

## NOTA BREVE

## OCCURRENCE OF *Promysis orientalis* DANA, 1852 (CRUSTACEA: MYSIDACEA) IN PATOS LAGOON ESTUARY, RS, BRAZIL

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### RESUMO

**Ocorrência de *Promysis orientalis* DANA, 1852 (Crustacea: Mysidacea) no Estuário da Lagoa dos Patos, RS, Brasil.** *Promysis orientalis* é um misidáceo típico dos oceanos Pacífico e Índico foi registrado pela primeira vez nas águas do estuário da Lagoa dos Patos. A ocorrência dessa espécie no canal de acesso do Porto de Rio Grande sugere que tenham sido transportadas em água de lastro.

**PALAVRAS-CHAVE:** misidáceo, *Promysis orientalis*, água de lastro, Lagoa dos Patos.

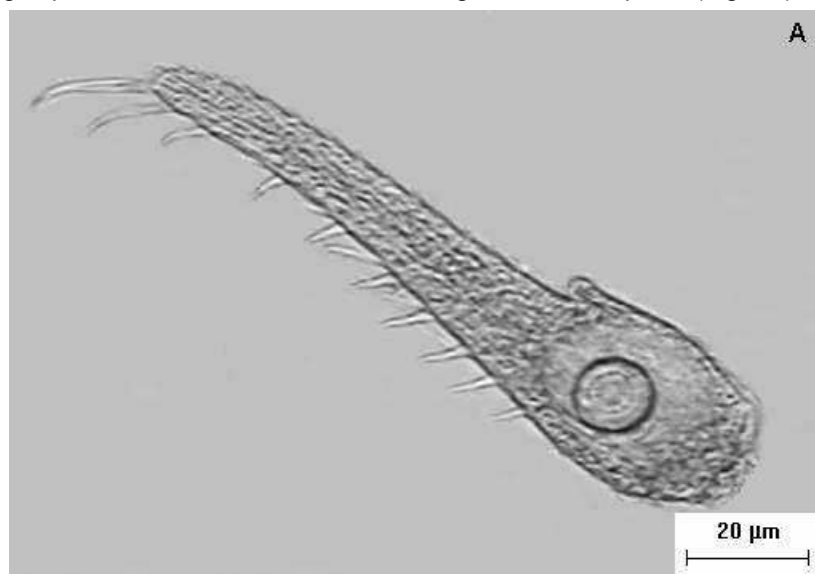
### ABSTRACT

*Promysis orientalis* is a typical mysid from the Indian and Pacific oceans and it is first recorded in waters of Patos Lagoon estuary. The occurrence of this species in the Rio Grande's Port access channel, suggests that they may have been transported in ballast water.

**KEY WORDS:** Mysid, *Promysis orientalis*, Ballast Water, Patos Lagoon

The mysid *Promysis orientalis* (Dana, 1852) belongs to the family Mysidae being widely distributed in the Indian and Pacific oceans, with records in the Coast of Kenia (4°24'S - 40°35'E), Singapore (5°N - 98° E) (Pillai, 1973); Sea of Japan (34°6'N - 128°13'E), Malaysia ( 1°38'N - 107°42'E), Coast of Vietnam (14°43'N - 109 °18'E) (Il, 1964) and Philippines (5°43'N -120°35'E) (Hansen, 1910). This species was described by Hansen (1910) like a synonymy of *Uromysis armata*.

The examined organisms are in agreement with the descriptions of Pillai (1965) and Hansen (1910) as follows: slender body, distal segment nearly twice as long as broad, frontal plate triangular, apex subtruncate, large eyes. Antennal scale reaching far beyond the antennular peduncle, seven times as long as broad. Telson more than half as long as uropods (Fig. 1A), tapering, cleft one-fourth the total length and with a pair of setae, lobes of the cleft narrow and terminating in a large spine, lateral border of telson with eight to eleven spines (Fig. 1B).



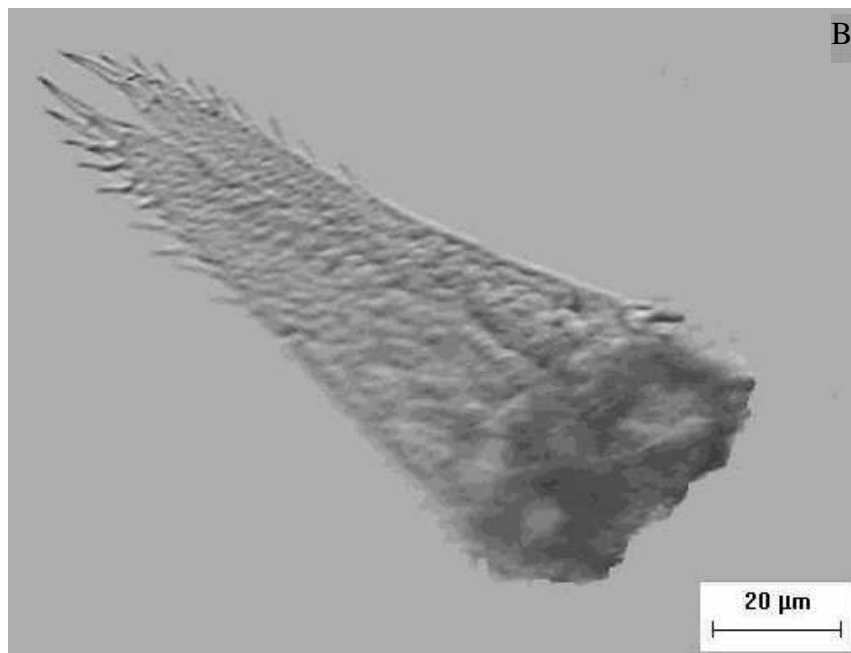


FIGURE. 1 – *Promysis orientalis*. A. Endopod of uropod. B. Telson. Magnification 40x.

The specimens used in this study were collected nearby the Rio Grande's Port channel, in the Patos Lagoon estuary (32°10'186" S - 52°07'170" W), Brazil, between January and February 2000. The samples were taken at night samples with a plankton net, 300 µm mesh size, horizontal tows at 10 m depth, salinity ranging from 33.8 to 34.1 and temperature from 24.2 to 24.9 °C. Two organisms were analyzed in January measuring 3.1 mm and 1.5 mm total length (male and juvenile respectively) and one in February with 1.3 mm total length (juvenile).

The species hasn't been recorded for the Atlantic Ocean, just for the Indian and Pacific Oceans. The presence of this species in the Rio Grande's Port access channel, suggests that they may have been transported in the ballast water of ships coming from Indo-Pacific areas that maintain commercial relationships with Brazil. The occurrence of exotic species in areas with great movement of ships was shown to be directly linked to their transport in ballast water (Carlton, 1985).

Other authors mention the occurrence of exotic species in other port areas of Brazil as a result of the discharge of ballast water. Montú (1982) found the copepod *Caligus undulatus* from of China in the Paranaguá's bay. D'Incao (1995) mentions the presence in Southern Brazil of *Metapenaeus monoceros*, recorded for the Indo-Pacific area, and Melo (1983) reports the Portunidae *Scylla serrata* (Indo-Pacific) in the coast of São Paulo state.

We suggest that the occurrence of *Promysis orientalis* in the area of Rio Grande's Port is related with the presence of these organisms in ballast waters, in the same way as described for the different species mentioned previously.

## REFERENCES

- CARLTON, J.T. 1985. Transoceanic and interoceanic dispersal of coastal marine organisms: the biology of ballast water. *Oceanography mar.Biol. Ann. Rev.*, Aberdeen, 23:313-371.
- D'INCAO, F. 1995. Ocorrência de *Metapenaeus monoceros* (Fabricius, 1798) no Sul do Brasil. (DECAPODA: PENAEIDAE). Nauplius, Rio Grande, 3: 165-167.
- HANSEN, H.J. 1910. The Schizopoda of the Siboga Expedition. *Siboga Expeditie*, Leyden, 37: 1-123, 16pls.
- II, N. 1964. Fauna Japonica, Mysidae. *Biogeography Society of Japan*, 610pp.
- MELO, G.A.S. 1983. A ocorrência, no litoral brasileiro, de um Portunidae (Crustacea, Decapoda, Brachyura), originário do Indo-Pacífico. *Revta bras. Zool.*, Curitiba, 1: 159-167.
- MONTÚ, M. 1982. Alguns copépodos parasitas de peixes do sul do Brasil. *Archos Biol. Tecnol.*, Curitiba, 25: 329-339.
- PILLAI, N.K. 1965. A review of the work of shallow-water Mysidacea of the Indian waters. *Proc. Symposium Crust.*, India, 5: 1681-1728.
- PILLAI, N.K. 1973. Mysidacea of the Indian Ocean. *I.O.B.S. Handbook*, India, 4: 1-125.

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