

# RECORD OF Leptochela papulata CHACE JR., 1976 (CRUSTACEA, DECAPODA), IN THE BRAZILIAN COAST

# Registro de *Leptochela papulata* Chace Jr., 1976 (Crustacea, Decapoda), no litoral brasileiro

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#### ABSTRACT

The caridean shrimp *Leptochela* (*Leptochela*) papulata (Pasiphaeidae) is recorded for the first time in Brazil based on samples taken with rectangular drag in the coast of the Rio Grande do Norte state (northeastern coast of Brazil).

**Keywords**: Caridea, Potiguar Basin, marine fauna, Western Atlantic.

## **RESUMO**

O camarão carídeo Leptochela papulata (Pasiphaeidae) é registrado pela primeira vez no Brasil através de amostragens com draga retangular na costa do estado do Rio Grande do Norte (Nordeste do Brasil).

Palavras-chave: Caridea, Bacia Potiguar, fauna marinha, Atlântico Ocidental.

The Pasiphaeidae shrimp genus *Leptochela* Stimpson, 1860, has 15 species of small caridean shrimps, ranging from shallow and deep waters worldwide: Indo-West Pacific (10 species), eastern Pacific (1 species) and western Atlantic (4 species). Of the 4 western Atlantic species, 3 were recorded from the Brazilian coast: *Leptochela* (*Leptochela*) bermudensis

Recebido em: 16/05/2020 Aprovado em: 28/03/2022 Publicado on-line em: 10/08/2022 Gurney, 1939, from Maranhão to Ceará states; *Leptochela (Proboloura) carinata* Ortmann, 1893, from Pará to Alagoas states; and *Leptochela (Leptochela) serratorbita* Bate, 1888, from Amapá to Pernambuco and São Paulo states (Coelho Filho, 2006).

The fourth western Atlantic *Leptochela* species, the light glass shrimp *Leptochela* (*Leptochela*) *papulata* Chace Jr., 1976, has been recorded from the Northwestern Atlantic (from Massachusetts to Georgia) and eastern Gulf of Mexico. The present paper reports *L. papulata* (Figure 1) for the first time from Brazilian waters, and fills some gaps on the inventory of the western Atlantic marine fauna.

The material consists of 2 females sampled in two different stations with a rectangular drag along the coast of the Rio Grande do Norte state, northeast of Brazil during the Potiguar Basin Environmental Assessment Project – Commission IV: Sta. BPOT30, 4°47′28.32′′ S, 36°39′47′′ W, depth 21.8m, 05/28/2004; Sta. BPOT31, 4°41′56.17′′ S, 36°39′47.02′′ W, depth 40.5m, 05/28/2004. The species was determined using Chace Jr. (1976, p. 26, figs. 22-24), Williams (1984, p. 57, fig. 37) and Abele and Kim (1986, p. 12), and the species identity was confirmed by De Grave and Fransen (2011, p. 256).

The female found at the Sta. BPOT31 had recently spawned given the development of the pleonal pleurae; ovigerous female are known from the eastern Gulf of Mexico in March to the North Carolina in October-November (Chace Jr., 1976). *Leptochela papulata* is known to occur from 15.7 to 202 m depth in bottoms with white or gray sand with black specks, sand, terrigenous sand, coarse sand, mud, coral and sand, gravel, shell debris, rocks. In the present study, the specimens were obtained from coarse sand bottoms, with or without mud, algae and shell fragments.



Figure 1 – *Leptochela papulata Chace, female,* Rio Grande do Norte, Brazil: Sta. BPOT30. Scale bar = 1mm

Williams (1984) comments that some species of the *Leptochela* genus have elevations on dorsal midline of the fifth abdominal segment, but none have elevations so clear as those in *L. papulata*. In the analyzed specimens, it was clearly possible to observe a sinuous dorsal margin on the fifth abdominal segment, with indication of 3 soft prominences, as indicated in the species description (Chace Jr., 1976, p. 27, fig. 22g). The material examined differs greatly from *L. carinata*, the other species of the genus that has relief in the fifth abdominal segment: *L. carinata* has the fifth somite sharply carinate, carina produced into

2 prominent acute anterior teeth and 2 low blunt teeth; and sixth abdominal somite bearing movable lappet near anterior end of dorsal surface (Chace Jr., 1976).

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