



## New terebellids (Polychaeta: Terebellidae) from northeastern Brazil

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## Abstract

Four new species of terebellid polychaetes were collected at the Reserva de Desenvolvimento Sustentável da Ponta de Tubarão, State of Rio Grande do Norte, northeastern Brazil. These species are *Streblosoma patriciae* sp. nov., *Terebella leslieae* sp. nov., *Nicolea ceciliae* sp. nov., and *Pista alonsae* sp. nov. All these species are herein described and compared with the morphologically most similar congeners.

**Key words:** *Streblosoma*, *Nicolea*, *Pista*, *Terebella*, taxonomy, northeastern Brazil

## Resumo

Quatro espécies novas para a ciência de poliquetas terebelídeos foram coletadas na Reserva de Desenvolvimento Sustentável da Ponta de Tubarão, Estado do Rio Grande do Norte, nordeste do Brasil. Estas espécies são *Streblosoma patriciae* sp. nov., *Terebella leslieae* sp. nov., *Nicolea ceciliae* sp. nov. e *Pista alonsae* sp. nov. Todas estas espécies são aqui descritas e comparadas com as congêneres morfologicamente mais similares.

## Introduction

Terebellid polychaetes constitute a large group of tubicolous annelids common in benthic marine environments worldwide, from shallow to deep waters (Holthe 1986; McHugh 1995). The group is currently subdivided into three subfamilies, Polycirrinae Malmgren, 1866, Terebellinae Grube, 1850 and Thelepodinae Hesse, 1917, based on the morphology of branchiae, if present, and the structure and arrangement of neurochaetae (Holthe 1986; McHugh 1995).

Nogueira & Yunda-Guarin (2008) and Fukuda *et al.* (2009) discussed the poor state of knowledge on the polychaete fauna from northeastern Brazil and this is particularly true for the family Terebellidae. Up to the present, only six papers dealing with terebellids from northeastern Brazil have been published, resulting in a total number of eight species reported for the area (Nonato & Luna 1970; Rullier & Amoureux 1979; Santos *et al.* 1994; Santa-Isabel *et al.* 2000; Garraffoni & Costa 2003; Garraffoni & Lana 2003).

Considering the importance of benthic macrofauna in coastal environments, an inventory on the fauna occurring in the state biological reserve of Reserva de Desenvolvimento Sustentável da Ponta de Tubarão (RDSPT), State of Rio Grande do Norte, northeastern Brazil, began in November 2007, aiming to provide support for the implementation of the state reserve and to study more appropriate strategies for the conservation of the area.

The results of that study showed that the polychaetes were the dominant group of invertebrates, followed by crustaceans and echinoderms. Representatives of around 50 species of polychaetes, belonging to 30 families were obtained from that study, of which Syllidae Grube, 1850 was the most diverse, followed by Terebellidae Grube, 1850 and Maldanidae Malmgren, 1867. Terebellidae was the most abundant, followed by Cirratulidae Ryckholt, 1851 and Oweniidae Rioja, 1917. The material is currently being studied by students and researchers from Universidade Federal da Paraíba (UFPB), in some cases with help from researchers from other institutions, such as Universidade Federal Rural do Rio de Janeiro (UFRRJ) and Universidade de São Paulo (USP).

During that study, four new species of terebellids were identified, all of which are described herein.

## Material and methods

### Studied area

The Reserva de Desenvolvimento Sustentável da Ponta do Tubarão (RDSPT) is a state biological reserve situated on the northern coast of the State of Rio Grande do Norte, northeastern Brazil, including part of the villages of Macau and Guamaré, between 05°02'–05°16'S and 36°26'–36°32'W.