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Some Freshwater Crabs from Ecuador, South America

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南米エクアドル産サワガニ類数種の記録

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Abstract

Freshwater crabs that were collected in Ecuador during the field survey for lung flukes were identified as 9 species of 2 families. The species collected from the west of the Andean Cordilleras are *Hyplobocera aequatorialis* (Ortmann, 1897), *H. delsolari* Pretzmann, 1978, *H. exuca* Pretzmann, 1977, and *H. guayaquilensis* Bott, 1967 of the family Pseudothelphusidae, while the species collected from the Ecuadorian Amazon Basin are *Moreirocarcinus chacei* (Pretzmann, 1968), *M. emarginatus* (H. Milne-Edwards, 1853), *Rotundovaldivia latidens* (A. Milne-Edwards, 1869), *Sylviocarcinus devillei* H. Milne-Edwards, 1853, and *Trichodactylus faxoni* Rathbun, 1905 of the family Trichodactylidae.

Keywords： Freshwater crabs, Pseudothelphusidae, Trichodactylidae, *Hyplobocera, Moreirocarcinus*, *Rotundovaldivia*, *Sylviocarcinus*, *Trichodactylus*, Ecuador.

要　約

2012年および2013年、南米エクアドルにおける肺吸虫に関する現地調査の際に採集されたカニ類は以下の２科９種に同定された。アンデス山系の西部で採集されたのは Pseudothelphusidae の *Hypolobocera*属４種、*H. aequatorialis*（Ortmann, 1897）、*H. delsolari* Pretzmann, 1978、*H. exuca* Pretzmann, 1977、*H. guayaquilensis* Bott, 1967、東部のアマゾン水系で採集されたのは Trichodactylidae の *Moreirocarcinus chacei*（Pretzmann, 1968）、*M. emarginatus*（H. Milne-Edwards, 1853）、*Rotundovaldivia latidens*（A. Milne-Edwards, 1869）、*Sylviocarcinus devillei* H. Milne-Edwards, 1853、*Trichodactylus faxoni* Rathbun, 1905の５種であった。

Introduction

During two years, 2012 and 2013, the junior authors participated in the field research of lung flukes from Ecuador, South America. In the first year, sampling of crabs as intermediate host was made in the west areas of the Andean Cordilleras, and at the Amazon Basin in the east of the Andean Dividing Range in the second year. Most of the specimens collected during the survey were dissected and examined for lung fluke larvae, but some crabs were kept in alcohol for identification of the species.

The crabs from Ecuador were well studied and many new species and subspecies were described by Pretzmann (1968a, b, 1971, 1972, 1977, 1978, 1983a-d), Smalley & Rodríguez (1972), Rodríguez (1982, 1992), and Rodríguez & Von Sternberg (1998). Two monographs dealing with the families Pseudothelphusidae and Trichodactylidae completed by Rodríguez (1982, 1992) are then the monuments for the knowledge of the South American freshwater crabs. The complex pentanomial nomenclature introduced by Pretzmann (1978, 1983a, b) was readjusted to binominal nomenclature by Rodríguez & Von Sternberg (1998), and the generic system of the Trichodactylidae was revised by Magalhães & Türkay (1996a). Even if the taxonomic studies were advanced as briefly noted above, there are still many problems for the identification of the critical and variable species, with geographical distribution around the Andean Cordilleras and the Amazon Basin.

As recorded in the following lines, the specimens from Ecuador collected by the authors were identified as four species of the family Pseudothelphusidae from the west of the Andean Cordilleras and five species of the family Trichodactylidae from the upper reaches of the Amazon Basin. All the specimens are preserved in the collections of the National Museum of Nature and Science, Tsukuba (NSMT).

Family Pseudothelphusidae

Genus ***Hypolobocera*** Ortmann, 1897

Hypolobocera aequatorialis (Ortmann, 1897)

(Figs. 1, 3C, D)

Potamocarcinus aequatorialis Ortmann, 1897, pp. 317 (in key), 319, pl. 17 fig. 5.

Pseudothelphusa aequatorialis: Rathbun, 1905, p. 285.

Potamocarcinus (Hypolobocera) aequatorialis aequatorialis: Bott, 1967, p. 368, fig. 3.

Hypolobocera (Hypolobocera) aequatorialis nigra Pretzmann, 1968a, p. 6; 1972, p. 44, figs. 167-169, 262-264.

Hypolobocera (Hypolobocera) aequatorialis aequatorialis: Pretzmann, 1972, p. 43, figs. 186-189, 265-267.

Hypolobocera aequatorialis: Rodríguez, 1982, p. 61 (pt), fig. 33e, f；Rodríguez & Von Sternberg, 1998, p. 113, fig. 1.

Hypolobocera (Hypolobocera) [aequatorialis] aequatorialis aequatorialis: Pretzmann, 1983d, p. 351, figs. 4, 18, 26, 39, 54, 56, 71.

Hypolobocera (Hypolobocera) [aequatorialis] aequatorialis nigra: Pretzmann, 1983d, p. 352, figs. 3, 17, 25, 35, 52, 55, 72.

Material examined. Pucayacu, Cotopaxi Province, Ecuador, 5 Oct. 2012, 2 ♂♂ (37.5 × 24.0 mm; 35.8 × 23.0 mm), 1 ♀ (46.5 × 28.9 mm); Guassaganda, Cotopaxi Province, 1 ♂ (33.9 × 21.5 mm), 2 ♀♀ (40.5 × 25.7 mm; 32.0 × 20.5 mm).

Remarks. This species is medium to large in size for the genus *Hypolobocera* from Ecuador, exceeding 6 cm in carapace breadth, together with *H. delsolari* Pretzmann and *H. exuca* Pretzmann.

The carapace (Fig. 1A) is typically elliptical, with the anterolateral margin regularly convex and minutely serrated along whole length and the posterolateral margin moderately retreats toward to its posterior end; the proportion of breadth to length of the carapace is 1.56-1.61. The dorsal surface of the carapace is uneven, with a prominent median depression and a pair of long oblique furrow from the gastro-cardiac separation. The male right and left chelipeds (Fig. 1C) are distinctly different in size, the fingers being sharply toothed; the outer surface of the palm is smooth, without tubercle.

The male abdomen (Fig. 1B) is narrow and seven-segmented. The thoracic trench (Fig. 1D) is deeply excavated, especially at the distal part of the fifth sternite, to accommodate the distal part of the first pleopods. The male first pleopod (Figs. 1D, 3C, D) is stout, with the gently developed lateral lobe along its whole length; its outer distal end of the apical lobe is sharply pointed and nearly perpendicular to the shaft or directed weakly forward. The female abdomen is remarkably large, completely covering the whole thoracic surface. Each female genital pore occupies whole length of the sixth thoracic sternite, being longitudinal for its anterior half and directed obliquely outward for its posterior half.

It may be right that Rodríguez & Von Sternberg (1998) synonymized the subspecies *nigra* described by Pretzmann (1968) with the present species. Considering that even in the specimens examined there is a dark colored, almost black, male among the dark brown specimens, with the quite similar pleopods, the coloration of the specimens is not

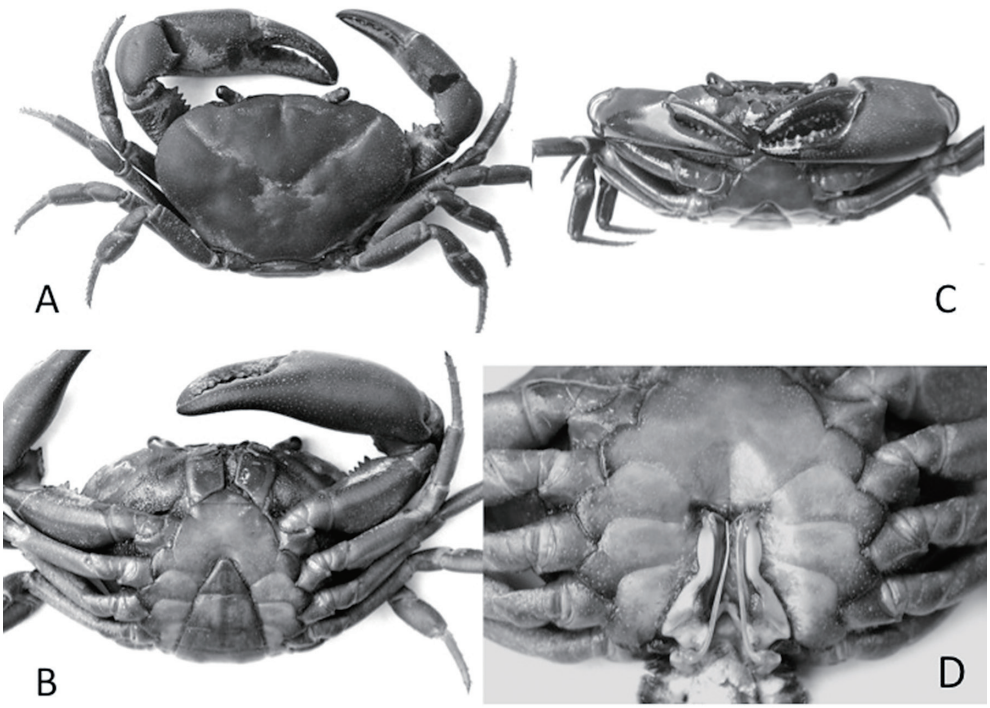

Fig. 1. *Hypolobocera aequatorialis* (Ortmann), ♂ (35.8 × 23.0 mm). Dorsal and ventral views (A, B), chelae (C), and pleopods (D).

considered to be the diagnostic character.

The general characters are close to those of *H. delsolari* Pretzmann. The distinguishing characters are referred to the remarks on the species.

Distribution. Widely distributed in the eastern and western slopes of the Eastern Cordillera of Ecuador.

Hypolobocera delsolari Pretzmann, 1978

(Figs. 2, 3G, H)

Hypolobocera (Hypolobocera) [aequatorialis] delsolari delsolari Pretzmann, 1978, p. 163, fig. 1; 1983d, p. 350, pl. 13 fig. 58.

Hypolobocera (Hypolobocera) delsolari: Pretzmann, 1983a, p. 304, pls. 11, 12.

Hypolobocera (Hypolobocera) [aequatorialis] delsolari isabella Pretzmann, 1978, p. 163, fig. 2; 1983d, p. 350.

Hypolobocera (Hypolobocera) delsolari isabella: Pretzmann, 1983a, p. 304, pls. 13, 14.

Hypolobocera aequatorialis: Rodríguez, 1982, p. 61 (pt), fig. 1a-d.

Hypolobocera delsolari: Rodríguez & Von Sternberg, 1998, p. 116, fig. 2.

Material examined. Guassaganda, Cotopaxi Province, Ecuador, 5 Oct. 2012, 1 ♂ (45.0 × 29.0 mm).

Remarks. Size and general shape of the carapace are close to those of *H. aequatorialis* (Ortmann) as represented in Figs. 1A and 2B. However, in this species both chelipeds (Fig. 2A) are not so much different in size and shape as in *H. aequatorialis* (Fig. 1C), with a big swelling at the distal part of the outer surface of the palm, or the bases of both fingers. The male abdomen is narrow, and the abdominal trench is not always specially deep, as seen in Fig. 2C. The male first pleopod (Figs. 2D, 3G, H) is rather slender, with the weakly developed lateral lobe not angled at the basal

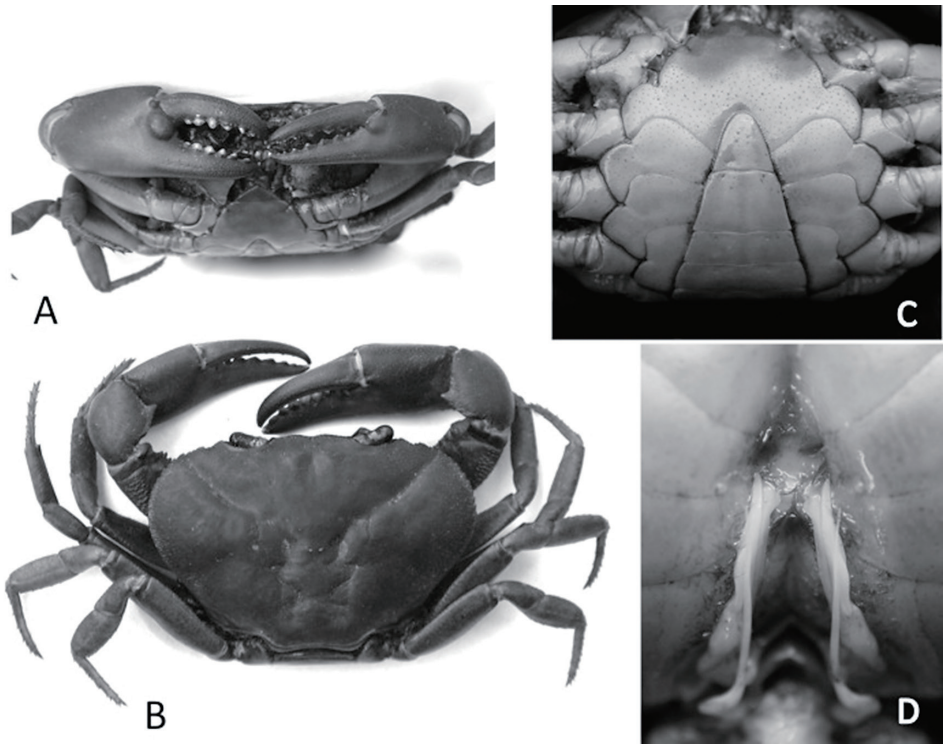

Fig. 2. *Hypolobocera delsolari* Pretzmann, ♂ (45.0 × 29.0 mm). Chelae (A), ventral view (B), abdomen (C), and pleopods (D).

and distal ends; the distal lobe is strongly developed forward and sharp at its tip as extension of the outer margin of the shaft; no special trench to accommodate the distal part of the first male pleopod as in *H. aequatorialis* (Fig. 1D).

Distribution. Known from several localities in Azuay Province, Ecuador.

Hypolobocera exuca Pretzmann, 1977

(Figs. 3A, B, 4)

Hypolobocera (Hypolobocera) [conradi] exuca Pretzmann, 1977, p. 437, fig. 8; 1983b, p. 357, pl. 20.

Hypolobocera riveti Rodríguez, 1980, p. 891; 1982, p. 49, figs. 19b, 20e, j, 23b, 25.

Hypolobocera exuca: Rodríguez & Von Sternberg, 1998, p. 117, fig. 4.

Material examined. Pucayacu, Cotopaxi Province, Ecuador, 5 Oct. 2012, 1 ♂ (carapace and abdomen with pleopods), (86.0 × 53.0 mm).

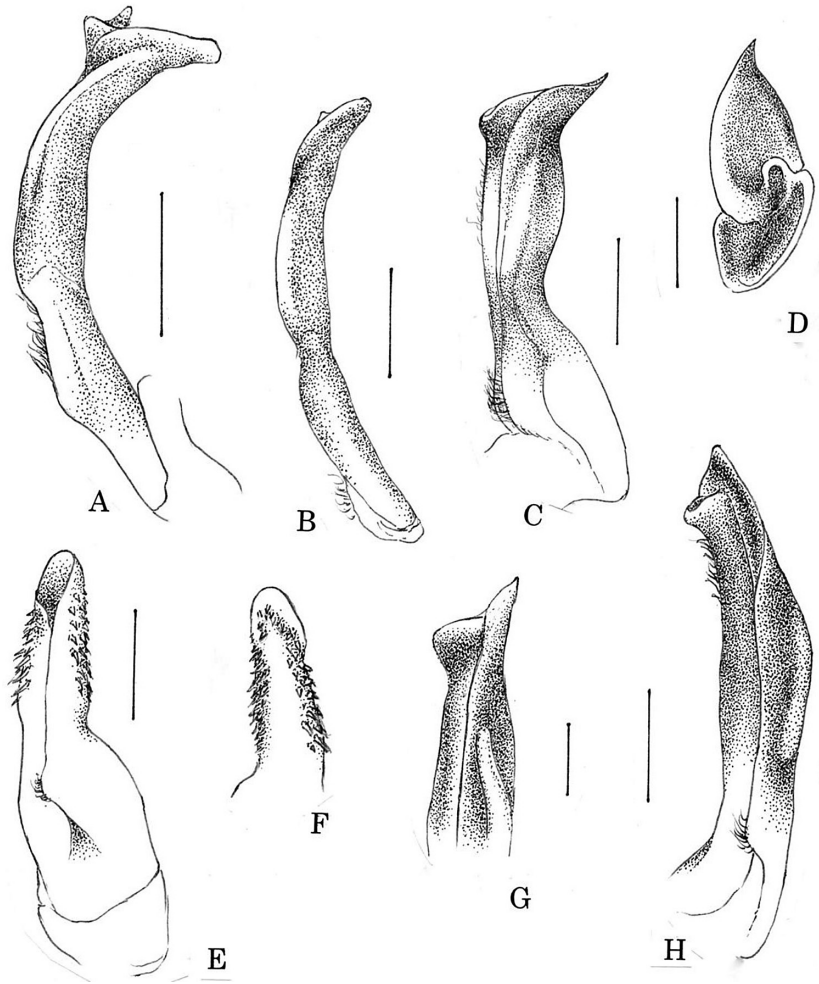

Fig. 3. Male first pleopod. A, B: *Hypolobocera exuca* Pretzmann, lateral (A) and sternal (B) views. C, D: *Hypolobocera aequatorialis* (Ortmann), ventral view (C) and distal part in upper view (D). E, F: *Trichodactylus faxoni* Rathbun, ventral view (E) and distal part in sternal view (F). *Hypolobocera delsolari* Pretzmann, distal part in lateral view (G) and ventral view (H). Scales for A = 5 mm, B, C = 3 mm, D-G = 1 mm, H = 2 mm.

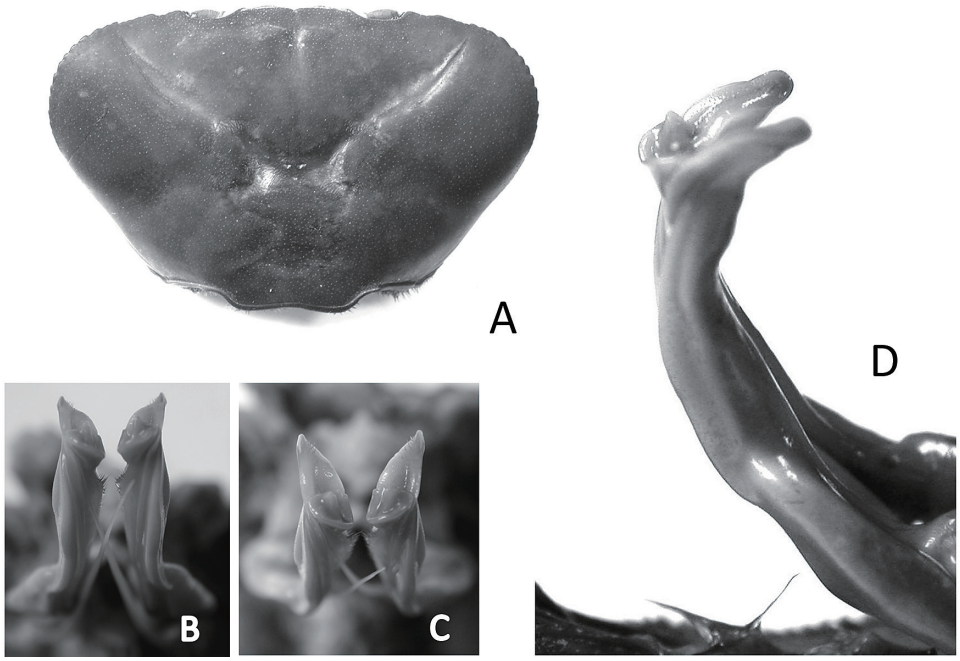

Fig. 4. *Hypolobocera exuca* Pretzmann, ♂ (86.0 × 53.0 mm). Carapace (A), and pleopods in ventral (B) and lateral (C) views.

Remarks. This species attains to large size in the genus *Hypolobocera*, having the broad carapace (Fig. 3A); in the male examined, the proportion of breadth to length of carapace is 1.62; anterior half of the lateral margin of the carapace is strongly convex and regularly serrated, while posterior half the lateral margin is rather concave and retreats strongly toward its posterior end. The dorsal surface is not convex, with a pair of prominent oblique furrow from the lateral end of the mesogastric region toward the anterior one third of the anterolateral margin of the carapace.

The male first pleopod (Figs. 3A, B, 4B-D) is slender and curved dorsally, without lateral lobe, but with distinct subapical ridge on mesial side; a prominent triangular papilla on the abdominal side of the distal truncated tip.

Distribution. According to Rodríguez & Von Sternberg (1998), this species is distributed between the provinces of Cañar and Cotopaxi, Ecuador.

Hypolobocera guayaquilensis Bott, 1967

(Fig. 5)

Potamocarcinus (Hypolobocera) aequatorialis guayaquilensis Bott, 1967, p. 368, fig. 4.

Hypolobocera (Hypolobocera) caputii guayaquilensis: Pretzmann, 1971, p. 17.

Hypolobocera (Hypolobocera) guayaquilensis: Pretzmann, 1972, p. 42, figs. 173-175.

Hypolobocera guayaquilensis: Rodríguez, 1982, p. 64; Rodríguez & Von Sternberg, 1998, p. 118, fig. 5.

Hypolobocera (Hypolobocera) [aequatorialis] guayaquilensis: Pretzmann, 1983b, p. 353, pl. 2 fig. 5, pl. 5 fig. 16, pl. 8 fig. 28, pl. 10 fig. 37, pl. 12 fig. 53, pl. 13 fig. 57, pl. 15 fig. 69.

Material examined. Jana River, Jana, Manabi Province, Equador, 12 Aug. 2013, 2 ♂♂ (carapaces and abdomens with pleopods) (35.2 × 14.0 mm; 31.4 × 11.5 mm), 1 ♀ (carapace and abdomen with pleopods) (40.5 × ca. 17.0

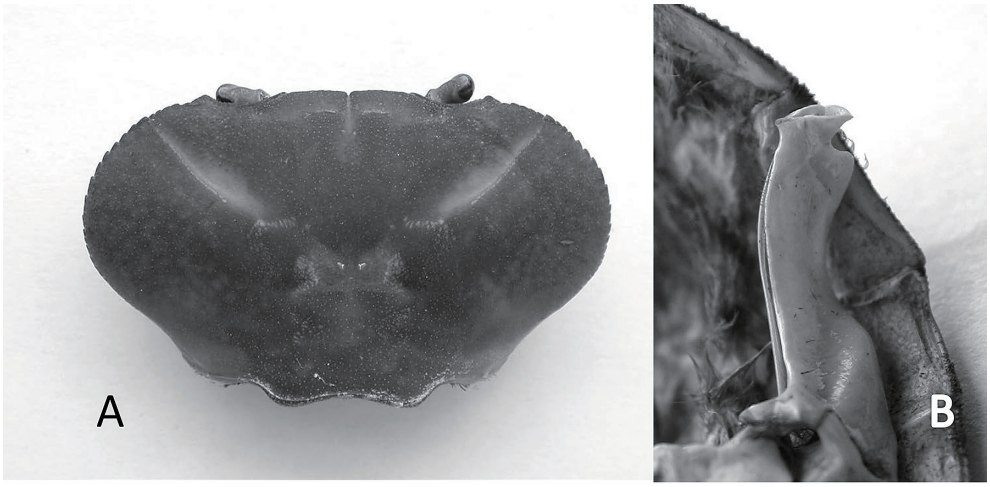

Fig. 5. *Hypolobocera guayaquilensis* Bott, ♂ (31.4 × 11.5 mm), Carapace (A) and left first pleopod (B).

mm)

Remarks. This species attains medium to large size for the genus. The carapace (Fig. 5A) is typical for the genus, but proportionally wider than the others, posterior part of the lateral margin being rather concave. Anterior half of the anterolateral margin of the carapace is regularly and strongly convex, and distinctly serrulated. The male first pleopod (Fig. 5B) is stout, and arcuate in lateral view; the outer lobe is strongly developed, increasing in width distally and ending as an obtuse or rather rounded summit.

Distribution. Ecuador.

Family Trichodactylidae

Genus ***Moreirocarcinus*** Magalhães & Türkay, 2008

Moreirocarcinus chacei (Pretzmann, 1968)

(Fig. 6A)

Trichodactylus (Trichodactylus) chacei Pretzmann, 1968b, p. 3.

Zilchiopsis chacei ecuadoroides Pretzmann, 1978, p. 169; 1983b, p. 310; 1983c, p. 327.

Zilchiopsis chacei: Pretzmann, 1983c, p. 327, pls. 11, 12.

Moreirocarcinus chacei: Magalhães & Türkay, 1996, p. 82 (in list), figs. 20, 29; Ng *et al*., 2008, p. 187 (in list).

Material examined. Santa Teresita, Orellana Province, Ecuador, 4 Aug. 2013, 1 carapace (25.7 × 20.2 mm; 20.9 × ca. 18 mm).

Remarks. This species is larger than *M. emarginatus* (H. Milne-Edwards); the carapace (Fig. 6A) is wider, more or less quadrilateral in its outline, and gently convex longitudinally, with the ill-defined regions. The frontal margin is deeply and widely concave. The lateral margin of the carapace is weakly convex for its anterolateral part and narrowly rimmed for whole length; there are two small, but distinct notches at anterior one fourth of the lateral margin; the outer margin of the first lobe thus formed is nearly straight and confluent with the obscure external orbital angle; the outer margin of the second lobe is about two thirds as long as the first; the anterior end of the third lobe is at anterior one fourth of the lateral margin, the outer margin being confluent with the medial and posterior parts of the lateral margin of the carapace.

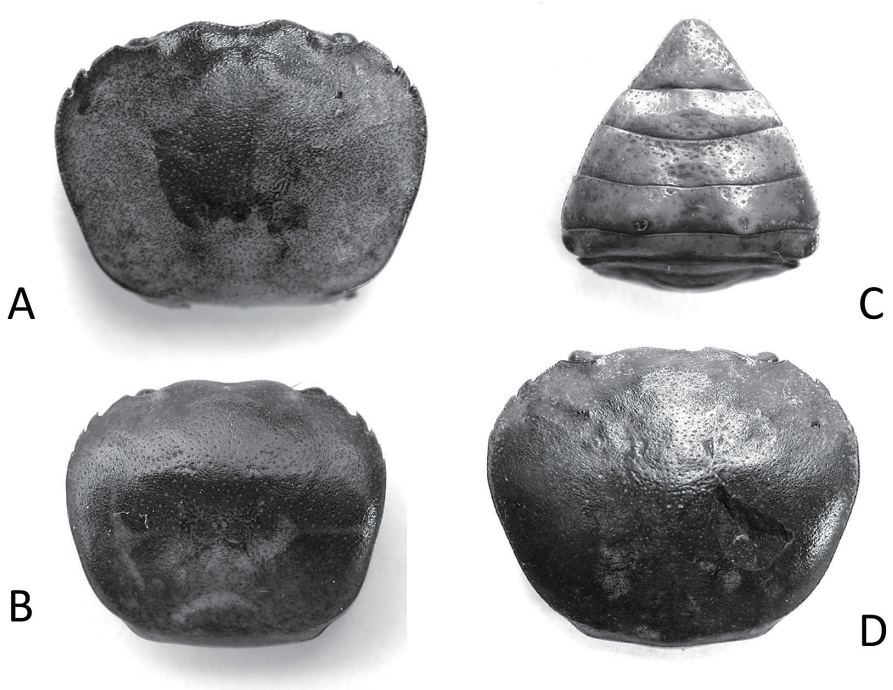

Fig. 6. A: *Moreirocarcinus chacei* (Pretzmann), . B-D: *M. emarginatus* (H. Milne-Edwards),

The male first pleopod is stout and tapering, with the long, curled second pleopod protruded from the distal aperture of the first pleopod.

This species is distinguished from the close congener, *M. emarginatus* (H. Milene-Edwards) by the less convex, wider carapace, and the rimmed lateral margins having three lobes formed by two small, but distinct notches.

Distribution. The type locality is Sevilla de Oro, between Mendez and Paute, Ecuador.

Moreirocarcinus emarginatus (H. Milne-Edwards, 1853)

(Fig. 6B-D)

Dilocarcinus emarginatus H. Milne-Edwards, 1853, p. 216; 1854, p. 181, pl. 14 fig. 4.

Trichodactylus (Dilocarcinus) emarginatus: Rathbun, 1906, p. 64, pl. 18 fig. 2.

Trichodactylus (Valdivia) ecuadoriensis Pretzmann, 1968a, p. 3.

Zilchiopsis emarginatus: Bott, 1969, p. 35, pl. 21 fig. 56; Pretzmann, 1893c, p. 327; Rodríguez, 1992, p. 102, figs. 3G, 4T, 5M, 7H, 8B, 9I, 10C, 13G, H, 35, 36.

Zilchiopsis ecuadoriensis: Smalley & Rodríguez, 1972, p. 49, figs. 9, 10; Pretzmann, 1983b, p. 328, pl. 13 figs. 29, 30, pl. 24 figs. 31, 32.

Material examined. Nuevo Rocaferte, Orellana Province, Ecuador, 12 Aug. 2013, 1♂, carapace and abdomen with pleopods (30.5 × 24.5 mm), 1 ♀, carapace and abdomen (18.7 × 15.8 mm).

Remarks. On establishment of a new genus *Moreirocarcinus* by Magalhães & Türkay (2008), this species was included in the genus together with the type species, *Trichodactylus (Trichodactylus) chacei* Pretzmann, 1968 [= *Zilchiopsis chacei ecuadoroides* Pretzmann, 1978], and an additional species *Dilocarcinus laevifrons* Moreira, 1901.

The young specimen (Fig. 6B) agrees well with the figures of a young specimen from Ecuador given by Rodríguez (1992). The carapace is narrow and rounded quadrangular somewhat different from the hexagonal outline of the larger specimen (Fig. 6D); the dorsal surface is strongly convex fore and aft, and ill-defined; the anterolateral margin is armed with four teeth behind the external orbital angle, and the first two teeth do not project from the curved outline of the carapace, with the sharp tips directed obliquely inward; the external orbital angle is obtuse, and the following lobe is as long as the first and second teeth combined; the third and fourth teeth are much smaller than the preceding two teeth; in the specimen examined the last tooth of the left side is almost worn out. The male abdomen (Fig. 6C) is wide, with a pair of tubercle on the fourth segment; the segmentation of all the segments are distinct, but the third to sixth segments are coalescent.

The male first pleopod was figured by Pretzmann (1983b) and Rodríguez (1992), being curved obliquely outward at distal one fourth, differing from the straight and tapering pleopod of the close congener, *M. chacei* (Pretzmann), in which the carapace is wider, with the strongly and regularly convex anterolateral and posterolateral margins (Fig. 6A).

Distribution. Colombia, Venezuela, Peru and Ecuador.

Genus ***Rotundovaldivia*** Pretzmann, 1968

Rotundovaldivia latidens (A. Milne-Edwards, 1869)

(Fig. 7A-C)

Sylviocarcinus latidens A. Milne-Edwards, 1869, p. 175.

Orthostoma latidens: Ortmann, 1897, pp. 326 (in key), 328.

Trichodactylus (Valdivia) latidens: Rathbun, 1906, p. 49, fig. 112, pl. 17 fig. 4.

Trichodactylus (Valdivia) bourgeti Rathbun, 1906, p. 56, fig. 118, pl. 16 fig. 4.

Trichodactylus (Valdivia) bourgueti falcipenis Pretzmann, 1968a, p. 5.

Valdivia (Rotundovaldivia) latidens: Pretzmann, 1968b, p. 73.

Valdivia (Valdivia) serrata latidens: Bott, 1969, p. 41.

Rotundovaldivia latidens: Pretzmann, 1983c, p. 326, pls. 8, 9; Magalhães & Türkay, 1996, p. 88 (in discussion), figs. 35, 43, 44; 2008, p. 225, figs. 7-18.

Rotundovaldivia falcipenis: Pretzmann, 1983c, p. 326, pl. 10.

Valdivia latidens: Rodríguez, 1992, p. 93.

Material examined. Santa Teresita, Orellana Province, Ecuador, 12 Aug. 2013, 2 ♂♂, carapaces and abdomen with pleopods (47.5 × 39.3 mm; 57.5 × 39.5 mm), 1 ♀, carapace and abdomen with pleopods (46.3 × 40.0 mm), 1 carapace (25.8 × 21.8 mm).

Remarks. Four specimens examined are seemingly somewhat different in contour; the carapace of the larger specimen (Fig. 7A) is subcircular like the photographs given by Pretzmann (1983c, pl. 9) and Magalihães and Türkay (2008, fig. 9), while that of the smaller specimen (Fig. 7B) is seemingly narrower, with straight posterolateral margin of the carapace similar to the photograph of the holotype of *Trichodactylus bourgeti* Rathbun given by Magalhães and Türkay (2008, fig. 8). In both specimens examined, it is remarkable that the posterolateral tooth behind the last anterolateral tooth is distinct, but very small and rather vestigial. The dorsal surface of the carapace is generally flattened, with the thin frontal and anterolateral margins, and uneven, with the shallow depressions, flattened regions and interregional furrows.

This species is a monotypic representative of the genus *Rotundovaldivia*. The type species is *Trichodactylus (Valdivia) bourgeti* Rathbun, 1905, which is considered as a synonym of *R. latidens* (A. Milne-Edwards, 1869)

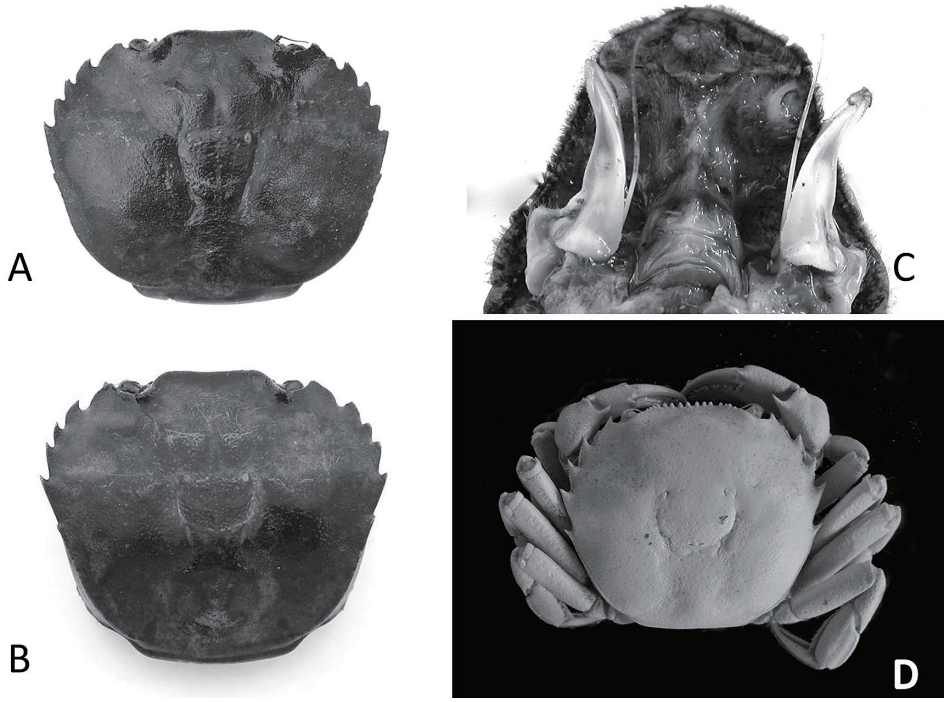

Fig. 7. A-C: *Rotundovaldivia latidens* (A. Milne Edwards), D: *Sylviocarcinus devillei* H. Milne-Edwards.

originally referred to the genus *Sylviocarcinus*.

Distribution. Amazon basin in Ecuador, Peru and Brazil.

Genus ***Sylviocarcinus*** H. Milne-Edwards, 1853

Sylviocarcinus devillei H. Milne-Edwards, 1853

(Fig. 7D)

Sylviocarcinus devillei H. Milne-Edwards, 1853, p. 215; Bott, 1969, p. 28, pl. 3 figs. 5a-c; Rodríguez, 1992, p. 71, figs. 4H, 5C, 7F, 9B, 13A, 25; Magalhães & Türkay, 1996, p. 101, figs. 9-26.

Sylviocarcinus peruvianus A. Milne-Edwards, 1869, p. 174.

Dilocarcinus spinifrons Kingsley, 1880, p. 35.

Dilocarcinus margaritifrons Ortmann, 1893, p. 492, pl. 17 fig. 11.

Sylviocarcinus gigas Smalley & Rodríguez, 1972, p. 48, figs. 6, 7, 21, 22.

Holthuisia peruviana margaritifrons: Pretzmann & Mayta, 1891, p. 141, figs. 9, 10.

Holthuisia peruviana peruviana: Pretzmann, 1893c, p. 323, pl. 4 figs. 9, 10, pl. 5 figs. 11-13.

Material examined. Photographs of 1 ♀ in dorsal and ventral views, without exact locality and size.

Remarks. Magalhães and Türkay (1996b) gave a full account of the variation as for the frontal and anterolateral armature of the carapace. Typically the outline of the carapace is subcircular, with evenly convex dorsal surface, but the marginal armature is surprisingly variable. The female examined (Fig. 7D) seems to be the closest to the holotype of *T. (Valdivia) peruvianus* A. Milne-Edwards represented by Magalhães and Türkay (1996b), having five markedly sharp anterolateral teeth and a line of subacute spinules fringing the frontal margin. Rodríguez (1992) synonymized

all the nominal species, and Magalhães and Türkay (1996b) confirmed the extreme variability on the examination of numerous specimens from the whole Amazon system.

Distribution. Widely distributed in Brazil, Peru, Ecuador and Colombia.

Genus ***Trichodactylus*** Latreille, 1828

Trichodactylus faxoni Rathbun, 1906

(Fig. 8)

Trichodactylus (Valdivia) faxoni Rathbun, 1906, p. 49, fig. 113, pl. 18 fig. 10; Bott, 1969, p. 23.

Trichodactylus (Trichodactylus) maytai Pretzmann, 1978, p. 165, fig. 8; 1983c, p. 320.

Trichodactylus maytai: Pretzmann, 1983b, p. 307, pl. 1 fig. 1, pl. 2 fig. 7, pl. 3 fig. 11, pl. 4 fig. 15, pl. 5 fig. 19; Rodríguez, 1992, p. 47.

Trichodactylus faxoni: Magalhães & Türkay, 1996a, p. 75 (in list); Ng *et al*., 2008, p. 188 (in list).

Material examined. Santa Teresita, Orellana Province, Ecuador, 12 Aug. 2013, 1 ♂ (12.5 × 11.3 mm), 1 ♀ (11.5 × 10.0 mm). 27 carapaces (13.5 × 12.2 mm − 7.3 × 6.8 mm) ; Nuevo Rocafuerte, Orellana Province, Ecuador, 7 ♀♀ , many carapaces and abdomens (13.4 × 12.0 mm − 10.0 × 9.1 mm).

Remarks. This species is small, attaining the size at most 15 mm in carapace breadth. The general contour of the carapace (Fig. 8A) is roughly square, with the weakly convex lateral margins. The dorsal surface is ill-defined, convex anteriorly for its anterior one third, smooth, without hairs in most specimens, but covered with a very short tomentum in some specimens. The front is shallowly concave in the middle, and the frontorbital margin is as wide as the posterior margin of the carapace. The lateral margin of the carapace is only weakly convex as a whole, without interruption. The chelipeds of male (Fig. 8C) are distinctly unequal, with the heavy larger cheliped. The ambulatory legs are comparatively long and scantly hairy. The male abdomen (Fig. 8C) is wide, tapering rapidly, and the first

Fig. 8. *Trichodactylus faxoni* Rathbun. ♂ (12.5 × 11.3 mm)(A-C) and ♀ (11.5 × 10.0 mm) (D). Dorsal view (A), and ventral views (B-D) showing chelae, abdomens and male pleopods.

pleopod (Fig. 3E, F, 8B) is constricted in the middle, and the club-shaped distal half is armed with many conical or elongated tubercles directed to the base along the margins.

This species is very close to *T. fluviatilis* Latreille, 1828 from Brazil, which is variable, as some subspecies were distinguished by Bott (1969). This species was elaborately examined by Rodríguez (1992), and the subspecies were synonymized with the nominate species. In the Brazilian species the anterolateral margin of the carapace is sometimes unarmed, but typically armed with three teeth or lobes defined by small notches. In the present specimens examined from Ecuador, the anterolateral margin is completely devoid of teeth or lobes, without notches or depressions. The male first pleopod is basically similar to the figures given by Rodríguez (1992), but the spines may be fewer and restricted to the distal part. In the male examined, the fingers of the larger cheliped are about half the length of the palm, differing from the figure given by Rodríguez (1992), in which the fingers are almost half the length of the palm.

Distribution. The type localities of *Trichodactylus (Valdivia) faxoni* Rathbun and *Trichodactyus (Trichodactylus) maytai* Pretzmann are Tabatinga, Brazil, and Tingomaria, Peru, respectively.

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