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# ON THE GENUS *LADOMEDAEUS* ŠTEVČIĆ, 2005, FROM THE PHILIPPINES AND JAPAN, AND THE STATUS OF THE LADOMEDAEIDAE ŠTEVČIĆ, 2005 (DECAPODA: BRACHYURA: XANTHOIDEA)

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***ABSTRACT*. –** The brachyuran genus *Ladomedaeus* Števčić, 2005, is redefined, and referred to the subfamily Euxanthinae in the Xanthidae. Recognition of the family Ladomedaeidae Števčić, 2005, is considered unwarranted as the presence of endostomial ridges is not unique, and while all the male abdominal sutures are visible, segments three to five are immobile as in other Xanthidae. A new species, *Ladomedaeus fungillus*, is described from the Philippines.

***KEY WORDS.* –** Xanthidae, *Ladomedaeus*, new species, taxonomy, Philippines, Japan.

## INTRODUCTION

Guinot (1967) re-appraised the composition of *Medaeus* Dana, 1851, and restricted it to just two Indo-West Pacific species, *M. elegans* A. Milne-Edwards, 1867, and *M. ornatus* Dana, 1852 (the type species). She could not ascertain the affinities of the other Pacific species, *M. serratus* Sakai, 1965, and its taxonomic position was left unresolved. Subsequently, two other *Medaeus* species have been described from the Pacific, *M. grandis* Davie, 1992, and *M. aztec* Davie, 1997. The genus *Medaeus* sensu stricto is presently defined for species which have the 4M region of the carapace distinct, the dorsal margins of the ambulatory meri armed with prominent spines, the anterior thoracic sternum relatively narrow, the male abdomen relatively slender with a subtriangular telson that is shorter than broad, and the male first gonopod distinctly slender with long setae distally (Guinot, 1967; Serène, 1984; Davie, 1997).

Over the last few years, we examined numerous specimens of a new species from the Philippines which had most of the characters of *Medaeus* sensu stricto except that it had a relatively stout male first pleopod without any long distal setae and the endostome has well developed ridges. As our new species was similar to *M. serratus*, it was necessary to re-examine the taxonomic problems associated with this species as well. We concluded that our new species is congeneric with *M. serratus* and both species should be placed in a genus distinct from *Medaeus* sensu stricto. However, Ševcic (2005) had recently argued that *M. serratus* was unusual in having endostomial ridges and all seven male abdominal segments freely articulating (not the case, see later). He established not only a new genus, *Ladomedaeus*, but a new family, Ladomedaeidae for *Medaeus serratus* Sakai, 1965. We concur that a new genus is necessary, but do not agree that a separate family or even subfamily is warranted. In all other important respects, such as carapace and pereiopodal form, and structure of the male first and second gonopods, *M. serratus* is a typical xanthid. We here re-diagnose *Ladomedaeus* Števčić, 2005, and discuss its affinities, as well as describe the new species, *Ladomedaeus fungillus*. The family Laomedaeidae Števčić, 2005, is not valid and is here synonymised under the Euxanthinae, Xanthidae.

The terminology used essentially follows Serène (1984). Measurements provided are for the carapace length (cl) and width (cw) in millimetres (mm). Other abbreviations used: G1 = male first gonopod; G2 = male second gonopod; stn = station; ZRC = Zoological Reference Collection, Raffles Museum of Biodiversity Research, National University of Singapore; NMCR = Crustacean Collection of the National Museum of the Philippines, Manila; NSMT = National Science Museum, Tokyo; and MNHN = Muséum national d'Histoire naturelle, Paris.

## TAXONOMY

### XANTHIDAE MacLeay, 1838, sensu Serène, 1984

### *Ladomedaeus* Števčić, 2005

*Ladomedaeus* Števčić, 2005: 35, 36.

***Diagnosis***. **–** Carapace hexagonal; dorsal surface with regions well defined, granular, 4M distinct; endostome with distinct oblique ridges; anteroexternal angle of merus of third maxilliped auriculiform; dorsal margin of ambulatory merus prominently serrated or spinate; major chela without modified basal cutting tooth; anterior thoracic sternum relatively narrow; male abdomen relatively slender, telson triangular, slightly longer than broad; G1 with basal part relatively stout, distal half markedly more slender, distal surfaces spinular but without long setae; G2 short.

***Type species.*** **–** *Medaeus serratus* Sakai, 1965, by original designation. Gender of genus masculine.

***Remarks.*** **–** Guinot (1967) was unable to confidently allocate *Medaeus serratus* Sakai, 1965, to any xanthid genus known at that time. She commented "… est une forme à part (en particulier les crêtes endostomiennes sont bien définies, completes). Nous laissons pour l'instant imprecise son appartenance générique, mais nous avons des raisons de croire qu'il s'agirait plutôt d'un Pilumninae-Eumedoninae" (Guinot, 1967: 374). However, the gonopods as described and figured by Sakai (1965: 101, Fig. 3a, b) are typical for members of the Xanthidae sensu Guinot (1978) and Serène (1984), as are the general facies of the species (see also Ikeda, 1998: 128, Pl. 58), and there is no indication that it is not a true xanthid. The presence of distinct endostomial ridges is unusual in the Xanthidae although some euxanthine genera like *Cranaothus* Ng, 1993, do have low but clearly visible ridges.

Sakai (1965: 101) described the male abdomen of *Medaeus serratus* as consisting of "… seven distinct segments as in the female", and this has been the main difficulty for its classification — all true xanthids have male segments 3–5 fused. The more important character, however, is whether or not the sutures separating segments 3–5 are freely movable, or effectively fused (see Ng & Chia, 1994). Such a fused, though visible, male abdominal condition is already known for xanthid genera like *Neoxanthias* Ward, 1933.

The new species described here, *Ladomedaeus fungillus*, shares with *M. serratus* the "anomalous" xanthid characters of the presence of endostomial ridges and visible sutures between male segments 3–5. The two species also share a G1 which is basally stout and lacking long distal setae. This is atypical of the condition in known *Medaeus* species. Thus we agree with Števčić (2005) that the establishment of a separate genus is necessary.

Števčić (2005) decided that *M. serratus* warranted not only a new genus but a new family. He wrote "Family LADOMEDAEIDAE fam. nov. *Medaeus*-shaped. Dorsal surface markedly areolated. Front wide, bilobed, bimarginate, lobes subtruncate, antennal sinus distinct. Exorbital margin thick, obtuse. Anterolateral margin with 4 wide triangular teeth. Supraorbital margin bifissured. Endostomial ridge complete. Chelipeds massive, feebly heterochelous, inner carpal spine distinct. Ambulatory legs compressed, crested at anterior margin, crest cut into teeth. Abdominal segments freely articulated in both sexes. First gonopod with flattened and spatulate tip. Second gonopod short, apically neither filamentous nor curled. Type genus. *Ladomedaeus* gen. nov. (Etymology: Lado = Old Slavic God. Type species: *Medaeus serratus* Sakai, 1965; gender: masculine)" (Števčić, 2005: 35, 36). No other details or discussion was provided. While he did not formally describe the genus, his description of the new family, statement that the new genus was the type genus and assignment of *M. serratus* Sakai, 1965, as the type species of the genus, all in the same paragraph, is clearly valid under the current zoological code, making both Ladomedaeidae Števčić, 2005, and *Ladomedaeus* Števčić, 2005, available names.

As already discussed, Števčić's (2005) understanding of the male abdominal condition is flawed, segments 3–5 being functionally fused. The presence of endostomial ridges, while unusual is not unique, and cannot justify the establishment of a separate family or even subfamily for *Ladomedaeus*. Nevertheless, his generic name is available and we use it in the context of the present revised diagnosis. *Ladomedaeus*, while distinct from *Medaeus* and its immediate allies, is nevertheless closely related. Like all other euxanthines, it shares the subfamilial character of the first anterolateral tooth being disjunct from the external orbital margin, with the anterolateral margin gently sloping downwards towards the anterior part of the buccal cavity (see Serène, 1984; Davie, 1997; Ng & Clark, 2003). It also possesses the differentiated basal tooth on the dactylus of the major chela found in many euxanthines (Ng, 1993). As such, we consider Ladomedaeidae Števčić, 2005, to be a subjective junior synonym of the Euxanthinae Alcock, 1898.

### *Ladomedaeus serratus* (Sakai, 1965)

(Figs. 1, 2)

*Medaeus serratus* Sakai, 1965a: 100, 101, Figs. 2a, 3a, b; Sakai, 1965b: 136, Pl. 69 Fig. 3; Ikeda, 1998: 128, Pl. 58; Takeda, 2001: 245.
?*Medaeus serratus* – Guinot, 1967: 374.
*Ladomedaeus serratus* – Števčić, 2005: 35, 36.

***Material examined.*** **–** Paratypes: 2 males (11.7 × 8.3 mm, 7.3 × 6.7 mm) (NSMT 2428), west of Joga Jima, Sagami, Japan, coll. 14 Feb.1963.

***Description.*** **–** Carapace transversely ovoid, 0.7 times wider than long; very slightly convex from side to side, more convex anteriorly, particularly over anterior third; grooves separating gastric and branchial regions distinct, somewhat deep, H-shaped groove separating cardiac and gastric regions distinct; surfaces of regions covered with small granules (Fig. 1A, C). Pterygostomial, sub-branchial and suborbital regions as well as sternum and abdomen covered with numerous closely packed, low, flattened, small granules, larger in some

parts, particularly those along sub-branchial region (Fig. 1D, E). Antennules folding transversely, antennular fossae completely covered by protruding front from frontal view (Fig. 1D). Antennal flagellum slender, relatively short, attached to stout basal segment occupying entire space between antennular fossa and internal suborbital angle (Fig. 1D, E). Endostome with well developed ridges. Outer surface of third maxilliped covered with low, closely packed small granules; ischium rectangular, median longitudinal sulcus deep; merus subquadrate, anteroexternal angle auriculiform, with median depression (Fig. 1E); exopod reaching anterior edge of merus, with long flagellum. Front prominent, broad, prominently produced beyond imaginary line connecting inner supra-orbital tooth; distinctly bilobed, inner lobe larger than subtruncatiform outer lobe, lobes separated by very deep, broad U-shaped cleft which extends back almost to epigastric region; margin with coiled setae; margin slightly sinuate near the orbit (Fig. 1A, C, D). Supraorbital margin with distinct inner tooth, separated from front by distinct U-shaped cleft, anterior margin of tooth with low granules; margin granular, with 2 prominent narrow fissures, 1 submedian, 1 lateral (Fig. 1C). Infraorbital margin concave, with sharp inner and outer teeth (Fig. 1D, E). External orbital tooth relatively big, distinct, roundedly triangular, directed anteriorly; separated from rest of anterolateral margin by rounded, minutely granular area, not connected by distinct crest groove. Anterolateral margin distinctly convex, clearly separated from posterolateral margin by sharp angle; armed with 4 prominent, triangular teeth but with rounded tips, margin and/or base of teeth with prominent intercalated small granules; teeth of anterolateral margin upturned; first tooth smallest, below level of external orbital tooth, with margin gradually sloping towards subhepatic region, not clearly connected to external orbital tooth; second tooth large, broad; third tooth largest, broadest, directly somewhat obliquely, fourth tooth small, distinctly laterally upturned (Fig. 1A, C). Posterolateral margin somewhat straight, covered with granules, some granules closely packed; prominently converging towards gently towards convex posterior carapace margin (Fig. 1A, C).

Chelipeds subequal, appearing eroded; outer surfaces of merus, carpus and propodus covered with medium to small granules (Fig. 1A, B). Margins of merus with 4 round-tipped spines, 3 spines distinctly separated from each other , spine nearest to carpus is largest but with small granules around it. Inner distal angle of carpus with 2 distinct teeth, margin either side of tooth lined with rounded granules, appearing weakly serrulate; outer margin with spinules; outer distal angle appearing swollen (Fig. 1A). Inner-dorsal margin of propodus of palm with 3 round-tipped spines, 2 proximal spines distinctly separated from each other, while distal third spine has subfoliaceous extension near carpus; dorsal margin of palm raised, appearing subcarinate; subdorsal outer surface

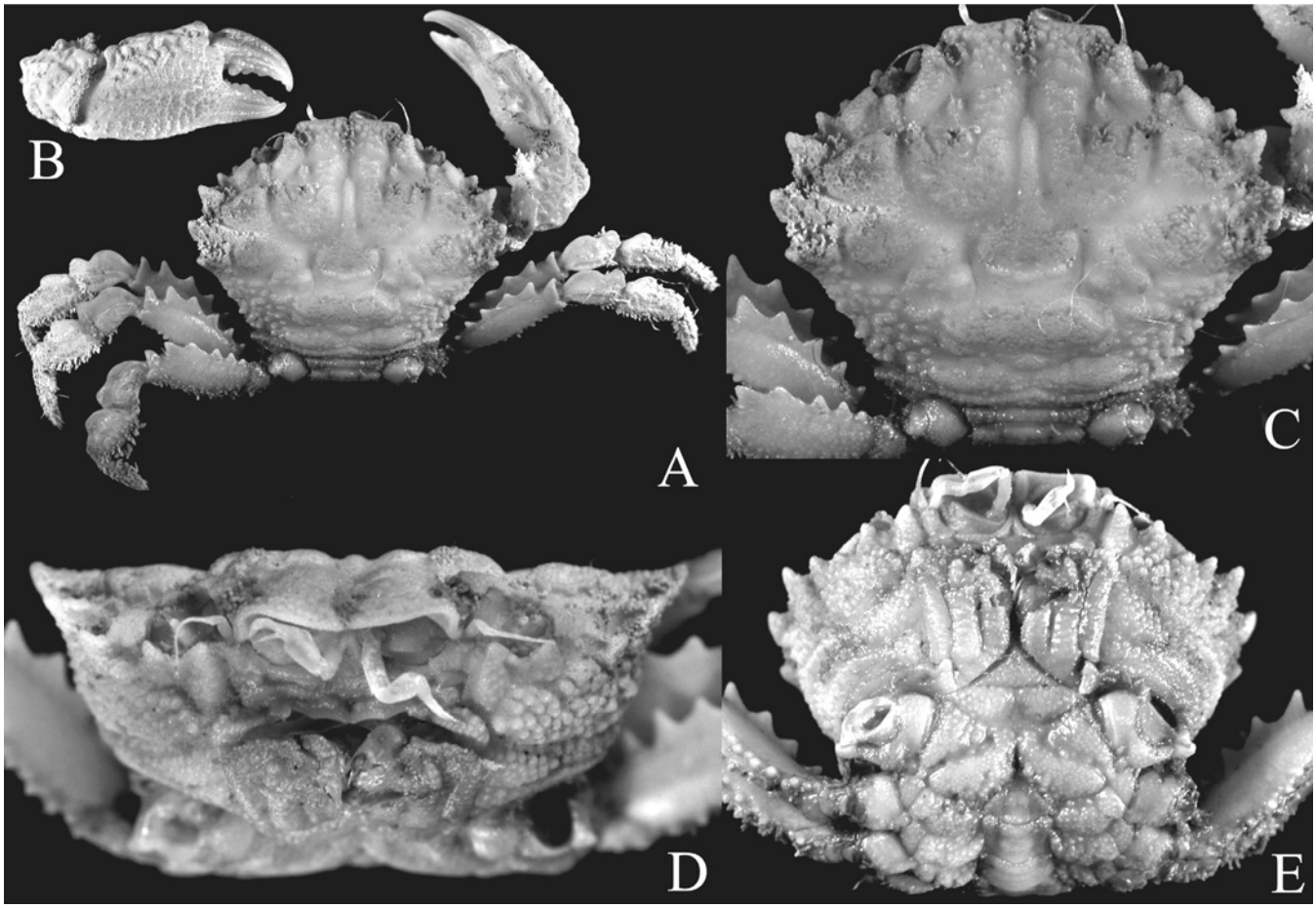


Fig. 1. *Ladomedaeus serratus* (Sakai, 1965). Male (11.7 × 8.3 mm) (NSMT 2428): A, overall view; B, outer surface of right chela; C, carapace; D, frontal view; E, thoracic sternum and third maxillipeds.

gently depressed longitudinally; inner subdorsal surface appears slightly eroded, with longitudinal row of widely separated tubercles; fingers length equal to length of palm, brownish; cutting margin of dactylus with pronounced large basal cutting tooth directed obliquely outwards, and 4 teeth; pollex with 3 teeth and 2 denticles (Fig. 1B).

Surface of ambulatory legs covered with small granules; margins setose but not obscuring margins (Fig. 1A). Merus with dorsal margin somewhat serrated, having 6 spines with rounded tip, very broad base; first 2 spines distinctly separated from each other while third, fourth and fifth spines joined basally, sixth and seventh spines distinctly separated (Fig.1A). Inner margin of legs setose, tuberculate, not obscuring margins. Carpus with distinct submedian carina on outer surface; dorsal margin of carpus and propodus with leaf-like extension; surface with small rounded granules (Fig. 1A).

Thoracic sternum relatively narrow, entire surface covered with numerous small flattened granules. Suture between sternites 1 and 2 completely absent; suture between sternites 2 and 3 complete; suture between sternites 3 and 4 appears complete, with lateral parts relatively deep, median part rather shallow; sutures between sternites 4 and 5, 5 and 6, and 6 and 7 medially interrupted. Abdomen reaching to imaginary line joining posterior bases of chelipeds (Fig. 1E).

Abdomen with outer surfaces mostly covered with small flattened granules and tomentum. Segments 3–5 completely fused, sutures separating segments 4 and 5 discernible, while 3 and 4 barely distinct; lateral margins entire, without any clefts or fissures, lateral regions gently depressed; segments 1–3 trapezoidal, segment 6 longitudinally rectangular, lateral margins gently concave; telson semicircular, lateral margins gently concave, tip rounded.

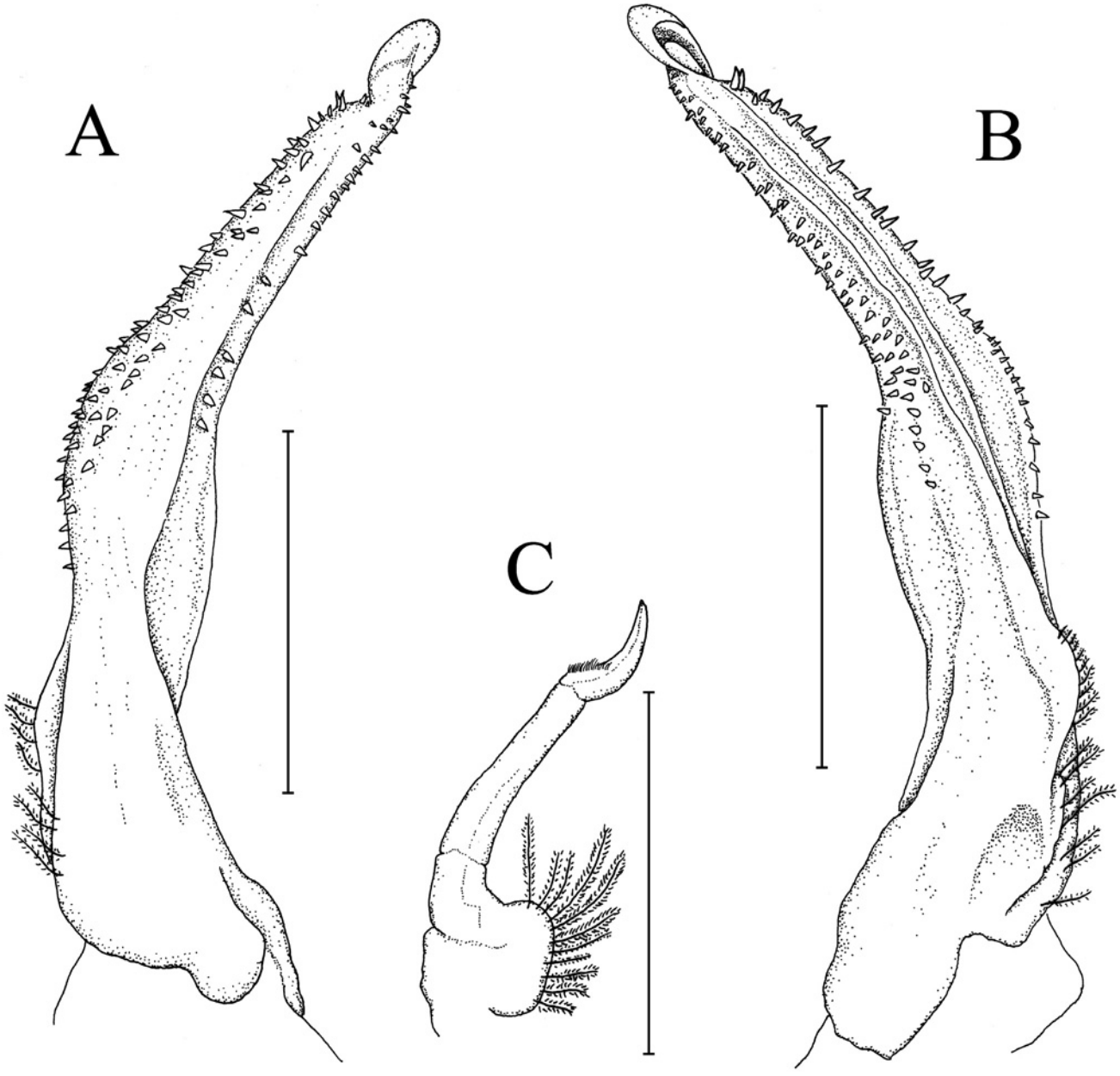


Fig. 2. *Ladomedaeus serratus* (Sakai, 1965). Male (11.7 × 8.3 mm) (NSMT 2428): A, B, right G1; C, right G2. Scale bars = 1.0 mm.

G1 relatively short, stout, proximal part tapering, distal part slender, distinctly tapering but with rounded tip, more or less spatulate; lateral margins of slender distal part lined with short spines; subdistal part with numerous plumose setae (Fig. 2A, B). G2 short, about a third length of G1, slender; distal part spatuliform (Fig. 2C).

***Remarks.*** **–** With regards to the type material, Dr Masatsune Takeda was kind enough to help us check on their status (as well as that of the allied *Medaeus planifrons* Sakai, 1965, now in *Paramedaeus* Guinot, 1967, see Ng & Clark, 1999). He writes "I asked Dr. Hiroshi Namikawa to check the specimens in the Showa Memorial Institute in the Tsukuba Research Center, National Science Museum [where all of the Emperor's material which Sakai used for his descriptions of new species is kept]. There may be some discrepancies between the type specimens and the original designations of *Medaeus serratus* Sakai and *M. planifrons* Sakai. Sakai (1965) described *M. planifrons* based on 3 males and 2 females (1 male and 1 female are designated as the holotype and allotype) from South Amadaiba, off Hayama, 85 m deep. In the Institute, there is only 1 male (sp. no. 2890: South Amadaiba, 250–300 m deep) and 1 female (sp. no. 2407: Maruyama-dashi to Kannonzuka-dashi, 60–80 m deep). According to Namikawa, the designation of TYPE (in red color) is only on the level of the male specimen (sp. no. 2890), without record on the ledger. *Medaeus serratus* was described on 2 males and 3 females (1 male and 1 female are designated as holotype and allotype) from Kannonzuka-dashi, 85 m deep [coll. by Japanese Emperor]; 1 male and 1 female from west of Joga jima [= Jyogashima], 65 m deep [coll. by Japanese Emperor]; 1 male from Sakai-Hama, Kii [coll. by M. Ozaki]; 2 males and 2 females from off Mimase, Tosa Bay, 60-80 m deep [coll. K. Sakai]. Although 2 males and 3 females are recorded on ledger including the holotype and allotype (sp. no. 2428), in reality, there are only 2 specimens in the bottle, with level of the record, west of Joga jima as the locality name. It is not sure whether these 2 specimens are those used in the original description or not. Unfortunately, Sakai (1965) did not record the collected date at all in the series of his papers which appeared in Crustaceana and also in his book, Crabs of Sagami Bay. I am afraid that he did not return all the specimens to the Biological Laboratory in the Imperial Household, and some of the type specimens were transferred to the Kanagawa Prefectural Museum or the Senckenberg Museum in Germany together with his private collections." (M. Takeda, pers. comm.).

The present two male specimens from NSMT pose an interesting problem. They are from the island of Joga Jima and bear the catalogue number 2428! Neither is the holotype as they are too small; Sakai (1965: 101) had noted that the holotype selected was a male 15 by 11 mm. The label with the present two NSMT specimens notes that they were collected on 14 Feb.1963, well within the timeframe for Sakai to have used them for his paper. Although the Emperor's collection of crabs at Tsukuba notes that the catalogue number 2428 was for the holotype, this same number accompanies the two male specimens found in NSMT. Also inexplicable is the locality associated with the present two specimens. Sakai (1965: 100) listed one male and one female from this locality. Both the present specimens are males. As noted by the curator of the Emperor's collections, the type material of Sakai poses some problems. In this case, however, both the specimens on hand are very likely to be the paratypes, even though it is clear that somewhere in its history, the collection locality and/or catalogue numbers have got mixed.

*Ladomedaeus serratus* is known only from Japan thus far. The species has been reported from its type locality (Sagami Bay) as well as Kii and Tosa Bay, usually in depths from 60 to 85 m, the deepest record being 255 m (Sakai, 1965a: 100; Takeda, 2001: 245).

For comparisons, see discussion for *L. fungillus*, new species.

### ***Ladomedaeus fungillus*, new species**
(Figs. 3–5)

***Material examined.*** **–** Holotype male (19.3 × 14.3 mm) (NMCR No. 27002), Balicasag Island, Panglao, Bohol, coll. tangle nets, Nov.2003. Paratypes: 19 males (11.9–16.9 × 8.4–11.7 mm), 19 females (ovigerous 13.1–15.8 × 9.1–11.5 mm, non-ovigerous 6.9–15.0 × 4.9–11.6 mm), 7 juveniles (NMCR), Balicasag Island, Panglao, Bohol, coll. tangle nets, Dec.2000; 1 male (18.2 × 13.0 mm) (ZRC 2001.0669), Balicasag Island,Panglao, Bohol, coll. P. K. L. Ng, from fisherman, 25–30 Jul.2003; 2 males (13.3–17.7 × 13.0–16.4 mm), 1 female (11.7 × 7.5 mm) (ZRC 2001.0465), Balicasag Island, Panglao, Bohol, coll. tangle nets 50–500 m depth, 28 Nov.2001; 12 males (10.5–20.3 × 7.7–15.5 mm), 4 juveniles (7.2–8. 3 × 6.3–7.5 mm) (ZRC), station CP2332, Maribojoc Bay, Panglao, Bohol, 396–418 m, 9°38.8'N 123°45.9'E, coll. MV DA-BFAR, 22 May 2005; 5 females (ZRC), station CP2331, Maribojoc Bay, Panglao, Bohol, 255–268 m, 9°39.2'N 123°47.5'E, coll. MV DA-BFAR, 22 May 2005; 2 females (ZRC), station CP2341, off Pamilacan Island, off Bohol, 544–712 m, 9°24.5'N 123°49.7'E, coll. MV DA-BFAR, 23 May 2005; 1 male (ZRC), station CP2360, 357–372 m, 8°48.9'N 123°37.6'E, coll. MV DA-BFAR, 26 May 2005; 1 male, 4 females, 2 juveniles (MNHN), station CP2368, 318–322 m, 8°56.1'N 123°16.6'E, coll. MV DA-BFAR, 27 May 2005; 3 males, 1 female (ZRC), station CP2372, 255–301 m, Dipolog Bay, Panglao, Bohol, 8°38.7'N 123°16.0'E, coll. MV DA-BFAR, 27 May 2005; 3 males, 3 females (ZRC), station CP2383, off Aligbay Island, 338-351 m, 8°44.7'N, 123°18.5'E, coll. MV DA-BFAR, 29 May 2005; 8 males, 12 females, 5 juveniles (ZRC), station CP2395, Maribojoc Bay, Panglao, Bohol, 382–434 m, 9°36.2'N 123°43.8'E, coll. MV DA-BFAR, 31 May 2005; 6 males, 4 females (MNHN), station CP2405, Maribojoc Bay, Panglao, Bohol, 387–453 m, 9°39.0'N 123°46.1'E, coll. MV DA-BFAR, 1 Jun.2005; 9 males, 4 females, 2 juveniles (ZRC), station CP2406, Maribojoc Bay, Panglao, Bohol, 334–387 m, 9°40.6'N 123°46.8'E, coll. MV DA-BFAR, 1 Jun.2005.

***Description of male holotype***. **–** Carapace transversely ovoid, 1.3 times wider than long; slightly convex from side to side, more convex anteriorly, particularly over anterior third; grooves separating gastric and branchial regions distinct, somewhat deep, H-shaped groove separating cardiac and gastric regions distinct; regions with fungiform sculpturing (Figs. 3A, B). Pterygostomial, sub-branchial and suborbital regions as well as sternum and abdomen covered with numerous closely packed, low, flattened, small granules,

setose in some parts (Figs. 3C–E). Antennules folding transversely, antennular fossae completely covered by protruding front from frontal view (Figs. 3C, 5A). Antennal flagellum thin, short, attached to stout basal segment occupying entire space between antennular fossa and internal suborbital angle (Figs. 3C, 5A). Endostome with well developed ridges. Outer surface of third maxilliped with low, closely packed small granules on anterior portion and diminishing towards posterior portion; ischium rectangular, median longitudinal sulcus deep; merus subquadrate, antero-external angle auriculiform, with median depression (Figs. 3D, 5B); exopod reaching anterior edge of merus with long flagellum. Front prominent, broad, prominently produced beyond imaginary line connecting inner supra-orbital tooth; distinctly bilobed, inner lobe larger than subtruncatiform outer lobe, lobes separated by very deep, broad U-shaped cleft which extends back almost to epigastric region; margin with coiled setae; margin slightly sinuate near orbit (Figs. 3A, B). Supraorbital margin with distinct inner tooth, separated from front by distinct U-shaped cleft, anterior margin of tooth with low granules; margin granular, with 2 prominent narrow fissures, 1 submedian, 1 lateral (Fig. 3B). Infraorbital margin concave, with sharp inner and outer teeth (Figs. 3C, E). External orbital tooth relatively big, distinct, triangular, directed anteriorly; separated from rest of anterolateral margin by rounded, minutely granular area, not connected by distinct crest or groove (Fig. 3B). Anterolateral margin distinctly convex, clearly separated from posterolateral margin by sharp angle; armed with 4 prominent, triangular teeth but with rounded tips, margin and/or base of teeth with prominent intercalated small granules; first tooth triangular, below level of external orbital tooth, with margin gradually sloping towards subhepatic region, not clearly connected to external orbital tooth; second tooth largest, broadest; third tooth directly somewhat obliquely, fourth tooth distinctly lateral (Fig. 3A, B). Posterolateral margin somewhat straight, anterior part with low granules, some granules closely packed; prominently converging towards gently towards convex posterior carapace margin (Fig. 3B).

Chelipeds distinctly unequal, surfaces appearing eroded (Figs. 3A, 4C, D); outer surfaces of merus, carpus and chelae covered with medium sized to small granules (Fig. 4B). Margins of merus with 4 spines with rounded tips, 3 spines

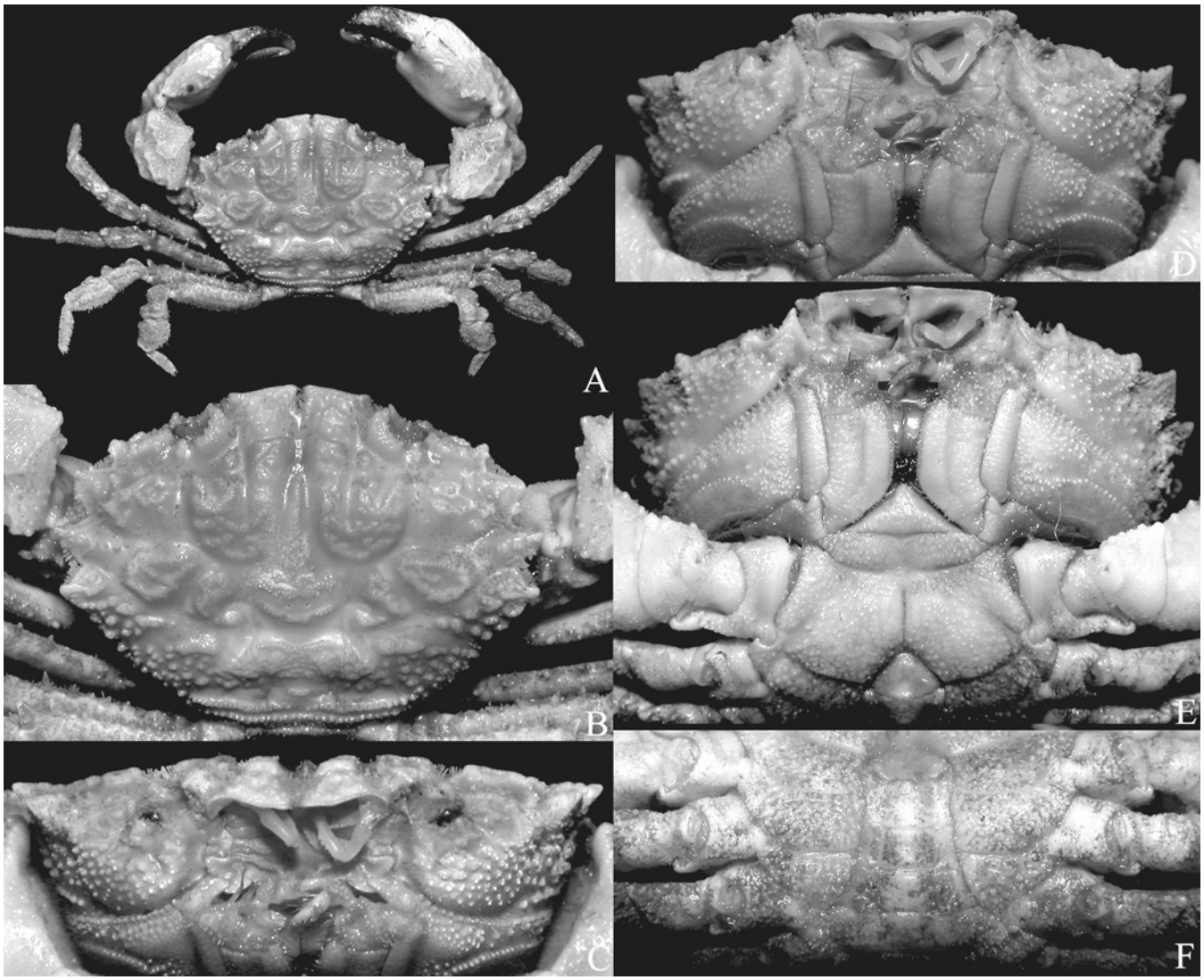


Fig. 3. *Ladomedaeus fungillus*, new species. Holotype male (19.3 × 14.3 mm) (NMCR No. 27002): A, overall view; B, carapace; C, frontal view; D, third maxillipeds; E, anterior part of thoracic sternum; F, male abdomen.

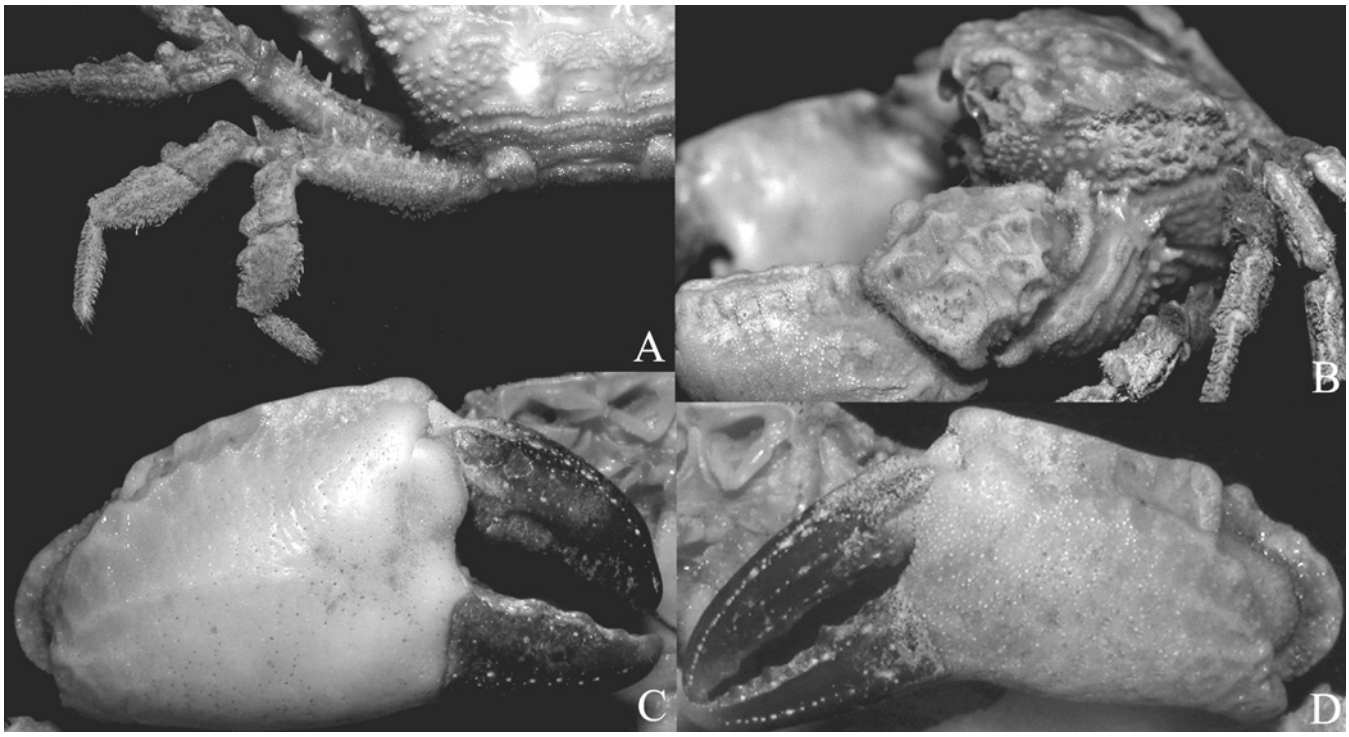


Fig. 4. *Ladomedaeus fungillus*, new species. Holotype male (19.3 × 14.3 mm) (NMCR No. 27002): A, left ambulatory legs; B, outer surface of left cheliped; C, right larger chela; D, left smaller chela.

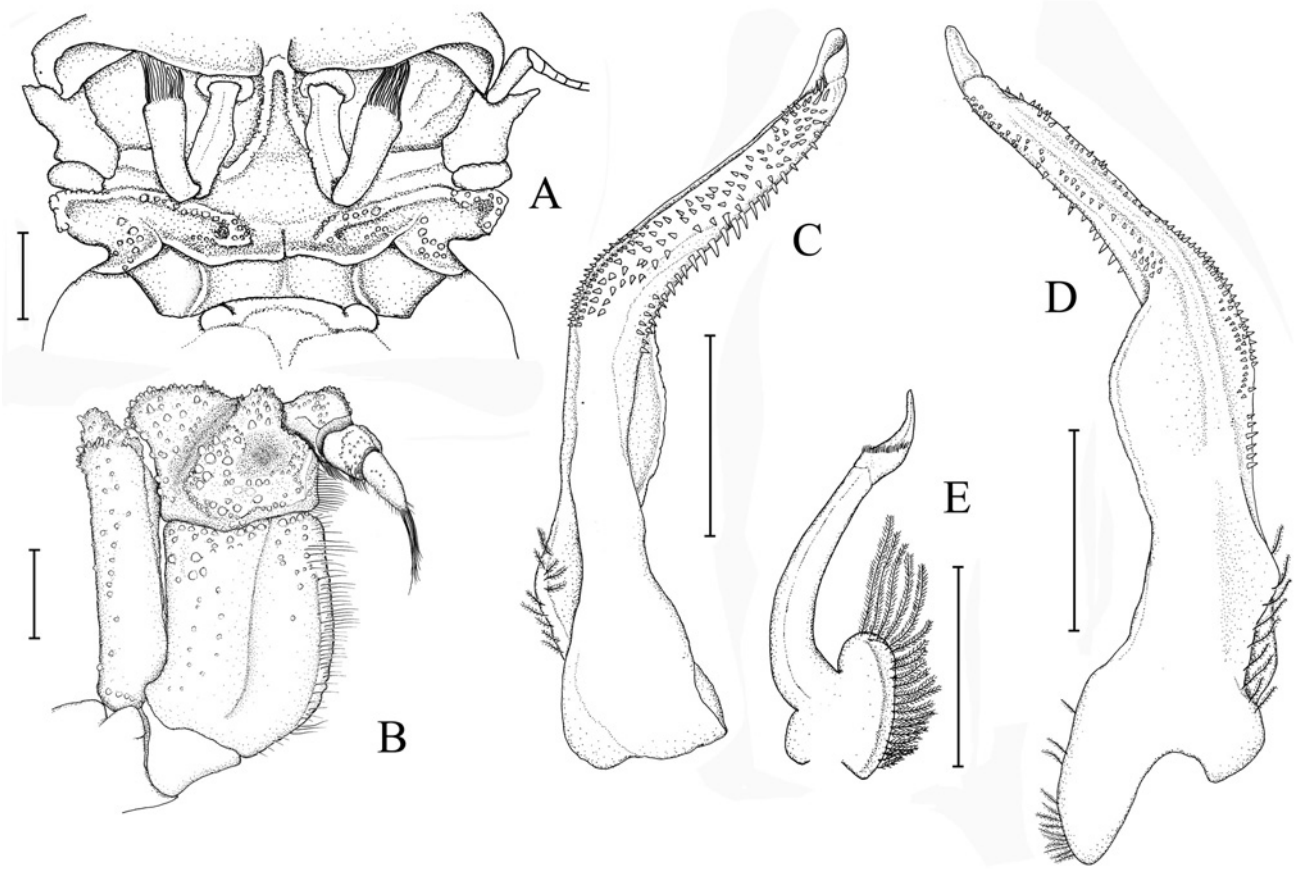


Fig. 5. *Ladomedaeus fungillus*, new species. Holotype male (19.3 × 14.3 mm) (NMCR No. 27002): A, antennae, antennules and epistome; B, right third maxilliped; C, D, right G1; E, right G2. Scale bars = 1.0 mm.

distinctly separated from each other while spine nearest to carpus is largest but with small granules around it. Inner distal angle of carpus with distinct prominent tooth, a margin anterior and posterior to tooth lined with rounded granules, appearing gently serrulate; outer margin with spinules; outer distal angle appears swollen (Figs. 3A, 4B). Dorsal margin of palm raised, appearing subcarinate; subdorsal outer surface gently depressed longitudinally; inner subdorsal surface appears slightly eroded, with longitudinal row of widely separated tubercles; fingers shorter than palm, brownish (although in smaller specimens, fingers are pinkish even in alcohol); cutting edge of dactylus of larger cheliped with pronounced large basal cutting tooth directed obliquely outward, and 4 teeth; cutting edge of pollex with 3 teeth and 2 denticles; minor cheliped with fingers more slender than those on major cheliped but not forceps-like, dactylus with 5 teeth, pollex with 8 teeth (Fig. 4C, D).

Surface of ambulatory legs covered with minute granules; margins setose but not obscuring margins. Merus with dorsal margin having 6 or 7 spines with rounded tip. Carpus with distinct submedian carina on outer surface; dorsal margin of carpus and propodus with foliaceous extensions; surface with small rounded granules (Figs. 1A, 4A).

Thoracic sternum relatively narrow, entire surface covered with numerous small flattened granules. Suture between sternites 1 and 2 completely absent; suture between sternites 2 and 3 complete; suture between sternites 3 and 4 appearing complete, with lateral parts relatively deep, median part rather shallow; sutures between sternites 4 and 5, 5 and 6, and 6 and 7 medially interrupted (Fig. 3E, F). Abdomen reaching to imaginary line joining posterior bases of chelipeds (Fig. 3E).

Abdomen with outer surfaces mostly covered with small flattened granules and tomentum (Fig. 3F). Segments 3–5 completely fused, sutures separating segments discernible, lateral margins entire, without any clefts or fissures, lateral regions gently depressed; segments 1–3 trapezoidal, segment 6 longitudinally rectangular, lateral margins gently concave; telson semicircular, lateral margins gently concave, tip rounded.

G1 relatively short, stout, proximal part tapering, distal half curving outwards; distal part slender, distinctly tapering to sharp tip; lateral margins of slender distal part lined with short spines (Fig. 5C, D); subdistal part with numerous long plumose setae. G2 short, about one-third length of G1, slender, distal part spatuliform (Fig. 5E).

***Female*. –** The female specimens of *L. fungillus*, new species, differ from the holotype and paratype males only in the sexual characters.

***Etymology*. –** This species is named based on the mushroom-like appearance of the regions of carapace.

***Remarks*. –** *Ladomedaeus fungillus*, new species, differs from its only congener, *L. serratus* in having the carapace proportionately broader with the anterolateral teeth relatively lower and less prominent (Fig. 3B vs. Fig. 1C), the ambulatory meri are armed with distinct spines (Fig. 3A) (versus sharp teeth, Fig. 1A), and the G1 has a relatively more slender distal part, with the tip less spatuliform (Fig. 5C, D vs. Fig. 2A, B).

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