

NOTES ON THE FRESHWATER CRABS OF THE  
GENUS *MORITSCHUS* PRETZMANN, 1965  
(CRUSTACEA: DECAPODA: PSEUDOTHELPHUSIDAE)  
WITH DESCRIPTION OF *M. NARINNENSIS*  
FROM SOUTHERN COLOMBIA

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**Abstract.**—*Moritschus narinnensis*, n. sp. adds a second species to a genus of pseudothelphusid crabs previously considered to be monotypic. The distribution of the genus appears to be confined to the high mountains of the Pacific slope of the Western Cordillera of Colombia and Ecuador, in areas neighboring the boundary between them, but their closest affinities are with *Hypolobocera henrici* from the Amazonian drainage of Ecuador and Perú. The generic diagnosis is redefined to accommodate the new species and a key is given to separate the two taxa.

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In 1897, Mary J. Rathbun, following the system of genera of freshwater crabs then in use, described a sample of small crabs collected by H. Deyrolle near Quito, Ecuador, which she named *Pseudothelphusa ecuadorensis*. Almost 70 years later, Pretzmann (1965) created the monotypic subgenus *Moritschus* of the genus *Hypolobocera*, to receive this species. In his monograph of the Pseudothelphusidae, Rodríguez (1982) gave generic status to *Moritschus* and mentioned the similarity of its gonopod to that of *Hypolobocera henrici*, a species from the Amazonian drainage of Ecuador and Perú. The species is fairly common around Quito and has been collected repeatedly in that area. Recent intensive collections in southern Colombia have revealed the presence there of a second, undescribed species of *Moritschus*.

The material is deposited at the Museum of Natural History, Universidad Nacional de Colombia, Bogotá (ICN-MHN), and in the reference collection of the Instituto Venezolano de Investigaciones Científicas (IVIC).

Tribe Hypolobocerini Pretzmann, 1971  
Genus *Moritschus* Pretzmann, 1965  
*Moritschus ecuadorensis* (Rathbun, 1897)

**Material examined.**—Alluriquin, affluent of Rio Toachi, SE of Santo Domingo de los Colorados, Pichincha Province, Ecuador; 31 Nov 1980; H. Díaz; 12 males, the largest cb. 22.0 mm, cl. 13.9 mm (IVIC).

**Remarks.**—These specimens agree well with the description and illustration of the species given by Rathbun (1897) and Rodríguez (1982). The border of the marginal lobe of the gonopod has a band of very tiny spinules, barely visible with the stereoscopic microscope at a magnification of 500 times. The 5th abdominal sternites of the males are deeply invaginated to form gonopodial receptacles where the apices of the gonopods are lodged. However, the mature males usually carry the gonopods outside the abdominal fossa, protruding on each side of the folded abdomen. The large gonopodial receptacles and the extrusion of the gonopods are also characteristic of *Hypolobocera henrici*; in other pseudothelphu-

sids the gonopodial receptacles are shallower and the gonopods are folded inside the abdominal fossa.

The known distribution of the species covers the Pacific slope of the Western Cordillera of Ecuador, between the Guayllabamba and Toachi rivers, tributaries of the Esmeraldas River, at altitudes between 880 and 2740 m above sea level.

*Moritschus narinnensis*, new species

Fig. 1

*Material examined.*—Quebrada Taibai, Vereda Piedra Verde, Inspección Buena Vista, Municipio Barbaocoas, 1140 m above sea level, Nariño Department, Colombia; 16 Aug 1987; G. Arango; 1 male holotype, cb. 25.2 mm, cl. 15.5 mm, 12 male paratypes, the largest cb. 24.4 mm, cl. 15.0, 16 female paratypes, the largest cb. 24.2 mm and cl. 15.3 mm (ICN-MHN No. CR 0605).

*Description.*—The cervical groove is straight and shallow, it reaches the margin of the carapace. The anterolateral margin has a conspicuous notch behind the orbit; it does not meet the outer orbital angle, but curves upward above the orbital margin; it is smooth, except for a faint crenulation near its midlength. The postfrontal lobes are ill defined, their presence being indicated only by 2 small scars. The median groove is obsolescent. The surface of the carapace behind the front is moderately inclined anteriorly and towards the mid-line. The upper border of the front is arched and bilobed in dorsal view, bearing a row of tubercles; the lower margin is strongly sinuous in frontal view and conspicuously marginated; it lies a little in front of the upper one. The front between the upper and lower margins is high. The surface of the carapace is smooth, covered by papillae not visible to the naked eye; for the most part, the regions are clearly defined.

The palm of the larger cheliped is inflated. The fingers have a strong gape between them; the mobile finger is strongly arched. The walking legs are slender and elongate, the

longest being the third pair (total length greater than the breadth of carapace); in this pair the merus is 3.2 times longer than wide. The exopod of the third maxilliped is 0.32 the length of the ischium of the endognath. The orifice of the efferent branchial channel is open.

The male gonopod is slender and strongly arched laterally; the lateral lobe, which is elongate and moderately prominent, occupies the distal half of the appendage; the apex is strongly elongate in the meso-lateral plane and strongly arched, the caudal end produced in a strong fingerlike process directed proximally. The elongate process over the field of spines, which in all species of *Hypoloberini* has 2 rudimentary papillae, in this species is entire, with its distal margin bordered with minute spines. In addition to the spines surrounding the spermatic aperture, other small closely-set ones cover the lateral margin of the apex and the fingerlike process.

*Etymology.*—The species is named after the Nariño Department in Southern Colombia.

*Remarks.*—The locality of the present species is on the Pacific slope of the Western Cordillera of Colombia, which is a continuation of the Western Cordillera of Ecuador, but 170 km to the North of the area frequented by *Moritschus ecuadorensis*, in the basin of the Paita River.

The species of *Moritschus* are among the smallest within the Pseudothelphusidae. *M. narinnensis* can be easily distinguished from *M. ecuadorensis* by details of the male gonopod given in the key below.

Key to the Species of the Genus *Moritschus*

1. Gonopod with caudal end produced in short beak. Elongate process over field of spines with 2 rudimentary papillae directed laterally. Lateral margin of apex unarmed . . . . .  
 . . . . . *M. ecuadorensis*
- Gonopod with caudal end pro-

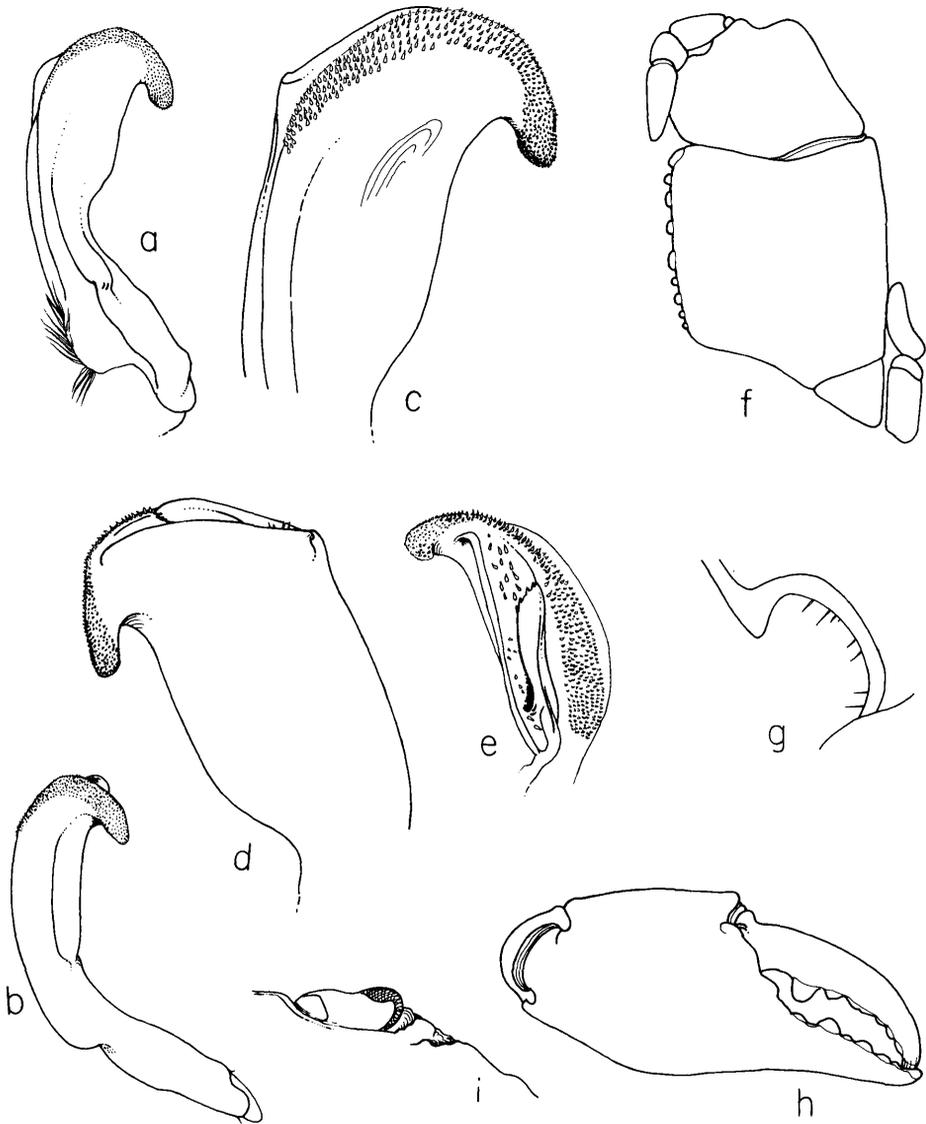


Fig. 1. *Moritschus narinnensis*, holotype, ICN 0605: a-e, Left gonopod (a, Caudal view; b, Same lateral view; c, Apex in caudal view; d, Apex in mesial view; e, Apex in distal view); f, Third maxilliped, left; g, Aperture of efferent channel; h, Larger chela; i, Detail of anterolateral margin of carapace at the outer orbital angle.

duced in strong fingerlike process directed proximally. Elongate process over field of spines entire, its distal margin bordered with minute spines. Lateral margin of apex and fingerlike process covered with small closely-set spines. . . . . *M. narinnensis*

Since the gonopod type found in *Moritschus* somewhat resembles the gonopod of some *Hypolobocera*, particularly *H. henrici*, a revised definition of *Moritschus* is given below to distinguish between the genera and to accommodate the new species described above.

*Moritschus* Pretzmann, 1965

Pseudothelphusid crabs of small size (carapace breadth usually less than 26 mm). The anterolateral margin of the carapace does not meet the outer orbital angle, but curves upward above the orbital margin. The exognath of the third maxilliped is less than half the length of the lateral margin of the ischium of the endognath. The male gonopod is slender and strongly arched laterally; the lateral lobe occupies the distal half of the appendage; it is elongate and moderately prominent; the apex is strongly elongate in the meso-lateral plane and strongly arched; its caudal end is produced in a beak or strong fingerlike process directed proximally.

## Literature Cited

Pretzmann, G. 1965. Vorläufiger Bericht über die Familie Pseudothelphusidae.—Anzeiger der

Osterreichischen Akademie der Wissenschaften Mathematische Naturwissenschaftliche Klasse, Jahrgang 1965 1:1–11.

Rathbun, M. J. 1897. Description de nouvelles espèces de Crabes d'eau douce appartenant aux collections du Muséum d'Histoire naturelle de Paris.—Bulletin du Muséum National d'Histoire Naturelle de Paris 3(2):58–61.

Rodríguez, G. 1982. Les Crabes d'eau douce d'Amérique.—Famille des Pseudothelphusidae.—Faune Tropicale 22:1–223.

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