



## Four new species of *Sabatieria* Rouville, 1903 (Nematoda, Comesomatidae) from the Continental Slope of Atlantic Southeast

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### Abstract

*Sabatieria* is the most abundant genus along the Campos Basin, Rio de Janeiro (Brazil). Four new species of *Sabatieria* (Nematoda-Comesomatidae) from the Continental Slope of Atlantic Southeast are described. *Sabatieria spiculata* sp.nov. is characterized by the size of spicule and the presence of dorsal tooth; *S. paraspiculata* sp. nov. by tail shape and the maximum diameter; *S. bitumen* sp. nov. by spicule shape with an arrow-like distal part and the *S. subrotundicauda* sp.nov. by a round tail and reflected ovary.

**Key words:** Free-living marine nematodes, *Sabatieria*, Comesomatidae, deep-sea, silty sediments

### Introduction

The nematode community structure in Campos Basin did not differ significantly from other deep-sea data worldwide, showing low densities, low dominance and very high richness. Netto *et al.* (2005) studying the same area found similar community structure, with a strong bathymetrical boundary between continental slope and deep sea stations. The number of genera (193) and families (44) are the highest recorded in deep-sea (Fonsêca-Genevois *et al.* 2005). Most of the genera (42%) were present from 500 m to 1950 m depth, but considering species distribution among the genera, diversity not only increases with depth but also spatial heterogeneity may become extremely more evident (Lira 2005).

*Sabatieria* is the most abundant genus along the Campos Basin accounting to 50% of the total nematofauna (Fonsêca-Genevois *et al.* 2005). *Sabatieria spiculata* sp. nov., *S. paraspiculata* sp. nov. and *S. bitumen* sp.nov. presented a continuous spatial distribution, whereas the *S. subrotundicauda* sp. nov. was only found at the upper slope.

### Study area

The continental slope of Campos Basin has a width varying from 120 km to 150 km, with the lowest limits between 2.400 m and 3.000 m depth. It is covered by fine continental sediment and a sandy fraction which is composed mainly of Foraminifera (Soares-Gomes *et al.* 1999). This Basin is located on the continental shelf and slope of Rio de Janeiro State, between 21° 30' and 23° 30' S (Figure 1).