naruse, 2005, from Japan, which differs from *P. kavieng* primarily in carapace ornamentation and gonopod morphology, is transferred to *Paramoguai*.

Key words: Decapoda, Camptandriidae, Kavieng, south-western Pacific

Introduction

The brachyuran family Camptandriidae currently includes 21 genera and 39 extant species (De Grave *et al.* 2009; Ng *et al.* 2010), of which the majority occur in the Indo-West Pacific. In June 2014, under the auspices of the Muséum national d'Histoire naturelle, Paris, the University of Papua New Guinea, and the National Fisheries Authority of Papua New Guinea, the first part of the Kavieng Lagoon Biodiversity Survey KAVIENG 2014 was conducted in the waters around Kavieng, New Ireland Province. Among the decapod crustaceans collected, a new species representing a new genus of camptandriid crab was collected. The new taxa are described herein.

Materials and methods

Abbreviations: carapace length (cl) and carapace width (cw), measured dorsally are of the greatest length and width respectively. Specimens are deposited in the collections of the Muséum national d'Histoire naturelle, Paris (MNHN) and Australian Museum, Sydney (AM).

Systematics

Camptandriidae Stimpson, 1858

***Paramoguai* gen. nov.**

Diagnosis. Carapace subovate to pyriform, longer than wide, widest at branchial margins; lateral angles of posterior margin with prominent blunt projection; surface with scattered groups of short, dark, red-brown setae; mesogastric, cardiac, and intestinal regions each with prominent, upraised median protuberances. Front weakly bilobed, width about one-third fronto-orbital width. Suborbital margin well-developed, together with infraorbital

anterolateral margin and runs along the upper branchial margins, terminating at the posterolateral tubercle (which is much more prominent in the new species). *Paramoguai kavieng* also differs from *P. pyriforme* in having a rounded instead of acutely triangular tooth on the anterolateral corner of the buccal cavity, and a proportionally wider female telson (width 3.3 times length; 2.8 in *P. pyriforme*). The male gonopod 1 exhibits the most distinctive differences between *P. kavieng* and *P. pyriforme*. In *P. kavieng*, the recurved, bifurcated distal portion of the gonopod lies close to (almost against) the proximal portion, with the branches of the bifurcation subparallel (Fig. 1H). In contrast, the recurved portion of gonopod 1 in *P. pyriforme* diverges strongly from the proximal portion, and the branches of the bifurcation are themselves distinctly divergent (Kishino *et al.* 2014). In *P. kavieng* (Fig. 1H), the mesial branch of the recurved portion is distally spiralled (straight in *P. pyriforme*), the blade-like lateral branch is armed with small spines (smooth in *P. pyriforme*), and there is no digitiform process projecting from the base of the bifurcation of the branches (present in *P. pyriforme*).

The postorbital portion of the carapace is subcircular in both sexes of *P. kavieng*. Aside from primary sexual differences, however, mature female *P. kavieng* differ from males in the proportionally wider, more laterally expanded carapace, proportionally shorter fronto-orbital area, proportionally shorter, more slender pereopods 2–5 (as measured by meral length and proportions), and a larger maximum body size. *Paramoguai pyriforme* exhibits similar sexual dimorphism (Kishino *et al.* 2014).

Colour in life. Drab grey-brown with scattered tufts of dark red-brown setae (Fig. 3A–C). The gastrofrontal area and posterior half of the carapace in one specimen was solid white (MNHN IU-2014-2715; Fig. 3D).

Habitat. *Paramoguai kavieng* was collected in shallow water (1–2 to 12 m depth) on substrates of sand, mud, silt, shell and seagrass. One specimen (MNHN IU-2014-2590) was taken near a river mouth. The remainder, however, were taken from areas away from significant freshwater input suggesting that the ecology of *Paramoguai kavieng* may differ from that of *P. pyriforme* and species of *Moguai*, all of which occur intertidally in estuarine and brackish habitats (Tan & Ng 1999; Naruse 2005).

Distribution. Presently known only from Papua New Guinea from localities in the vicinity of Kavieng, New Ireland Province.

Acknowledgements

Thanks are due to Laure Corbari, Anouchka Sato, Gary Poore and Zdenek Ďuriš for their good cheer in Kavieng, and Tohru Naruse for helpful comments on the manuscript. The Kavieng Lagoon Biodiversity Survey (Principal Investigators: Philippe Bouchet, Jeff Kinch) was part of the *Our Planet Reviewed* expeditions organized jointly by Muséum National d'Histoire Naturelle (MNHN), Pro-Natura International (PNI) and Institut de Recherche pour le Développement (IRD), with support from Papua New Guinea's National Fisheries Authority. The organizers acknowledge supporting funding from the Total Foundation, the Laboratoire d'Excellence Diversités Biologiques et Culturelles (LabEx BCDiv), the Laboratoire d'Excellence Diversités Biologiques et Culturelles (LabEx BCDiv, ANR-10-LABX-0003-BCDiv), the Programme Investissement d'Avenir (ANR-11-IDEX-0004-02), the Fonds Pacifique, and CNRS' Institut Ecologie et Environnement (INEE). The expedition was endorsed by the New Ireland Provincial Administration and operated under a Memorandum of Understanding with University of Papua New Guinea (UPNG). This is a contribution from the Australian Museum Research Institute.

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