



“Dalyellioida” (Platyhelminthes, Rhabdocoela) from the Río de la Plata estuary in Argentina, with the description of two new species of *Gieysztoria*

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Abstract

Two new species of *Gieysztoria* are described, along with the first record of two species of this genus in Argentina. *Gieysztoria atalaya* n. sp. has a sclerotic stylet with a window on one of its sides and a belt bearing three types of spines. One hollow spine, originated under the window, is basally broad and tapers towards its blunt distal end. This spine separates the other two groups of spines, one of approximately ten thick spines situated on the edge of the belt, and the other arranged in several rows. The proximal row bears approximately 10 triangular spines, broad at the base and rapidly tapering. *Gieysztoria matilde* n. sp. has a sclerotic stylet with a belt formed by a fibrous framework and a circular window. A central projection arising under this window bears a large blade-shaped hollow spine. This spine separates two major groups of thin spines, one formed by several parallel rows of hollow, acicular, very thin spines, the other comprising hollow and slightly thicker spines with broader base, arranged in several irregular rows. *Gieysztoria evelinae* (Marcus 1946) Luther 1955, *Gieysztoria hymanae* (Marcus 1946) Luther 1955 and *Gieysztoria falx* Brusa, Damborenea and Noreña 2003 are reported for the second time after their original description. *Nygulus evelinae* Marcus 1954 is cited for the first time for Argentina; until now, this species was known only for the estuary of Itanhaen River in Bahia de Santos, Brazil.

Key words: Dalyelliidae, *Gieysztoria*, Graffillidae, *Nygulus*, turbellarian, benthos

Introduction

The “Dalyellioida” are a group of small rhabdocoel Platyhelminthes, comprising both free-living and parasitic forms; the group is considered polyphyletic (Willems *et al.* 2006). The Dalyelliidae is one of the richest and most diverse families, containing mostly free-living species, with approximately 170 species described from primarily freshwater environments (Cannon 1986). The genus *Gieysztoria* is the most speciose of this family, with about 70 species (Tyler *et al.* 2006). Twenty-five of these species are known from South America, most of them from Brazil, and only 8 have been described for Argentina (Noreña-Janssen 1995; Brusa *et al.* 2003; Damborenea *et al.* 2007).

The Graffillidae is a smaller family of parasitic and free-living species that inhabit aquatic environments. The subfamily Pseudograffillinae comprises three genera of free-living marine and brackish species. The single species of the monospecific genus *Nygulus*, *N. evelinae* Marcus 1954, is known only for the Southern Hemisphere; it is the only species of the subfamily recorded in brackish environments from the Brazilian coast.

Research on the microturbellarian fauna of Argentina is still at an early stage. Few regions within Argentina have been explored, and only poorly at that (Böhmig 1902; Brugni 1993; Trochine *et al.* 2006). Nevertheless, studies carried out in areas such as the floodplain of the Middle Paraná River or areas associated with the