

Record of *Pleopis schmackeri* (Poppe) Branchiopoda in Rio das Ostras, Rio de Janeiro, Brazil

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Resumo

Registro de *Pleopis schmackeri* (Poppe) Branchiopoda em Rio das Ostras, Rio de Janeiro, Brasil. Neste artigo é descrita a primeira ocorrência de *Pleopis schmackeri* (Poppe, 1889) (Branchiopoda, Onychopoda) em Rio das Ostras, Rio de Janeiro, Brasil. Essa espécie de Cladocera marinho ocorreu em amostras de zooplâncton obtidas em julho de 2003, com densidade média de 10 ind.m⁻³. Sua presença pode ser relacionada a duas hipóteses, por água de lastro de embarcações e a partir da corrente do Brasil, que no inverno se aproxima da costa.

Palavras-chave: Brasil; Cladocera; *Pleopis schmackeri*; Rio das Ostras, RJ; Zooplâncton

Abstract

The paper describes the first occurrence of *Pleopis schmackeri* (Poppe, 1889) (Branchiopoda, Onychopoda) in Rio das Ostras, Rio de Janeiro, Brazil is described. This marine cladoceran species occurred in zooplanktonic samples obtained on July, 2003 with mean density of 10 ind.m⁻³. Its presence may be related to two hypotheses, due to ballast water and through the Brazilian current, which gets closer to the coast Winter.

Key words: Brazil; Cladocera; *Pleopis schmackeri*; Rio das Ostras, RJ; Zooplankton

Marine cladocerans present higher densities in coastal waters, but in a certain time of the year they can become rare (MARAZZO; VALENTIN, 2004). The *Pleopis schmackeri* (Poppe 1889) species has unknown ecological characteristics, due to low abundance and rare presence in tropical and coastal and tropical waters (MARAZZO, 2002). Its incidence has been described in waters from the South China Sea to the Northeast

of Honshu (Japan) and there are sporadic records for Aqaba Bay (Red Sea) and Madagascar (Indian Ocean). In Brazilian waters, some records were made: by Rocha (1985) in the coast of Sao Paulo; by Resgalla Jr. and Montú (1993) in the Southern coast; by Marazzo (2002); in the Guanabara Bay, Rio de Janeiro; by Resgalla Jr. (2008; 2011) in the coast of Santa Catarina and in the Southern coast among other works.

The presence of *P. schmackeri* in the region of Rio das Ostras (22°31'-22°32'S and 41°47'-41°52'W) had not been recorded, although several surveys have been carried out in the stretch between Cabo Frio and Cabo de Sao Tome, Rio de Janeiro for several years.

The occurrence of *P. schmackeri* was observed during zooplankton survey carried out in the region of Rio das Ostras (22°32'048S and 41°50'922'W). The zooplankton samples were obtained through horizontal surface hauls with a 200µm mesh network and an opening of 60cm in diameter in three stations, on July, 2003, with triplicates, and they presented a mean density of 10 ind.m⁻³. The population consisted only of parthenogenetic females, with mean total body length (TL) of 452µm and 3 embryos/female-1. Temperature ranged from 23.99 to 24.05°C and salinity ranged from 33.74 to 34.69. Marazzo (2002), a survey in the Guanabara Bay, the mean body length of parthenogenetic females was 420µm. Water temperature and salinity were 21.6 and 35.2°C, respectively. The results showed that there is similarity in the size of individuals and that both were found in salinity less than 36, corroborating Onbé (1999), who says that the species was observed in salinity less than 36 near the coast.

One assumes that *Pleopsis schmackeri* is a marine cladoceran from the Brazilian current, which gets closer to the coast on Winter (MARAZZO, 2002). There is also the hypothesis that this species is introduced through ballast water, whether in a planktonic form or as diapause eggs associated to sediments from the ballast tanks of ships (LOPES, 2004).

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