



## Two new species of *Sabatieria* Rouville (Nematoda: Comesomatidae) with conical-cylindrical tails, from Campos Basin, Rio de Janeiro, Brazil\*

ALESSANDRA PRATES BOTELHO#, MARIA CRISTINA DA SILVA, LUCIANA DAVINA TOSTA SOBRAL, & VERÔNICA GOMES FONSÊCA-GENEVOIS.

Universidade Federal de Pernambuco, Av. prof. Moraes Rêgo, S/N, Departamento de Zoologia. Cidade Universitária, Recife – Pernambuco, Brazil. CEP 50670-901.

# Corresponding author: luna\_soleil@yahoo.com

\* In: Brökeland, W. & George, K.H. (eds) (2009) Deep-sea taxonomy — a contribution to our knowledge of biodiversity. *Zootaxa*, 2096, 1–488.

### Abstract

*Sabatieria* is the most abundant nematode genus on the Campos Basin continental slope. Two new species are described here. *Sabatieria exilis* sp. n. has a small rounded head and a narrow pharynx with a cuticularized anterior end. *Sabatieria fidelis* sp. n. has a short outstretched testis, spicules directed ventrally and shaped like the tip of a dropper, the gubernaculum with a v-shaped cuticularized area in the distal part, short cephalic and somatic setae, and a longer tail.

**Key words:** Meiofauna, Deep Sea, Benthos, Atlantic Ocean, Taxonomy

### Introduction

The genus *Sabatieria* Rouville is differentiated by the features: annulated cuticle or transverse punctations; lateral differentiation of large regular or irregular dots; labial sensilla in an arrangement of 6+6+4; spicules usually enlarged in the proximal portion; and the gubernaculum usually with a dorso-caudal apophysis (rarely with a caudal apophysis). Jensen (1979) revised the family Comesomatidae, updated the dichotomous key proposed by Wieser (1954), and discussed the important morphological features used to identify the genera. Platt (1985) revised *Sabatieria* and established 5 subgroups of species, using as differentiation characteristics the type and distribution of preloacal supplements, characteristics of the gubernaculum and apophyses, the number of turns of the amphideal fovea, and the cephalic setae. He considered 36 species as valid. There are now considered to be 48 valid species, 6 of which were described from Brazil: *S. rota* Gerlach, 1957; *S. supplicans* Gerlach, 1956; *S. bitumen* Botelho *et al.*, 2007; *S. spiculata* Botelho *et al.*, 2007; *S. paraspiculata* Botelho *et al.*, 2007; and *S. rotundicauda* Botelho *et al.*, 2007. The first two species were described from coastal sediments, and the last four from deep-sea sediments (Botelho *et al.* 2007).

The taxonomic position of the Comesomatidae is still debatable. Over the years this family has undergone several modifications. It was first placed in the Chromadorida (Wieser 1954; De Coninck 1965; Gerlach & Riemann 1973; Andrásy 1976; Jensen 1979; Platt 1985) because of the punctate cuticle and spiral amphidial fovea. Afterwards, it was placed in the superfamily Axonolaimoidea (order Monhysterida), especially because of the outstretched ovaries (Lorenzen 1994). De Ley and Blaxter (2004), based on molecular analyses, raised the superfamily Araeolaimoidea to the rank of order. Thus, this recently proposed order belongs to Chromadorida and the class Chromadorea (Abebe *et al.* 2006).

With respect to ecology, *Sabatieria* is most abundant in sandy silts (Tietjen 1976). The group is reported as dominant or subdominant on the slope of the Goban Spur (Vanaverbeke *et al.* 1997) and on the shelf break