

NOTA BREVE

**EXTENSION OF THE RANGE OF DISTRIBUTION OF
Panopeus mirafloresensis ABELE & KIM (CRUSTACEA:
DECAPODA: XANTHIDAE)**

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Abele and Kim (1989), working on the material collected from the Panama Canal, described two new species of *Panopeus*, *P. gatunensis* and *P. mirafloresensis*; the latter has now been collected from this area, thereby extending its distribution beyond the type locality.

A survey being carried out to determine the carcinological fauna of an estuary of the state of Rio Grande do Norte, Brazil, provided the material for this study. Among the species of decapods collected, *Panopeus mirafloresensis* Abele and Kim is a common species inhabiting the sublittoral region where the substratum is covered with mud and algae (*Caulerpa sertularioides* (Gmelin) Howe, *C. racemosa* (Forsskål) J. Agarth, *Acanthophora* sp. and *Dictyota indica* Sonder). The material reported here was obtained with an Ockelmann sledge which was dragged along the bottom from a depth of about 2 to 3 metres to the shore.

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Abbreviations cb and cl represent carapace breadth and carapace length respectively.

Material examined: - 7 females of which one was ovigerous and 9 males; one of the females in the samples was infested with rhizocephalan parasite.

Measurements: - Male - cb from 3.8 to 7.1 mm and cl from 2.3 to 5.3 mm; female - cb from 3.9 to 6.6 mm and cl from 3.0 to 5.2 mm; the ovigerous female measured 6.0 mm and 5.2 mm in cb and cl..

Locality of collection: - All specimens were collected from the estuary of the river Conceição close to the municipality of Macau, state of Rio Grande do Norte, Brazil (longitude between 36°35'E and 36°30'E and latitude 5°04'S and 5°08'S).

Remarks: - The specimens collected here are quite similar to those described by Abele and Kim (1989). While studying a large series of specimens of *P. mirafloresensis* Abele and Kim (1989) encountered a range of variations in the general shape of carapace, size and shape of anterolateral teeth, degree

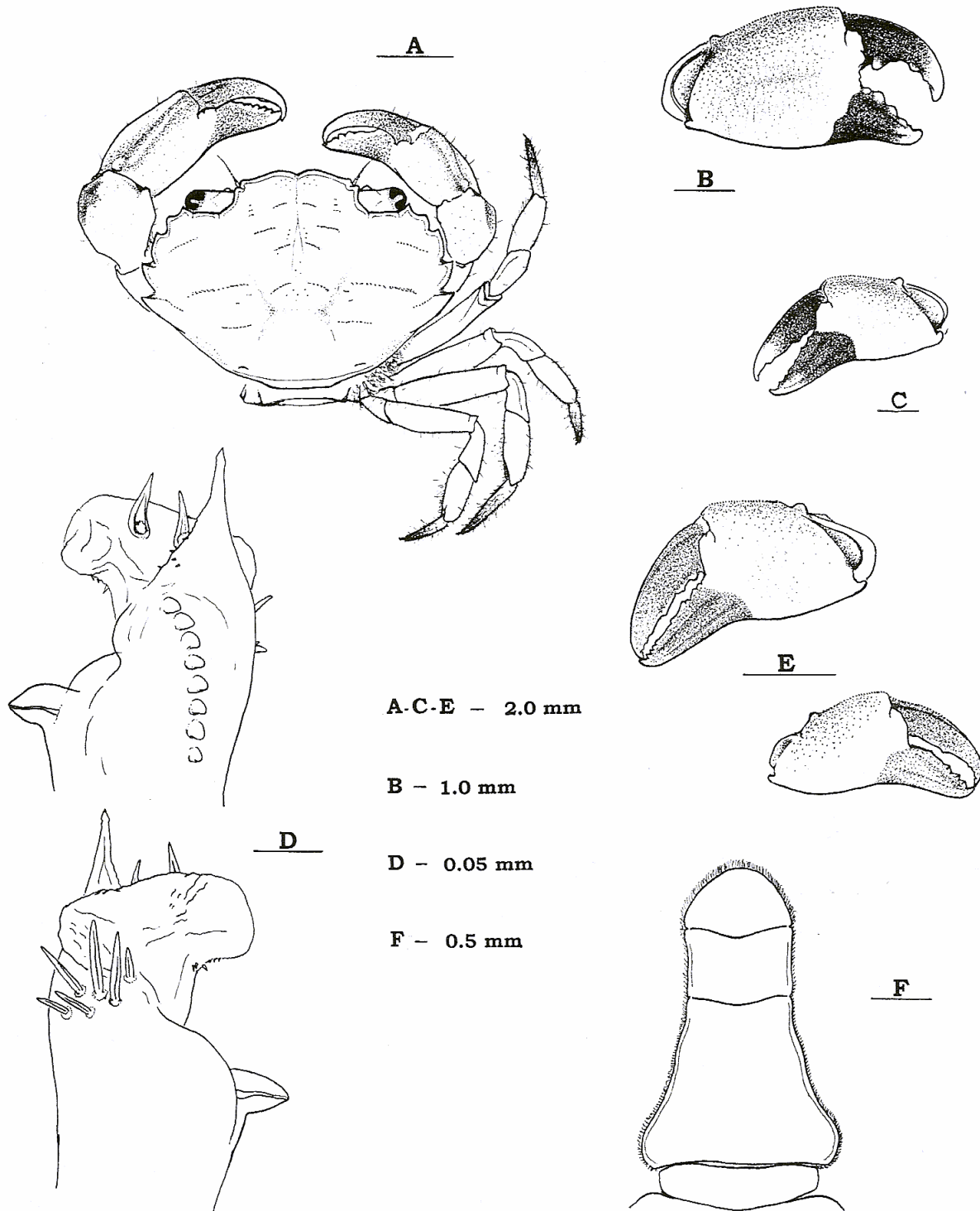


Fig. 1. A. *Panopeus mirafloresensis* Abele & Kim - Dorsal view of male, cb. 7.7 mm & cl. 5.4 mm; B & C. right and left chela, outer view; E. left and right chela, outer view; D. sternal and abdominal view (upper & lower figures respectively) of apex of first male gonopod; F. male abdomen

of demarcation of the regions of carapace, size and dentition of chela. According to them, such characteristics are consistent enough to recognize three types within the species. Our observation on the material collected from here has confirmed variability within the species but cannot assign them to any of the three types since a certain degree of overlap of the characters seems evident. The carapace has faint but recognisable transverse ridges with or without pubescent setae. The size of the first anterolateral tooth (outer orbital angle) is variable, so is the groove which separates it from the second tooth; carpus and propodus of chelipeds are mostly smooth and not rugose and with pubescent setae, when rugose are feebly so. Chelae are stout and in most cases, basal tooth of dactylus is present (of varying size) and only in two cases dactylus of the chela lacks the basal tooth as is the case with type 3 of Abele and Kim (1989). With regard to the first male gonopod, the basic characteristics such as a lateral subterminal lobe (more robust in specimens from here), a tapering distal lobe and a transparent transverse (hammer-shaped) lobe with two, rarely three, distal spinules and a varying number of subterminal elongated setae (5 to 8) on the ventral surface are all present.

According to Dr. R. B. Manning of U.S. National Museum, Washington the specimens from this region is closer to *P. argentus* Williams & Boschii (1990) since *P. mirafloresensis* lacks the subdistal spines on the abdominal face of the gonopod (Personal communication of January 28, 1997). However, we are inclined to consider the specimens in our collection as *P. mirafloresensis* in view of the fact that the male gonopods are almost identical (except for the difference observed by Dr. Manning) and in particular the presence of the long tapering distal lobe.

REFERENCES

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- WILLIAMS, A.B. & E.E. BOSCHI, 1990. *Panopeus argentus*, a new crab from the Argentine Warm Temperate subregion (Decapoda : Xanthidae). Proc. Biol. Soc. Wash. 103 (3): 598-601.