



New species and new records of Terebellidae (Annelida: Terebelliformia) from off the Brazilian coast

ORLEMIR CARRERETTE^{1,2} & JOÃO MIGUEL de MATOS NOGUEIRA¹

¹Laboratório de Poliquetologia, Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo, R. do Matão, travessa 14, n. 101, 05508–090, São Paulo, SP, Brazil

²Corresponding author: E-mail: o.carrerette@ib.usp.br

Abstract

Three new species of Terebellidae Grube, 1850 were identified among material collected on hard substrates off the states of Paraíba and Pernambuco, northeastern Brazil. These species are *Lanicola hutchingsae* **sp. nov.**, *Eupolymnia corae* **sp. nov.**, and *Neoleprea potiguara* **sp. nov.**, all herein described and compared with the morphologically most similar congeners. *Lanicola hutchingsae* **sp. nov.**, is characterized by having lobes of segment 2–3 reaching beyond segment 1, with dorsal margin extending dorsally, covering bases of branchiae, and uncini with 3 rows of secondary teeth above main fang. *Eupolymnia corae* **sp. nov.**, has lobes of segment 2 laterally higher, with dorsal margins rounded, and lobes of segments 3 and 4 progressively shorter, roughly triangular, with pointed tips, pairs of branchiae progressively shorter, all longitudinally aligned, and uncini throughout with 3 rows of secondary teeth above main fang. *Neoleprea potiguara* **sp. nov.**, is characterized by having notopodia up to the segment 23, with nephridial papillae on segment 3 and genital papillae on segments 6–19. These are the first records for the genera *Lanicola* Hartmann-Schröder, 1986 and *Neoleprea* Hessle, 1917 in Brazilian waters.

Key words: Polychaeta, diversity, taxonomy, hard substrates, northeastern Brazil

Introduction

Sandstone reefs are common substrates along the northeastern coast of Brazil, and they are colonized by a large amount of benthic organisms, living on the rocks and nodules of calcareous algae (rhodoliths), such as sponges, cnidarians and ascidians, tufts of algae, mussel beds, sabellariid reefs and coral reefs, with a variety of vagile forms, including crustaceans, gastropods and polychaetes. Polychaetes are usually one of the most important groups in terms of both benthic biomass and species richness, and they are particularly abundant on the sandstone reefs off northeastern Brazil, although few taxonomic studies have been conducted in the area, and even fewer have focused on Terebellidae (Amaral *et al.* 2013).

Terebellidae is a well known group of polychaetes, currently with 47 valid genera, comprising around 300 species. So far 13 genera and 34 species have been recorded for Brazilian waters, but only 12 of these species were registered for the northeastern Brazilian coast (Amaral *et al.* 2013), from which the material used for the present study was collected.

Three new species of Terebellidae Grube, 1850 were identified among material collected off the states of Paraíba and Pernambuco. These species are *Lanicola hutchingsae* **sp. nov.**, *Eupolymnia corae* **sp. nov.**, and *Neoleprea potiguara* **sp. nov.**, all herein described and compared with the morphologically most similar congeners. In addition to the new species described, this is also the first record for the genera *Lanicola* Hartmann-Schröder, 1986 and *Neoleprea* Hessle, 1917 in Brazilian waters.

Material and methods

The material used for this study was collected by the Project ‘BIOTA/FAPESP – Diversity of Polychaeta