

**A NEW SPECIES OF FRESHWATER
CRAB OF THE GENUS
POTAMOCARCINUS H. MILNE
EDWARDS, 1853 (Crustacea:
Brachyura: Pseudothelphusidae)
FROM COLOMBIA**

por

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Abstract

Campos M. R.: A new species of freshwater crab of the genus *Potamocarcinus* H. Milne Edwards, 1853 (Crustacea: Brachyura: Pseudothelphusidae) from Colombia. Rev. Acad. Colomb. Cienc. **27** (103): 283-286, 2003. ISSN 0370-3908.

A new species of freshwater crab from Colombia of the genus *Potamocarcinus* H. Milne Edwards, 1853, is described and illustrated, bringing to 12 the total number of known species in the genus. This new species was collected in Apartadó, Antioquia Department, and it is distinguished by the morphology of the male first gonopod, especially the presence on the cephalic surface of a basally wide, spine-like median cephalic process, and, slightly rounded proximo-lateral process.

Key words: Brachyura, Pseudothelphusidae, Freshwater crabs, Taxonomy.

Resumen

Se describe e ilustra una nueva especie de cangrejo de agua dulce del género *Potamocarcinus* H. Milne Edwards, 1853 de Colombia. Con esta especie se eleva a 12 el número de especies de género. La nueva especie fue recolectada en Apartadó, Antioquia, y se caracteriza por la morfología del primer gonópodo del macho, especialmente por presentar en la superficie cefálica del gonópodo un proceso medio cefálico de base amplia, en forma de espina y un proceso próximo-lateral de forma ligeramente redondeada.

Palabras clave: Brachyura, Pseudothelphusidae, cangrejos de agua dulce, taxonomía.

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1. Introduction

The genus *Potamocarcinus* H. Milne Edwards, 1853 of the Tribe Potamocarcinini Ortmann, 1897, currently includes a group of 11 species distributed from Mexico to northwestern Colombia (Rodríguez 1982, 1986, 1992; Prahll & Ramos 1987; Rodríguez & Hobbs 1989a, 1989b; Campos & Lemaitre, 2002). *P. colombiensis* Prahll & Ramos, 1987 is the first species founded in Colombia. A new species of *Potamocarcinus* from Colombia was discovered, bringing to 12 the total number of species in this genus. Like others species in the genus, this new species herein described and illustrated, is characterized primarily by features of the male first gonopod. The terminology used for the different processes of the gonopod is that established by Smalley (1964) and Rodríguez (1982).

The material is deposited in Museo de Historia Natural, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá (ICN-MHN). The abbreviations cb and cl, indicate carapace breadth and carapace length, respectively. Color nomenclature follows Smithe (1975).

Systematic of the new species

Family Pseudothelphusidae Rathbun, 1893

Tribe Potamocarcinini Ortmann, 1897

Genus *Potamocarcinus* H. Milne Edwards, 1853

Potamocarcinus pinzoni, new species

2. Material

Holotype. 1 male, cl 50.1 mm, cb 79.3 mm, Antioquia Department, Apartadó, Río Grande, 30 m alt., 20 Dec 2002, leg. R. Maya, ICN-MHN-CR 2056.

Type locality. Río Grande, Apartadó, Antioquia Department, Colombia, 30 m alt.

3. Diagnosis

Third maxilliped with exognath 0.51 times length of ischium. First male gonopod with caudal lobe ending transverse to axis of gonopod; mesial lobe partially folded over field of spines; distal cephalic lobe narrow; median cephalic process wide basally, spine-like with median external notch; proximo-lateral process slightly rounded; apex elongated meso-laterally.

4. Description of holotype

Carapace (Fig.1 F) with cervical groove wide, deep, straight anteriorly, slight recurved posteriorly, reaching lateral margin; anterolateral margin with shallow depression behind external orbital angle; with 4 small, low tubercles between orbital angle and cervical groove, and approximately 17 teeth beyond cervical groove diminishing in size posteriorly; postfrontal lobes high, rounded, delimited anteriorly by 2 transverse depressions; median groove narrow, deep, making incision on upper border of front; surface of carapace in front of postfrontal lobes flat; front high, excavated, upper border of front straight, demarcated with row of tubercles, bilobed in dorsal view, lower margin sinuous in frontal view; upper and lower orbital margins each with row of small tubercles; surface of carapace covered with small papillae; limits between regions strongly demarcated; third maxilliped (Fig.1 G) with regularly recurved external margin of merus, deep depression subdistally, exognath 0.51 times length of ischium; orifice of efferent branchial channel open, slightly ovate shape; right cheliped lacking; merus of left cheliped with 3 longitudinal crests as follows: upper one with rows of tubercles, internal lower one with row of teeth, and external lower one with row of tubercles, carpus with 3 tubercles on internal crest, and prominent spine distally, palm smooth, somewhat swollen, fingers slightly gaping when closed, surfaces with rows of minute tubercles.

Walking legs (pereopods 2-5) strong; dactyli each with papillae and 5 longitudinal rows of large, conspicuous spines diminishing in size proximally; number of spines and papillae on each dactyl arranged as follows: 1 anterolateral row and 1 anteroventral row each with 5 spines; 1 external row with 5 spines and 1 pair of proximal papillae; 1 posterolateral row with 3 spines and 1 posteroventral row with 4 spines.

First male gonopod straight, slightly expanded laterally at midpoint in caudal view; with rows of conspicuous setae on subdistal portion of mesial side and scattered short setae on lateral side (Fig.1 A, C); caudal lobe rudimentary, ending transverse to axis of gonopod (Fig.1 A, 1); mesial lobe partially folded over field of spines (Fig.1 E, 2); mesial process triangular, recurved caudo-cephalically, with tip directed downward (Fig.1 A, C, D, E, 3); distal cephalic surface with slight transverse depression, and row of spinules distally, distal cephalic lobe narrow, rounded distally (Fig.1 B, D, E, 4), median cephalic process wide basally, spine-like with median external notch (Fig.1 B, D, E, 5), proximo-lateral process

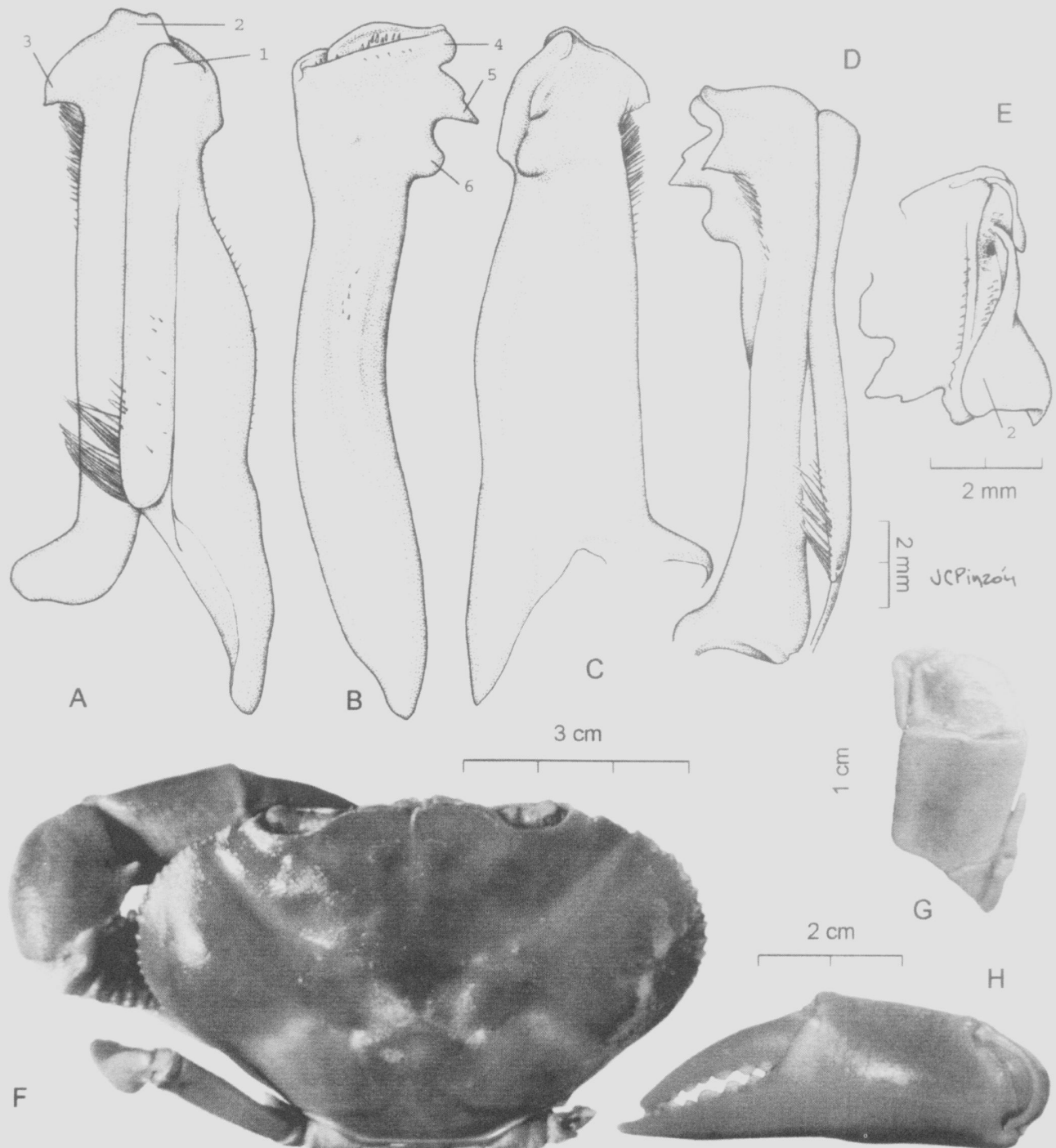


Figure 1: *Potamocarcinus pinzoni*, new species, male holotype, ICN-MHN-CR 2056: A, left first gonopod, caudal view; B, same, lateral view; C, same, cephalic view; D, same, mesial view; E, same, apex, distal view; F, carapace, dorsal view; G, left third maxilliped, external view; H, left cheliped, external view; 1, caudal lobe; 2, mesial lobe; 3, mesial process; 4, distal lobe; 5, median process; 6, proximo-lateral process.

slightly rounded, separated by a rounded gap from median cephalic process (Fig.1 B E, 6); apex elongated meso-laterally; spermatid channel narrow, slit-like (Fig.1 B, E).

Color

Preserved in alcohol, the holotype is light brown (near 121B, Brussels Brown) on the dorsal side of the carapace and the walking legs. The cheliped is light brown mottled brown-reddish (near Kingfisher Rufous, 240). The ventral surface of the carapace is beige (near Tawny Olive, 223 D).

Etymology

The species is named in honor of Juan Carlos Pinzón, an excellent illustrator of freshwater crabs.

5. Remarks

Comparing both descriptions and material of other species of the genus with that of this new species revealed that it is most similar to *Potamocarcinus lobulatus* Campos & Lemaitre, 2002. The two can be distinguished by features of the gonopod. The male first gonopod of *P. lobulatus* has been described and illustrated by Campos & Lemaitre, (2002: 601, Fig.2). The cephalic surface presents in *P. lobulatus* three processes: a prominent, wide, distal lobe, a second one, with middle incision, whose distal portion is recurved caudally, and a button-like proximal process, and in *P. pinzoni* the cephalic surface shows three processes too, but the distal lobe is narrower, followed by a median cephalic process which is wide basally, spine-like with median external notch, and a proximo-lateral process slightly rounded, separated by a rounded gap from median cephalic process.

Acknowledgments

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