



Four new species of *Syringolaimus* De Man, 1888 (Nematoda: Ironidae) from the Southeast Atlantic (Brazil), with redefinition of valid species and the proposal of a new key*

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Abstract

Syringolaimus is the most abundant and diverse genus of the family Ironidae (Nematoda) found in the Campos Basin, off Rio de Janeiro, Brazil. In this article, four new species of this genus are described. *S. annae* sp. n. is characterized by a conical-cylindrical tail without a spinneret. *S. magdae* sp. n. possesses a pair of ejaculatory glands located in the precloacal region, and a spinneret, which comprises 21.2% of the total tail length. In *S. smolae* sp. n. the spicule is setiform. *S. taniae* sp. n. has the anterior region of the tail rounded, with its terminal portion cylindrical-filiform.

Key words: marine nematodes, deep sea

Introduction

The genus *Syringolaimus* De Man, 1888 was first recorded from the deep sea in the Cabo Basin off the African coast, between the 3700 and 4180 m isobaths (Gourbault & Vincx 1985). Netto *et al.* (2004, 2005) recorded this genus from the South Atlantic, on the slope of the Campos Basin, between the 870 and 950 m isobaths.

The taxonomic position of *Syringolaimus* was doubtful for a long time. The genus was assigned to the Rhabdolaimidae Chitwood, 1951 because of the presence of a true basal bulb in the pharynx (Riemann 1970; Gerlach & Riemann 1973). However, this is an uncommon feature for Enoplia (Lorenzen 1981), and therefore the genus was transferred to the Ironidae by Lorenzen (1981) based on the structures of the buccal cavity and the existence of replacement teeth, which are placed slightly behind the functional teeth (Coomans & Van der Heiden 1979).

Platonova & Mokievsky (1994) proposed an emended diagnosis for Ironidae, which had been previously based on a single freshwater genus. This posed a challenge for the taxonomy of *Syringolaimus* as well as for other marine genera of this family. These authors also provided an identification key for the nine species of *Syringolaimus* that were recognized at that time.