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Occurrence of *Euchaeta paraconcinna* Fleminger, 1957 (Crustacea, Copepoda, Calanoida) in a coastal area of Bahia State, northeastern Brazil

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Abstract

Dias, C.O and Bonecker, S.L.C. **Occurrence of *Euchaeta paraconcinna* Fleminger, 1957 (Crustacea, Copepoda, Calanoida) in a coastal area of Bahia State, northeastern Brazil.** *Biota Neotrop.* Sep/Dec 2006 vol. 6, no. 3 <http://www.biotaneotropica.org.br/v6n3/pt/abstract?article+bn02406032006> ISSN 1676-0611

The calanoid copepod *Euchaeta paraconcinna* Fleminger, 1957 is reported from Camamu Bay, state of Bahia, northeastern Brazil (14°02'49"S; 38°52'58"W). Three females were collected by vertical hauls with a plankton net of 200 µm mesh size. This is a new record for this species in northeastern Brazil.

Key words: *Copepoda*, *new occurrence*, *Euchaeta paraconcinna*, *Southwest Atlantic*

Resumo

Dias, C.O and Bonecker, S.L.C. **Ocorrência de *Euchaeta paraconcinna* Fleminger, 1957 (Crustacea, Copepoda, Calanoida) em uma região costeira do estado da Bahia, Nordeste do Brasil.** *Biota Neotrop.* Sep/Dec 2006 vol. 6, no. 3 <http://www.biotaneotropica.org.br/v6n3/pt/abstract?article+bn02406032006> ISSN 1676-0611

Uma nova ocorrência para o copépode Calanoida *Euchaeta paraconcinna* Fleminger, 1957 foi registrada na região costeira da baía de Camamu, estado da Bahia, Nordeste do Brasil (14°02'49"S; 38°52'58"W). Três fêmeas foram coletadas em arrastos verticais, com rede de plâncton, de 200 µm de malha. Este registro revela uma nova ocorrência desta espécie no Nordeste do Brasil.

Palavras-chave: *Copepoda*, *nova ocorrência*, *Euchaeta paraconcinna*, *Atlântico sudoeste*

Introduction

Euchaeta paraconcinna Fleminger, 1957 was originally described from specimens obtained in Onslow Bay, North Carolina, and the Gulf of Mexico, and has subsequently been recorded from the Gulf of Guinea along the coast from Sierra Leone to Angola (Vervoort 1963) and the Caribbean Sea (Park 1975). In Brazil, the only citation of this species is from northern Brazil, by Yoneda (1999). Montú & Gloeden (1998) did not include this record in their revision of the Calanoida. Data on the biology of *E. paraconcinna* indicate its tropical-subtropical distribution and mesopelagic habit (Bradford-Grieve et al. 1999, López-Salgado et al. 2000). This study reports the occurrence of *E. paraconcinna* in a coastal area of northeastern Brazil (Camamu, state of Bahia).

Material and Methods

The biological material examined was obtained as part of a project to study the copepod fauna off northeastern Brazil. The zooplankton program was carried out at several sites along the coast of Bahia, during January and August 2004. The sites were located between Garapuá (13°48'S; 38°91'W) and the Maraú peninsula (14°10'S; 39°W) in the adjacent internal shelf near Camamu Bay, at stations shallower than 50 m.

The zooplankton samples were collected during the day, by vertical hauls with a conical net of mesh size 200 μ m and mouth diameter 60 cm, fitted with a calibrated flowmeter. Samples were preserved in 4% buffered formalin. Sampling was carried out from August 26 to 28, 2004. The sample that contained *E. paraconcinna* was taken at 30 m depth (14°02'49"S; 38°52'58"W).

Results and Discussion

The specimens were collected during the dry season; water temperature was 26.3°C at the surface and 25.1°C near the bottom. Salinity was 35.3 at the surface and 35.9 near the bottom.

A total of three female copepods (2 ovigerous females) belonging to the species *E. paraconcinna* were collected. Their total body lengths were 2.65 to 2.84 mm, measured in dorsal view from the anterior end of the cephalic somite to the posterior margin of the anal somite. The total length of the specimens is larger than reported by Park (1995), who found specimens with lengths from 2.38 to 2.56 mm.

The continental shelf off the state of Bahia, on the northeastern coast of Brazil, is one of the locations on the Brazilian coast with the fewest works published on the es-

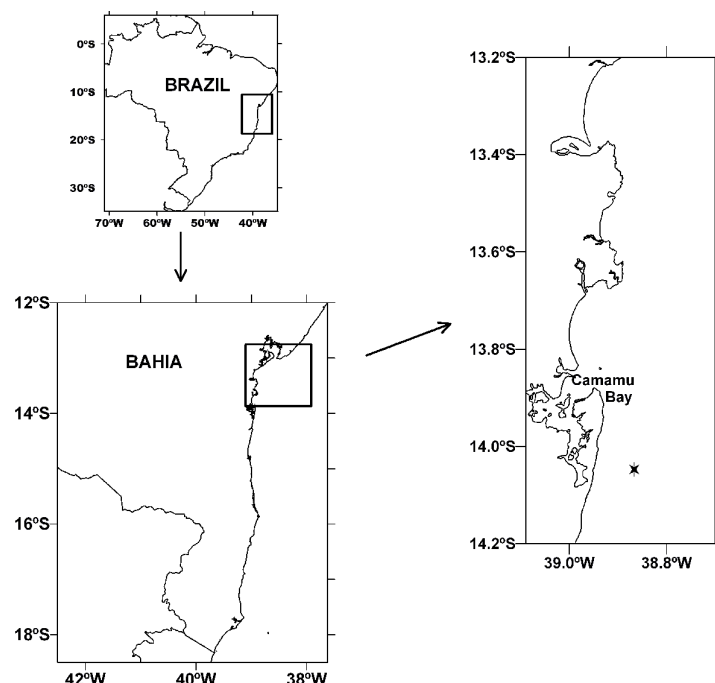


Figure 1: Map of the study area indicating the sampling stations.

tuarine and coastal zooplankton communities (Bonecker 1995, Neumann-Leitão 1994/1995). *E. paraconcinna* is probably a normal, although rare, member of the local coastal zooplankton community, and has not been recorded previously because of the lack of adequate surveys. The copepod fauna of this region is similar to that found in the Gulf of Guinea (Binet & Dessier 1971), and the occurrence of *E. paraconcinna* in both areas reflects this similarity. This new find significantly extends its known distribution area in South America. This is only the second record in Brazilian waters; the species was previously recorded in the north of Brazil (State of Maranhão).

The three females were deposited in the copepod collection of the Integrated Zooplankton and Ichthyoplankton Laboratory (LIZI) of the Federal University of Rio de Janeiro (DZUFRJ 3244).

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