TWO NEW SPECIES OF THE AXIIDEAN GENUS *GOURRETIA* DE SAINT LAURENT, 1973 (DECAPODA: CTENOCHELIDAE) FROM THE SOUTH CHINA SEA

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ABSTRACT

Two new species of *Gourretia* from South China Sea are described and illustrated. *Gourretia laevidactyla* n. sp. is closely allied to *G. biffari* found from northwest of Barcelona, Venezuela but differs markedly in having a cardiac prominence present and telson appearing truncate on the posterior margin. *Gourretia sinica* n. sp. appears to be closely related to the West Atlantic species *G. laresi* known from Venezuela but differs in the rostrum having a narrower acute spine. It is the first record of this genus in China seas.

KEY WORDS: Axiidea, Gourretia, South China Sea

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INTRODUCTION

While working on a systematic study of the axiidean fauna of the China Sea, two new species of the genus *Gourretia* De Saint Laurent, 1973 were found in the biological collections from the northern South China Sea.

Gourretia is diagnosed by: carapace lacking dorsal oval; maxilliped 3 ischium and merus subpediform, usually with distolateral meral spine; propodus oblong and dactylus digitiform, exopod present; larger cheliped with proximal meral hook; male pleopod 1 uniramous, biarticulate, distal segment distally bifurcate, male pleopod 2 biramous, foliaceous, and with appendix interna; female pleopod 1 uniramous, biarticulate, distal segment simple, female pleopod 2 biramous.

Ten species are known from the West Atlantic, East Atlantic, Mediterranean, and Indo-West Pacific (Table 1). De Saint Laurent (1973) established this genus based on type species, Callianassa subterranea var. minor Gourret, 1887, included in Callianassidae Dana, 1852. Manning and Felder (1991) established the callianassoid family Ctenochelidae and moved the genus Gourretia De Saint Laurent, 1973 into it. The family includes three subfamilies: Ctenochelinae for Ctenocheles Kishinouye, 1926, Dawsonius Manning et Felder, 1991, Gourretia de Saint Laurent, 1973, and Paracalliax de Saint Laurent, 1979; Anacalliacinae (as Anacalliinae) for Anacalliax de Saint Laurent, 1973; and Callianopsinae for Callianopsis de Saint Laurent, 1973. Poore (1994) suggests that Ctenochelidae are paraphyletic, unless Callianassa s. str. is included by cladistic analysis based on morphology. He generally agreed with the classification of Manning and Felder (1991) but returning Anacalliax to Callianassidae. Tudge et al. (2000) conducted a more extensive analysis also based on morphology. Their analysis suggests a division of two major groups corresponding to Callianassidae and Ctenochelidae, which generally agrees with the classification of Manning and Felder (1991); Anacalliax was again included in Ctenochelidae. In Robles et al. (2009), an analysis based

on nuclear and mitochondrial genes, *Gourretia* is also in Ctenochelidae.

Sakai (1999, 2004a and 2005) considerably rearranged the higher level classification of Callianassoidea by referring to a few morphological characters, resulting in a classification scheme very different from those proposed by other authors. Sakai (1999) established Gourretiidae, and according to the classification by him (2005) Ctenochelidae comprise only the genus *Ctenocheles*. Most of the other genera mentioned above are assigned to Gourretiidae Sakai, 1999, which includes three subfamilies: Gourretiinae Sakai, 1999 for *Gourretia* De Saint Laurent, 1973, *Laurentgourretia* Sakai, 2004b, *Paragourretia* Sakai, 2004b; Callianopsinae Manning et Felder, 1991 for

Table 1. Species of Gourretia with relevant literature.

- G. barracuda Le Loeuff et Intes, 1974 Abidjan, Ivory Coast
- G. denticulata (Lutze, 1937) Limski-Canal, Istria, Croatia, Adriatic Sea (type locality); Cadiz Bay, Spain (Lopez de la Rosa et al., 1998). Mediterranean: Gulf of Marseille, Ionian Sea, Malta, and along the coast of Israel; Baie de Kotor (De Saint Laurent and Bozic, 1976); Piran Gulf (Manning and Števčić, 1982). Adriatic Sea (Lutze, 1937; Dworschak, 1992); Tyrrhenian Sea, Ischia (Italy) (Dworschak, 1992); Ionian Sea, Aegean Sea, N. Euboikos Gulf, Patraikos Gulf, and Rhodes, 5-15 m depth, in pure sand (Thessalou-Legaki, 1986) Koukouras et al., 1992). Cyprus (Lewinsohn and Holthuis, 1986)
- G. lahouensis Le Loeuff et Intes, 1974 Grand Lahou, Ivory Coast
- G. loeuffintesi Sakai, 2005 Guinea Bay, Benin

West Atlantic species:

- G. bijfari Blanco Rambla et Liiiero Arana, 1994 Northwest of Barcelona, Venezuela
- *G. laresi* Blanco Rambla et Lifiero Arana, 1994 Northwest of Chimana Islands, Venezuela

Indo-West Pacific species:

- G. coolibah Poore et Griffin, 1979 Western Australia
- G. crosnieri Ngoc-Ho, 1991 Prony Bay, He Ouen, New Caledonia
- G. manihinae Sakai, 1984 Pangani Bay, Tanzania
- G. nosybeensis Sakai, 2004b Nosy Bé and near Ile d'Ampasindava, Madagascar

East Atlantic and Mediterranean species:



Fig. 1. Gourretia laevidactyla, new species, holotype female, entire animal, lateral view. Scale = 1 mm.

Callianopsis De Saint Laurent, 1973; and Pseudogourretiinae Sakai, 2005 for *Pseudogourretia*, Sakai, 2005.

In view of the still confused higher taxonomy of Callianassoidea, we follow the scheme of Tudge et al. (2000), which is based on an analysis of numerous morphological characters. The higher taxonomy of Callianassoidea is not discussed here, which is beyond the scope of this paper. In this paper, we describe and illustrute two new species of this genus from South China Sea. It is the first record of this genus in Chinese waters.

MATERIALS AND METHODS

Materials for this study were collected from the northern South China (2007) within and outside of the Beibu Gulf (Gulf of Tonkin). All materials examined are deposited in the Institute of Oceanology, Chinese Academy of Sciences, Qingdao, China (IOCAS).

The drawings were made with the aid of drawing tube mounted on a Zezss Stemi Sv11 compound microscope.

The following abbreviations are used throughout the text: cl, length of carapace; tl, total length of body.

Systematics

Ctenochelidae Manning et Felder, 1991 *Gourretia* de Saint Laurent, 1973 *Gourretia laevidactyla* n. sp. (Figs 1-4)

Material examined.—Holotype: Q, South China Sea, 20.15°N, 112.4°'E, 80 m, October 2007. Paratype: Q, Y40B-8, Beibu Gulf, 18°N, 108°E, 93 m, muddy sand, Xiutong Ma, coll., 11 December 1959.

Diagnosis.—Rostrum a narrow acute spine; carapace without dorsal oval, cardiac prominence present. Antennule

peduncle shorter and wider than antennal peduncle. Maxilliped 3 ischium-merus pediform, merus with a distomedian spine, exopod present. Cheliped unequal. Female larger cheliped with 1 rounded tooth on cutting edge of dactylus, cutting edge of fixed finger unarmed; female smaller cheliped each cutting edge unarmed. Abdominal pleura 3-5 with tuft of setae, pleura 6 with longitudinal row of setae. Female pleopod 1 uniramous, and two-segmented; the distal segment is flat, longer than the proximal one; pleopod 2 biramous, endopod wider than exopod, with an appendix interna. Telson longer than wide, posterior margin straight, with a small median spine. Uropodal endopod with dorsal carina, uropodal exopod with lateral notch.

Description.—Rostrum (Fig. 2A) a narrow acute spine, less than 3/4 length of eyestalks, detached between rostrum and eyestralks; lateral projections triangular. Carapace without dorsal oval, dorsal region narrow; cardiac prominence present; linea thalassinica complete; cervical groove located about in posterior quarter; gastric region with a lateral row of setae.

Eyestalks (Fig. 2A) elongate, ovate in dorsal view; extending to distal third of first article of antennular peduncle; cornea located in distal third, with scarce black pigments, corneal width about 1/3 of peduncular width.

Antennular peduncle (Fig. 2A) distinctly shorter and wider than antennal peduncle; terminal article longer than penultimate one; rami of flagella subequal in length to peduncle. Antennal peduncle with scaphocerite on article 3, slender and acute; terminal article about 1/2 length of penultimate article.

Maxilliped 3 (Fig. 2B, C) pediform with exopod; length of endopodal merus and ischium 3.1 times of the width,





Fig. 2. *Gourretia laevidactyla*, new species, holotype female. A, carapace, dorsal view; B, left maxilliped 3, outer view; C, ischium of left maxilliped 3, inner view; D, telson and uropods, dorsal view. Scale = 1.25 mm for A; 1.6 mm for B, C; 1 mm for D.

with dense setae on lower margin; ischium subsquare, 1.4 times as long as width, with spinous ridge on internal surface; merus subsquare, 1.75 times as long as width, with a spine at distoventral comer; carpus base narrow, broad distally and 1.3 times as long as wide, about as long as merus (upper margin); propodus sub-ovate, slightly broadened on lower margin, slightly narrower and shorter than carpus; dactylus fingerlike, 2.0 times as long as wide, 0.8 length of propodus.

Branchial formula summarized in Table 2; maxilliped 1 with a rudimentary epipod, maxilliped 3 to pereiopod 4 each with a pair of arthrobranchs.

Pereiopod 1 unequal. Larger cheliped (Fig. 3A) ischium three times as long as high; upper margin slightly concave and unarmed; lower margin straight, armed with several inconspicuous denticles. Merus slightly shorter than ischium, about twice as long as high; upper margin convex, smooth; lower margin convex, with a sharp and curved tooth at the proximal end and furrowing inconspicuous denticles. Carpus 0.7 times as long as high, and 0.5 times as long as merus; upper margin almost straight, and proximoventral margin broadly rounded and smooth in outline. Chela heavy, palm about 1.5 times as long as high, 1.3 length of merus; upper margin convex and lower



Fig. 3. Gourretia laevidactyla, new species, holotype female. A, left larger cheliped, outer view; B, right smaller cheliped, outer view. Scale = 1 mm.

margin slightly concave; fixed finger about 0.8 times as long as the upper margin of palm, cutting edge with sharp ridge and unarmed; dactylus incurved distally, slightly overreaches fixed finger, bearing a blunt tooth on the middle of cutting edge and with a sharp ridge.

Smaller cheliped (Fig. 3B) with three times ischium as long as high; upper margin slightly concave and unarmed; lower margin straight, armed several denticles. Merus almost as long as ischium, about twice as long as high; upper margin convex, smooth; lower margin convex, with a sharp and curved tooth at the proximal end; exterior surface medially swollen; carpus 1.3 times as long as high, 0.6 length of merus, 0.5 length of palm; upper margin almost straight, proximoventral margin gradually tapering to the base. The chela slender, tapering and incurved distally, palm about 1.9 length of carpus; fixed finger slender, about 0.9 length of upper margin of propodus, cutting edge with sharp ridge and unarmed; dactylus also slender, slightly overreaching fixed finger, cutting edge with sharp ridge and unarmed.

Pereiopod 2 (Fig. 4A) chelate, fingers slightly slender. Merus with rounded projection ventroproximally; carpus broad distally; palm distinctly shorter than fingers, about 0.33 length of dactylus; cutting edge of fingers unarmed; tips of dactylus and fixed finger corneous. Pereiopod 3 (Fig. 4B) simple. Merus about 3.3 length of ischium; carpus about 0.7 length of merus, lower margin convex, broader distally; propodus nearly 1.9 times as long as wide; dactylus elongate, 3.5 times as long as wide, acute at tip.

Pereiopod 4 (Fig. 4C) similar to pereiopod 3. Merus about 1.8 length of ischium; carpus 0.8 length of merus, basal narrow; propodus shorter than carpus; dactylus elongate, 3.6 times as long as wide, acute at tip.

Pereiopod 5 (Fig. 4D) subchelate. Merus about 3.0 length of ischium; carpus 0.8 length of merus, convex on upper margin; propodus slightly shorter than carpus, dorsally convex, fixed finger short, straight; dactylus strong, sinuous, concave on inner margin.

First pleomere longer than wide; second somite slightly longer than the first; third somite about 0.5 length of the second; fouth and fifth somites similar, slightly shorter than the third, third to fifth pleura each with tuft of setae (located on distal, middle and basal respectively); sixth somite about 1.2 length of the fifth, subquadrate in dorsal view, ventrolateral projections rounded, pleura with row of setae.

Female pleopod 1 (Fig. 4E) uniramous, slender, 2 segments; distal article longer than basal; pleopod 2 (Fig. 4F) biramous, foliaceous, endopod wider than exopod, laterally attached appendix interna; pleopod 3 (Fig. 4G) biramous, foliaceous, wider than pleopod 2,



Fig. 4. *Gourretia laevidactyla*, new species. A-D, holotype female; E-G, paratype female, Y40B-8. A, pereiopod 2, lateral view; B, pereiopod 3, lateral view; C, pereiopod 4, lateral view; D, pereiopod 5, lateral view; E, pleopod 1, posterior view; F, pleopod 2, posterior view; G, pleopod 3, posterior view. Scale = 1 mm for A, B, C, D; 0.8 mm for E; 0.64 mm for F.

Table 2. Branchial formula of *Gourretia laevidactyla* and *G. sinica*, n. spp. r = rudimentary.

	Maxillipeds			Pereopods				
	1	2	3	1	2	3	4	5
Epipods	r	_	_	_	_	_	_	_
Podobranches	-	-	-	-	_	_	_	-
Arthrobranches	-	-	2	2	2	2	2	-
Pleurobranches	-	-	-	-	-	-	-	-

endopod wider than exopod, with a middle transverse dent on mesial face and bearing a slender appendix interna on mesial margin; pleopods 4 and 5 similar to pleopod 3.

Telson (Fig. 2D) longer than wide, trapezoidal, basal lateral projections rounded; posterior margin generally straight, with small median spine. uropodal endopod nearly as long as telson, distal rounded, with a low submedian carina on dorsal face; uropodal exopod wider than uropodal endopod, with lateral notch.

Size.—Holotype Q: cl 4.4 mm, tl 16.0 mm; paratype Q: cl 9.0 mm, tl 32.1 mm.

Etymology.—The species name is based on the unarmed cutting edges of the smaller cheliped; *laevidactyla*, is the combination of the Latin, "laevi" (= left), and "dactyla" (= finger).

Distribution and Habitat.—Presently only known from the type locality. At depths of 80-93 m; bottom: muddy sand.

Remarks.—Only the female is known. The new species bears some resemblance to *G. biffari* Blanco Rambla and Liñero Arana, 1994 found northwest of Barcelona, Venezuela, but it differs in several aspects: cardiac prominence is present (versus absent); the posterior margin of telson is straight (versus rounded).

Gourretia sinica n. sp. (Figs 5-10)

Material examined.—Holotype: \circ , X248A-17, Beibu Gulf, 19.5°N, 106.5°E, 32 m, coll., 21 August 1962. Paratype: \circ , X167A-16, Beibu Gulf, 19.5°N, 107°E, 47 m, Fuzeng Sun, coll., 15 January 1962; 1 \circ , X54A-29, Beibu Gulf, 19.75°N, 106.5°E, 32 m, muddy sand, Zhengang Fan, coll., 8 February 1960; 1 \circ , Q190A-11, Beibu Gulf, 20.75°N, 107.5°E, 32 m, sandy mud, Fuzeng Sun, coll., 19 April 1960; 1 \circ , K213A-12, Beibu Gulf, 19.5°N, 107°E, 49.8 m, muddy sand, Zhengang Fan, coll., 7 July 1960.

Non-type material: 1 \circ , K213A-12, Beibu Gulf, 19.5°N, 107°E, 49.8 m, muddy sand, Zhengang Fan, coll., 7 July 1960; 1 \circ , K230A-17, Beibu Gulf, 18.5°N, 106.25°E, 27.5 m, muddy sand, Lingxin Qi, coll., 10 July 1960; 1 \circ , K272A-9, Beibu Gulf, 19°N, 106.5°E, 44 m, sandy mud,



Fig. 5. Gourretia sinica, new species, holotype male, X248A-17, entire animal, lateral view. Scale = 1 mm.



Fig. 6. *Gourretia sinica*, new species. A, D, holotype male, X248A-17; B, C, paratype male, X54A-29. A, carapace, dorsal view; B, left maxilliped 3, outer view; C, ischium of left maxilliped 3, inner view; D, telson and uropods, dorsal view. Scale = 1 mm for A; 0.8 mm for B, C; 1.25 mm for D.

Ronghua Na, coll., 19 October 1960; 1Q, X72A-3, Beibu Gulf, 19°N, 106°E, 28 m, muddy sand, 11 February 1960.

Diagnosis.—Rostrum a narrow acute spine; carapace without dorsal oval. Antennule peduncle shorter and wider than antennal peduncle. Maxilliped 3 ischium and merus pediform, ischium with a strong curved projection ventro-proximally, merus with a distomedian spine, exopod present. Cheliped unequal. Male larger cheliped with 2 rounded teeth on cutting edge of fixed finger and 5 rounded teeth on cutting edge of dactylus; female larger cheliped with row of low teeth on each cutting edge. Male and female smaller

chelipeds similar, with 7 triangular, proximally directed teeth on each cutting edge. Each cutting edge of pereiopod 2 with 4 sharp corneous spines. Pleonal pleura 3-5 with tuft of setae. Male pleopod 1 uniramous, two-segmented, distal segment bilobed distally; male pleopod 2 biramous, endopod laterally attached appendix interna, without appendix masculina. Female pleopod 1 uniramous, two-segmented, distal segment incurved; pleopod 2 biramous, endopod wider than exopod, without appendix interna. Telson longer than wide, posterior margin rounded, without median spine. Uropodal endopod without dorsal carina, uropodal exopod without lateral notch.



Fig. 7. *Gourretia sinica*, new species. A-B, paratype male, X54A-29; C, paratype female, X167A-16. A, male left larger cheliped, inner view; B, male right smaller cheliped, inner view; C, female left larger cheliped, outer view. Scale = 1 mm.

Description.—Rostrum (Fig. 6A) a narrow acute spine, less than 3/4 length of eyestalks, detached between rostrum and eyestralks; lateral projections triangular. Carapace without dorsal oval, dorsal region arched; cardiac prominence absent; linea thalassinica complete; cervical groove located about in posterior quarter.

Eyestalks (Fig. 6A) elongate, ovate in dorsal view; extending to distal third of first article of antennular

peduncle; cornea located in distal third, with scarce black pigments, corneal width about 1/4 of peduncular width.

Antennular peduncle (Fig. 6A) distinctly shorter and wider than antennal peduncle; terminal article longer than penultimate one; rami of flagella subequal in length to peduncle. Antennal peduncle with rudimentary scaphocerite on article 3; terminal article about 1/2 length of penultimate article.



Fig. 8. *Gourretia sinica*, new species. Paratype female, X167A-16. A, pereiopod 2, lateral view; B, chela of pereiopod 2, lateral view; C, pereiopod 3, lateral view; D, pereiopod 4, lateral view; E, pereiopod 5, lateral view. Scale = 1 mm for A, C, D, E; 0.38 mm for B.

Maxilliped 3 (Fig. 6B, C) pediform with exopod; length of endopodal merus-ischium 1.9 times of the width, with dense setae on lower margin; ischium subsquare, 1.9 times as long as width, with spinous ridge on internal surface and provided with a strong tooth at the inner proximal rectangular angle directed outwards along the proximal margin; merus subquadrate, 1.6 times as long as width, with a spine at distoventral comer; carpus base narrow, broad distally and 1.5 times as long as wide, about as long as merus (upper margin); propodus sub-ovate, slightly broadened on lower margin, narrower and slightly shorter than carpus; dactylus fingerlike, 2.1 times as long as wide, 0.9 length of propodus.

Branchial formula summarized in Table 2; maxilliped 1 with a rudimentary epipod, maxilliped 3 to pereiopod 4 each with a pair of arthrobranchs.

Pereiopod 1 (Fig. 7A) unequal. Male larger cheliped with ischium 2.5 times as long as high; upper margin slightly concave and unarmed; lower margin straight, armed with 5 sharp denticles. Merus slightly shorter than ischium, about 1.6 times as long as high; upper margin convex, smooth; lower margin convex, with a sharp and curved tooth at the proximal end and furrowing inconspicuous denticles at basal half. Carpus 0.6 times as long as high, and 0.8 times as long as merus; upper margin almost straight, and proximoventral margin broadly rounded and smooth in outline. Chela heavy, palm about 1.4 times as long as high, 1.6 length of merus; upper margin slightly convex and lower margin slightly concave; fixed finger about 0.7 times as long as the upper margin of palm, cutting edge with 2 rounded teeth; dactylus incurved distally, slight overreaches fixed finger, bearing 5 rounded teeth on the cutting edge.

Smaller cheliped (Fig. 7B) with ischium 2.5 times as long as high; upper margin slightly concave and unarmed; lower margin straight, armed with 5 sharp denticles. Mreus 0.7 length of ischium, about 1.4 times as long as high; upper margin convex, smooth; lower margin almost straight, with a sharp and curved tooth at proximal end; exterior surface medially swollen; carpus 1.3 times as long as high, 0.8 length of merus, 0.5 length of palm; upper margin almost straight, proximoventral margin gradually tapering to the base. The chela slender, tapering and incurved distally, palm about 1.8 length of carpus; fixed finger slender, about as long as upper margin of propodus, cutting edge with a series of 7 triangular, proximally directed teeth; dactylus also slender, slightly overreaching fixed finger, cutting edge with a series of 7 triangular, proximally directed teeth.

Female larger cheliped (Fig. 7C) similar to the male, different in: lower margin of merus only with a sharp and curved tooth at the proximal end and without furrowing inconspicuous denticles at basal half; cutting edge of fixed with several low teeth at middle and a row of fine teeth



Fig. 9. *Gourretia sinica*, new species. A-C, paratype male, X54A-29; D-E, paratype female, X167A-16. A, male pleopod 1, posterior view; B, male pleopod 2, posterior view; C, male pleopod 3, posterior view; D, female pleopod 1, posterior view; E, female pleopod 2, posterior view. Scale = 1 mm.

extending to basal, and cutting edge of dactylus with several low teeth at middle.

Female smaller cheliped similar to the male.

Pereiopod 2 (Fig. 8A, B) chelate. Merus with rounded projection ventroproximally; carpus broad distally, lower margin with mesial row of setae near distal; palm distinctly shorter than fingers, about 0.33 length of dactylus, propodus upper magin with mesial row of setae near distal and lower margin also with mesial row of setae on basal

1/4; upper margin of dactylus with mesial row of setae near basal; cutting edge of fingers both with 4 sharp corneous spines; each cutting edge with sharp ridge, tips of dactylus and fixed finger corneous.

Pereiopod 3 (Fig. 8C) simple. Merus about 2.7 length of ischium; carpus about 1.6 length of merus, lower margin convex, broad distally; propodus short and wide, nearly 1.1 times as long as wide, upper margin distinctly convex; dactylus short, 2.2 times as long as wide, acute at tip.



Fig. 10. *Gourretia sinica*, new species, merus of larger cheliped. A, holotype male, X248A-17; B, paratype male, X54A-29; C, paratype male, Q190A-11; D, paratype female, K213A-12. Scale = 1 mm.

Pereiopod 4 (Fig. 8D) similar to pereiopod 3. Merus about 1.9 length of ischium; carpus 0.7 length of merus, basal narrow; propodus ovate, 0.6 length of carpus; dactylus short, 2.1 times as long as wide, acute at tip.

Pereiopod 5 (Fig. 8E) subchelate. Merus about 4.1 length of ischium; carpus 0.8 length of merus, convex on upper margin; propodus slightly shorter than carpus, dorsally convex, fixed finger short, straight; dactylus strong, sinuous, concave on lower margin and with some inconspicuous denticles.

First pleomere longer than wide; second somite slightly longer than the first; third somite about 0.5 length of the second; fouth and fifth somites similar, slightly shorter than the third, third to fifth pleura each with tuft of setae on distal; sixth somite about 1.2 length of the fifth, subquadrate in dorsal view, ventrolateral projections rounded, pleura without row of setae.

Male pleopod 1 (Fig. 9A) uniramous, two-segmented, distal segment bilobed distally; pleopod 2 (Fig. 9B) biramous, foliaceous, endopod laterally attached a wide appendix interna and distally without appendix masculina; pleopod 3 (Fig. 9C) biramous, foliaceous, wider than pleopod 2, endopod wider than exopod, with a slender appendix interna 3; pleopods 4 and 5 similar to pleopod 3. Female pleopod 1 (Fig. 9D) pediform, uniramous and two-segmented; distal segment flat, incurved and longer than the proximal one; pleopod 2 (Fig. 9E) biramous, endopod wider than exopod, without appendix interna; pleopods 3-5 similar to the male.

Telson (Fig. 6D) longer than wide, basal lateral margin slightly concave, posterior margin generally rounded, without median spine; uropodal endopod shorter than telson, distally rounded, without median carina on dorsal face; uropodal exopod wider than uropodal endopod, lateral margin entire, without lateral notch or incision.

Size.—Holotype (male) cl 4.8 mm, tl 14.7 mm; largest male cl 4.8 mm, tl 14.7 mm; largest female cl 5.0 mm, tl 16.1 mm.

Variation.—The lower margins of the merus in the male larger chelipeds exhibit some degree of variation (Fig. 10A, B, C). The lower margin has a sharp and curved tooth at the proximal end and a furrow with 3-5 denticles on the basal half. Only one female (K213A-12) large cheliped shows variation in the lower margin of the merus, beside a sharp and cured tooth, it also bears 3 small teeth (Fig. 10D).

Etymology.—The species name is based on the type locality.

Distribution and Habitat.—Presently only known from the type locality. At depths of 28-50 m; bottom: muddy sand and sandy mud.

Remarks.—The new species is similar to G. laresi Blanco Rambla et Liñero Arana, 1994 from Venezuela and G. manihinae Sakai, 1984 from Tanzania. The three species are all characterized and also distinguished from other species of the genus in having a strong curved projection on the lower margin of the ischium of maxilliped 3. However, the new species differs from G. laresi in regard to these points: with a narrower rostrum; cutting edge of male larger cheliped fixed finger with 2 rounded teeth (versus with 3); cutting edge of male larger cheliped dactylus with 5 rounded teeth (versus unarmed); each cutting edge of pereiopod 2 with 4 long spines (versus with 5 short ones). It can also be distinguished from C. manihinae by: female larger cheliped is being armed with row of low teeth on each cutting edge (versus with 2 obsolete teeth on cutting edge of fixed finger and 4 ones on cutting edge of dactylus) and a wider telson.

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