



## First record of *Stephensoniana trivandrana* Aiyer, 1926 (Oligochaeta: Naididae), in southeastern Brazil

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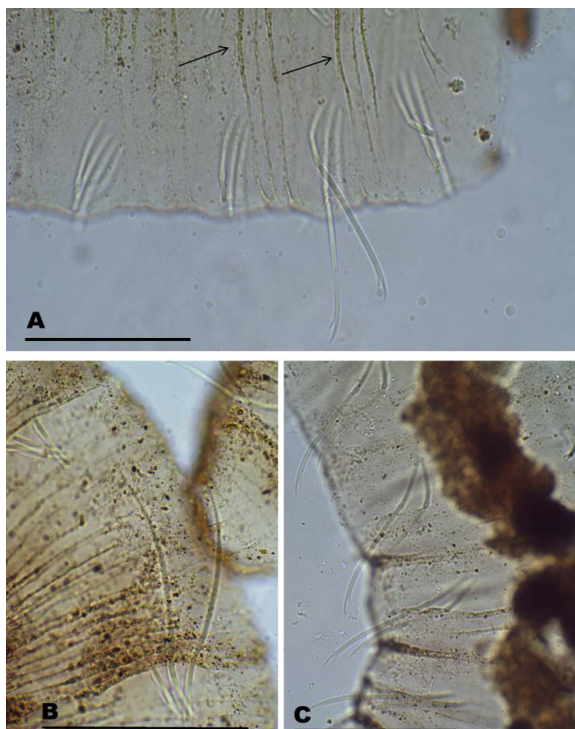
Received: September 18, 2018 – Accepted: December 6, 2018 – Distributed: February 28, 2020  
(With 1 figure)

Oligochaeta (Annelida: Clitellata) are recognized as highly diverse groups inhabiting a wide variety of aquatic ecological habitats. Due to their sensitivity to pollution (Rodríguez and Reynoldson, 2011; Tixier et al., 2011), these groups are used as a valuable tool in biomonitoring programs for water quality (Prygiel et al., 2000; Lafont et al., 2012; Vivien et al., 2014). These organisms can be found living on sandy and clay substrates, or in environments enriched by organic matter (Dornfeld et al., 2006). In addition, these worms are also associated with other substrates such as: bryophytes, bryozoans, hydrozoans (Corbi et al., 2005; Gorni and Alves, 2007), sponges (Gorni and Alves, 2008), insects (Corbi et al., 2004), gastropods (Gorni and Alves, 2006), and aquatic macrophytes (Correia and

Trivinho-Strixino, 1998; Trivinho-Strixino et al., 2000; Alves and Gorni, 2007).

In this article, we report the first occurrence of *Stephensoniana trivandrana* Aiyer, 1926 (Figure 1), in aquatic ecosystems of southeastern Brazil.

The specimens were identified in sediment samples collected in 07/30/2014 in the deep ( $\pm$  21m) region of the Promissão Reservoir (21°18'49"S and 49°45'49"W). The Ekman-Birge grab (0.0231m<sup>2</sup>) was used for the samples. All sampling and fixing procedures followed the protocol stipulated by Technical Standard CETESB L5.309 (CETESB, 2003). These collections were carried out by the Aquatic Communities Sector (ELHC) of CETESB and are part of the Sediment Quality Monitoring Network Project.



**Figure 1.** *Stephensoniana trivandrana*. (A) Prostomium, anterior ventral chaetae (detail) and papillae (arrows); (B) Dorsal chaetae (detail); and (C) Posterior ventral chaetae. Scale bars: 100  $\mu$ m.

The species was identified using the taxonomic criteria adopted by Brinkhurst and Jamieson (1971) and Brinkhurst and Marchese (1989). According to these authors, *S. trivandran* is described with the following characteristics: length: 2-6 mm, segments = 21-43. The body wall was covered by material adhered to the cutaneous glands. Dorsal bristle bundles containing 3-4 capillaries and 3-4 acicular; up to 4 ventral setae per bundle anteriorly, decreasing to 1 posteriorly, all with proximal nodules and distal tooth longer than the proximal. The difference between the teeth becomes more pronounced in the later segments. Pharynx in segment II / III; Sudden dilation of the intestine in segment VI. Clitelo in segments 1 / 2IV-1 / 2VI; deferens vessels apparently devoid of prostate, with thick and glandular epithelium, opening directly to the outside; 4-5 penile bristles with bundle, with distal nodule and two short and blunt teeth.

The *S. trivandran* specie belongs to family Naididae, sub family Naidinae (Timm, 2009). Until the present study, records of *S. trivandran*, in Brazil, were limited to only three states: Mato Grosso (Marchese et al., 2005), Mato Grosso do Sul (Takeda et al., 2000) and Paraná (Montanholi-Martins and Takeda, 1999; Behrend et al. 2009; Moretto et al., 2013). In previous studies in Southeastern Brazil, *S. trivandran* had not yet been registered. This fact, associated with the unique characteristics of Brazilian continental ecosystems, justifies the realization of further research which aims to map oligochaete species in these environments, since these worms are considered important bioindicators of water quality and sediment.

## Acknowledgements

We are thankful to teacher Mercedes Marchese to aid in the identification process. We are also grateful to the Water Communities Sector (ELHC) of the Environmental Company of the State of São Paulo - CETESB, especially to the biologists Monica Luisa Kuhlmann and Hélio Rubens Victorino Imbimbo for the authorization of access to the Oligochaeta Collection of Monitoring Network, and to the Coordination for the Improvement of Higher Education Personnel (CAPES) and National Foundation for the Development of Private Higher Education (FUNADESP) for financial support.

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