First occurrence of *Anodontites tenebricosus* (Bivalvia: Mycetopodidae) in the Tocantins-Araguaia basin, Brazil

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Anodontites tenebricosus (Lea, 1834) typically inhabits lotic environments, partially buried in sandy or gravel substrate in South America waters (Bonetto, 1967; Castellanos and Landoni, 1990). The species occurs in four Neotropical sub-regions, and, in Brazil, it has been mostly found in the Paraná basin (Mansur and Pereira, 2006; Graf and Cummings, 2007; Bogan and Cummings, 2011; Troncon and Avelar, 2011).

The Tocantins-Araguaia basin occupies 10.8% of Brazil, and reaches five Brazilian states and Distrito Federal. The Tocantins River rises in Goiás state, Central Brazil, and its superior course is formed by two main tributaries, the rivers Maranhão and Paranã. Nowadays, the water pumping for agriculture and industry uses are the mainly applications of the basin, turning critical the balance between water availability and its demand (ANA, 2013).

The field work was carried out at the Paranã River (14° 46' 17.89" S - 47° 20' 18.68" W), on the surroundings of Alto Paraíso de Goiás, Goiás state (see Figure 1). The bivalves were collected by fishing net in September 2008, by the end of the dry season. A complete individual and three valves were identified and deposited in the Mollusk Collection of University of Brasília (lot numbers CMUnB 417 and CMUnB 429).

According to Pereira et al. (2013), *A. tenebricosus* occurs principally at the lower countries of South America, being recorded in the Uruguay, Plata and Paraná basins, with its frequency decreasing northwards (Pereira et al., 2013). Simone (2006) estimates its distribution along all South-American basins westerly to Andes, however, there was no record of the species in the Tocantins-Araguaia basin until now, and the Venezuelan register for the Orinoco river delta shows no connection to this hydrographic region.

The Brazilian inland aquatic ecosystems are in real danger. For the range of Tocantins-Araguaia basin, the main threats to the freshwater biodiversity are poor water treatment, deforestation, construction of dams and canals, intensive cattle ranching and predatory fisheries (Tundisi, 2003). Most of these are pointed as the causes of local extirpation and extinction of many endemic species of freshwater mussels (Bogan, 1993). The Brazilian Ministry of Environment (MMA) classified *A. tenebricosus* as

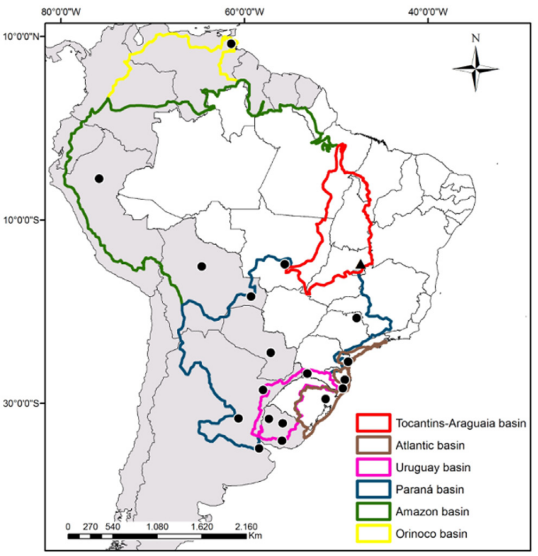

Figure 1. Map of the distribution of *Anodontites tenebricosus* in South America. The circles (●) represent the regions with the species occurrence and the triangle (▲) the new register in the Tocantins-Araguaia basin.

"Vulnerable" (Amaral et al., 2008), but the IUCN ranks it as "Least Concern" (Bogan and Cummings, 2011). Therefore, this divergent situation urgently requires studies on freshwater mussels in the country.

The new record of *A. tenebricosus* in the headwaters of the Tocantins River may be a sign that it can be found along the Tocantins-Araguaia basin, and this new-found data is an incentive for further fieldwork at the region. The biological and ecological features of the animal, as well as its relation with fishermen and other communities, must be investigated.

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