

First record of *Synchaeta jollyae* (Shiel and Koste, 1993) (Rotifera) in the Neotropical region: Furnas Reservoir, MG, Brazil

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(With 2 figures)

The Synchaetidae (Rotifera, Monogononta) are represented by 4 genera, being *Synchaeta* the most representative. There are 34 species known for this genus, 7 of them occurring in the Neotropical region: *Synchaeta arcifera* Xu, 1998; *S. kitina kitina* Rousselet, 1902; *S. longipes* Gosse, 1887; *S. oblonga* Tessin, 1890; *S. pectinata* Ehrenberg, 1832; *S. stylata* Wierzejski, 1893; *S. tremula* (Müller, 1786) (Segers, 2007). This genus was initially described by Rousselet (1902) who included detailed descriptions of the species trophi, a relevant contribution to the taxonomical work, according to Nogrady and Segers (2002).

Populations of *Synchaeta* sp. were abundant in the zooplankton community in Furnas Reservoir, an oligotrophic system (46° 19' W and 20° 40' S), during the period between August 2006 and July 2007. Among them *Synchaeta jollyae*, a species not yet reported for the Neotropical region, occurred in large numbers. Therefore, the aim of this short communication is to report the first occurrence of this species in the Neotropical region, in Brazil and Minas Gerais state.

A total of 317 individuals taken from different samples were measured with an optical microscope Olympus BX50 (up to 2000 times magnification). The observation of the trophi – required for the identification at the species level for non-loricated rotifers, was performed after adding sodium hypochloride 1% solution to the specimens directly on the glass slide, as recommended by Paggi (1995). The taxonomical identification was based on descriptions by Shiel and Koste (1993) and Nogrady and Segers (2002).

Individuals of the population examined had body lengths ranging from 140 to 207.5 µm and mean value of 158.1 µm, differing slightly from the 107 ± 1.8 µm reported by Shiel and Koste (1993). A distinctive characteristic of this species is the slightly convex head, a slender foot with two tiny toes (Figure 1). The trophi has long fulcrum and manubria, the latter slender with external edges supporting a long curved blade (Figure 2).

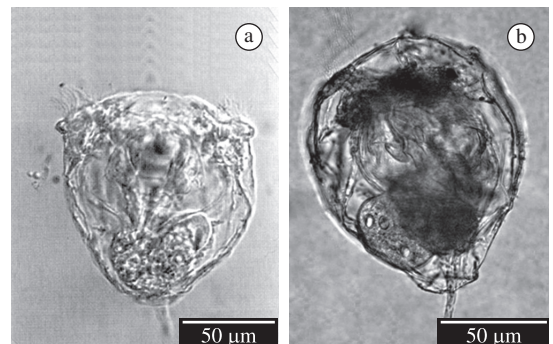


Figure 1. General view of *Synchaeta jollyae*: a) Australia, Rockhampton Queensland, (from Shiel and Koste, 1993); and b) Furnas Reservoir, MG, Brazil (present authors).

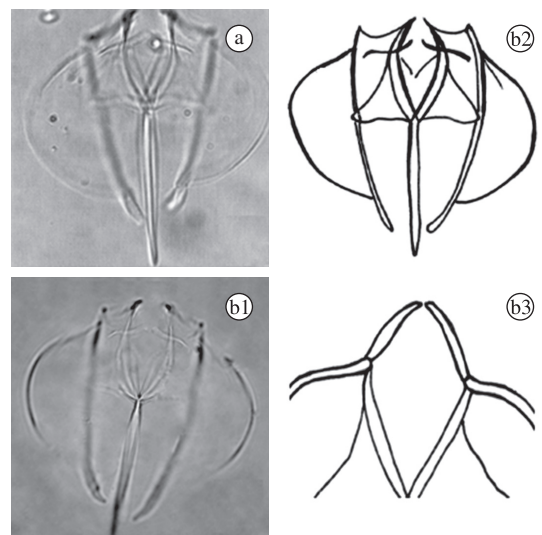


Figure 2. *Synchaeta jollyae*. a) Trophi - Fitzroy River, Queensland, Australia (from Shiel and Koste, 1993). *S. jollyae* from Furnas Reservoir, MG, Brazil; b1–b3) Trophi.

S. jollyae occurred throughout the year of study in all 6 localities sampled in the Sapucaí compartment of Furnas Reservoir reaching the maximum density of 3,370 ind. m⁻³ in June 2007, sampled by vertical net hauls from depths varying between 2.6-27.0 m. Recent studies in this same reservoir reported the occurrence of *S. stylata* and *S. tremula* (Rosa, 2008) besides a third species identified only at genus level (Rosa, 2008; Castilho and Santos-Wisniewski, 2009). It is possible that these records of *Synchaeta* sp. could be *S. jollyae* populations which if confirmed, would indicate the species persistence in the reservoir.

According to Shiel and Koste (1993) *S. jollyae* has been recorded in Rockhampton, Queensland, and Warramba Dam (Lake Burragorang), both water bodies that are also oligotrophic systems in Australia, but they suggested that its distribution could be much more widespread. Considering that in Furnas reservoir this species was abundant and occurred throughout the year, it is possible that it occurs in other places across the Neotropical region.

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