

***UPOGEBIA VASQUEZI* NGOC-HO, 1989**  
**(DECAPODA: THALASSINIDEA: UPOGEBIIDAE): FIRST RECORD**  
**FOR VENEZUELA**

IVAN HERNÁNDEZ-ÁVILA<sup>1</sup>, CARLOS LIRA<sup>2</sup>, GONZALO HERNÁNDEZ<sup>2</sup> & JUAN BOLAÑOS<sup>2</sup>

<sup>1</sup>*Museo Marino de Margarita, Departamento de Investigaciones, Boca del Río, Isla de Margarita, Venezuela.*  
ivanhernavila@yahoo.com

<sup>2</sup>*Universidad de Oriente, Núcleo Nueva Esparta, Isla de Margarita, Venezuela*

**ABSTRACT:** Twenty-one specimens of *Upogebia vasquezi* Ngoc-Ho, 1989 were collected from the sandy mud shores of Carenero, on La Tortuga Island by means a yabby pump, a first record of this species in Venezuelan waters. *Upogebia vasquezi* is characterized as follows: rostrum short; postocular spine present; first antennal article with ventral subdistal spine; abdominal sternites unarmed; coxa of first pereiopod with small spine on distomesial margin, chelae with spines in ventromesial, dorsal and dorsomesial margins; coxa of second pereiopod with small spine on distomesial margin, merus with a single proximal spine on ventral margin; merus of third pereiopod with 4 or 5 proximal spines on ventral margin; and merus of both fourth and fifth pereiopods spineless. Although this species is widely distributed in the Western Atlantic, it had not been recorded for Venezuela until now.

Key words: Callianasoidea, biodiversity, mud-shrimp

**RESUMEN:** Veintiún especímenes de *Upogebia vasquezi* Ngoc-Ho, 1989 fueron colectados, mediante el uso de una bomba yabby, en los sedimentos arenoso-fangosos en la región costera de la laguna Carenero, isla La Tortuga, lo que representa el primer registro de esta especie para aguas venezolanas. *Upogebia vasquezi* se reconoce por las siguientes características: rostro corto, espina postocular presente; primer artejo antenal con una espina subterminal en posición ventral; esternitos abdominales inermes; coxa del primer pereípodo con una pequeña espina en el margen distomesial; quela con espinas en los márgenes ventromesial, dorsomesial y dorsal de la palma; coxa del segundo pereípodo con una pequeña espina en el margen distomesial, mero con una espina proximal en el margen ventral; mero del tercer pereípodo con 4 o 5 espinas proximales en el margen ventral y mero del cuarto y quinto par de pereípodos inermes. Aunque esta especie se encuentra ampliamente distribuida en el Atlántico Occidental, no había sido registrada para Venezuela hasta ahora.

Palabras clave: Callianasoidea, biodiversidad, camarón fantasma

## INTRODUCTION

The mud shrimps of the family Upogebiidae are highly diverse with notorious endemism (DWORSCHAK, 2000). These organisms are poorly known in Venezuelan waters, due to just six (2.07 % from 29 species recorded from Western Atlantic), has been identified for the area until now (WILLIAMS, 1993; DWORSCHAK, 2000; LIRA *et al.*, 2003; RODRÍGUEZ & SUÁREZ; 2003). This, almost in part, because to the infaunal features of the family. In this work, *Upogebia vasquezi* are recorded for first time in Venezuela.

## MATERIALS AND METHODS

The specimens were collected with a yabby pump in Carenero lagoon, South coast of La Tortuga Island (10°53'N 65°14'W), Venezuela. The material examined was identified following descriptions, keys and illustrations

supplied in Ngoc-Ho (1989) and WILLIAMS (1993), and thereafter deposited in the Laboratorio de Carcinología, Universidad de Oriente (LCUDO). Observations, measurements and illustrations were done with a stereoscopic microscope, with lucid camera and calibrated ocular accoplated. All measurements are expressed in millimeters.

## RESULTS

### TAXONOMIC ACCOUNT

Family Upogebiidae BORRADAILLE, 1903

Genus *Upogebia* LEACH, 1814

*Upogebia vasquezi* NGOC-HO, 1989

Fig. 1

*Upogebia affinis*.— SCHMITT, 1936: 375 [*sensu* WILLIAMS, 1993]

*Upogebia vazquezi* NGOC-HO, 1989: 866, figs. 1,2.—

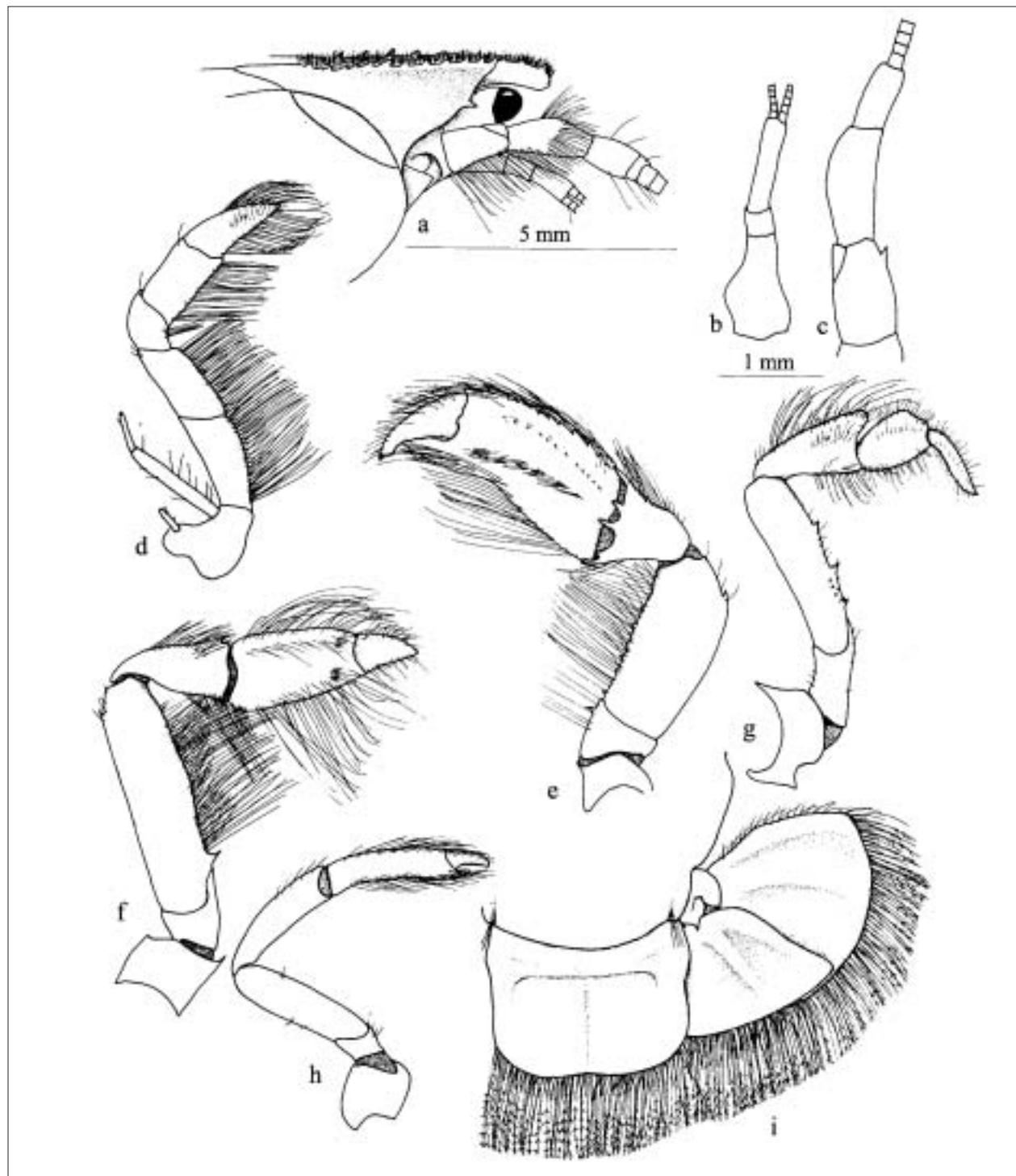


Fig. 1. *Upogebia vasquezi* Ngoc-Ho, 1989. (PT050-LCUDO) a.- Anterior view. b-c.- Antennule and antenna respectively (setae omitted). d.- Third maxilliped. e.- Cheliped, inner side. f-h.- Second, third and fifth pereopods respectively, outhter side. i.- Uropod and telson. Scale for b-h are the same.

MARKAN *et al.*, 1990: 424 [distribution]. — WILLIAMS, 1993: 67, figs. 30, 31.

MATERIAL EXAMINATED.— Entrance of Carenero Lagoon, La Tortuga Island, Venezuela ( $10^{\circ}53'N$   $65^{\circ}14'W$ ); PT050-LCUDO 1 specimen (ovigerous), carapace length (CL) 11.2, coll. J. Bolaños, 6/6/2001, galleries on muddy-sand near of the coast (0.50 m depth). Same Locality; PT051-LCUDO 20 specimens, CL 4.8-11.4 (mean 9.5) coll. J. Bolaños & J. Hernández, 9/14/2001.

DESCRIPTION.— Rostrum triangular, downcurved in lateral view, length subequal than basal width, tip exceeding eyes for about the width of cornea, ventral margin unarmed (fig. 1a); dorsal pair of strong subapical spines followed by mesioventral ridge bearing 7-8 irregular spines. Projections on each side of rostrum ending in acute spine followed by 10-12 spines, decreasing in size front to rear. Lateral to cervical groove unarmed. Postocular spine present. Eyestalks stout, spineless.

Antennular peduncles reaching about 1/4 to terminal article of antennal peduncles Length of proximal 2 articles together slightly longer than terminal article (fig. 1b).

Antennal peduncles with near 2/3 its length exceeding tip of rostrum; article one with subdistal spine on ventral margin. Scale oval (fig. 1c).

Maxilliped bearing epipod (fig. 1d).

Cheliped with 1 distal spine in ventral margin of coxa. Ischium with a single subdistal ventral spine, merus with 5 in a row spines on ventral margin and a single subdistal dorsal spine. Carpus triangular, inner side with 6 spines in dorsal margin ending in strong spine on distal corner, moreover 1 mesiodorsal spine and 1 mesial tubercle in anterior margin; external side with one spine in anterior margin followed by 1 small spine.

Length of chela 2.4 times its height, dorsal margin of palm with subdistal spine, a mesiodorsal row of strong spines decreasing in size backwards (but the first smaller than the second one) upper mesial surface with row of 14 small spines ending anteriorly in small spine in the margin of dactilar condyle, a mesioventral row of 5 strong spines present [direction of mesiodorsal and upper mesial surface subparallel, mesioventral row divergent]. Fixed finger shorter than dactyl (about 1/2 times) and more slender, 2 blunt teeth in proximal prehensile edge. Dactyl with unique tooth in proximal prehensile edge, followed by a crenulated

ridge and subdistal tooth. Tip corneous (fig. 1e).

Pereiopod 2 reaching about 1/2 - 2/5 of palm. Coxa with distal ventral spine. Ischium spineless. Merus with proximoventral spine and subdistal dorsal spine. Carpus with a single spine suddistally on each dorsal and ventral margin (fig. 1f).

Pereiopod 3 with 3 proximal spines on ventral margin of merus, followed by 2 wide set spines (fig. 1g).

Pereiopod 4 and 5 spineless (fig. 1h).

Abdominal sternites unarmed.

Telson subrectangular, emarginated, transverse ridge confluent with inconspicuous longitudinal ridge to each side. Protopod of uropods with acute spine. (fig. 1i)

REMARKS.— *Upogebia vasquezi* resemble closely to *U. noronhensis*, but can be distinguished by the presence of a spine in distomesial margin of cheliped and pereiopod 2 in *U. vasquezi*. Although the latter species is wide distributed in the Western Atlantic (WILLIAMS, 1993; BOSCHI, 2000), it has not been recorded for Venezuela until now. Up to now seven species of Upogebid shrimps are recorded in Venezuelan waters: *Pomatogebia operculata* (SCHMITT, 1924), *Upogebia marina* COELHO, 1973, *U. omissa* GOMES-CORRÊA, 1968, *U. omissago* WILLIAMS, 1993, *Upogebia brasiliensis* HOLTHUIS, 1956, *Upogebia affinis* (SAY, 1818) and *U. vasquezi* NGOC-HO, 1989 (WILLIAMS, 1993; BLANCO-RAMBLA & LIÑERO, 1994; BLANCO-RAMBLA, 1995; LIRA *et al.*, 2003).

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