First record of *Nais schubarti* Marcus, 1944 (Oligochaeta: Naididae) in the State of São Paulo

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(With 1 figure)

The Oligochaeta (Annelida: Clitellata) is known to have important participation in the aquatic macroinvertebrates fauna, mainly due to its active participation in the organic matter decomposition (Esteves et al., 2011). Despite its ecological importance, the knowledge about this taxon is still incipient (Timm et al., 2001; Gorni et al., 2015).

According to Alves et al. (2008), Petsch et al. (2015), Maroneze et al. (2011) and Ragonha et al. (2014), these organisms can be found living on sandy substrates or in organic matter enriched environments (Behrend et al., 2012). In addition, these organisms are also recorded associated with aquatic macrophytes and leaf litter (Trivinho-Strixino et al., 2000; Alves and Gorni, 2007; Gorni and Alves, 2007; Oliveira et al., 2014) with sponges (Gorni and Alves, 2008) gastropods (Gorni and Alves, 2006), insect larvae (Corbi et al., 2004) and amphibians (Oda et al., 2015). Recent studies (Gorni et al., 2015) recorded 75 species of aquatic oligochaetes in the State of São Paulo, in which 64 species (85%) belong to the Naididae family. This family stands out as diverse and abundant, being composed of eight subfamilies totaling about 50% of the oligofauna described on the Earth (Rodriguez and Reynoldson, 2011).

In this article, we report the first record of *Nais schubarti* Marcus 1944 for the State of São Paulo (Figure 1). Sediment samples were collected by the Water Communities Sector (ELHC) of CETESB, and are part of the Sediment Quality Monitoring Network Project.

The specimens were collected in the Paiva Castro reservoir, in the municipality of Franco da Rocha / SP (23°21’13"S and 46°39’56"O). The procedures for sampling, fixation and preparation of the samples followed the Technical Standard CETESB L5.309 (CETESB, 2003). The species was identified using the taxonomic criteria adopted by Brinkhurst and Jamieson (1971), Righi (1984) and Brinkhurst and Marchese (1989). According to the authors, *N. schubarti* is described with the following characteristics: length 2.5 mm, diameter of 150 μm with twenty-five segments. The species has ventral setae of II-V, 3-5 per tuft, proximal nodule, distal tooth 2 times longer than proximal; in the following three segments by tuft, distal nodule, teeth of similar length. Dorsal bristles, 1 capillary and 1 acicular spatuliform in the distal third. Bulbiform stomach in VIII segment. Intestine dilated in the X segment.

In the present literature, *N. schubarti* occurrence records in Brazil were limited to two Brazilian states: Pernambuco (Marcus, 1944; Righi, 1984; Christoffersen, 2007), and Paraná (Montanholi-Martins and Takeda, 2001; Christoffersen, 2007); being recognized as an endemic species of South America (Christoffersen, 2007). However, it is probable that *N. schubarti* occurs in other Brazilian aquatic ecosystems, due to the scarcity of studies that aim at the survey of oligochaete species in Brazilian aquatic ecosystems, as well as the lack of specialists in the taxonomic identification of these worms.

Figure 1. *Nais schubarti*. (A) Prostomium and anterior ventral chaetae (detail); (B) Posterior ventral chaetae; and (C) Dorsal chaetae (detail). Scale bars: (A) and (B) 50 μm; (C) 10 μm.
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References


