

## A new species of *Gieysztor* (Platyhelminthes; Rhabdocoela; Dalyelliidae) from a freshwater lake in Queensland, Australia

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### Abstract

A new species of Dalyelliidae, *Gieysztor queenslandica*, is described from a freshwater lake in Brisbane, Queensland, Australia. *Gieysztor queenslandica* n. sp. is a member of the Aequales group of *Gieysztor* and differs from its congeners by possession of an S-shaped ovary, a Y-shaped oviduct leading to a separate receptaculum seminis, and the shape and size of the male copulatory organ. The sclerotic male organ of *G. queenslandica* is characterized by 27-32 broad, dagger-like spines arising from a hollow crescent-shaped girdle. The new species is seasonally abundant (April-July) in an artificial lake present on the St. Lucia campus of the University of Queensland in Brisbane, Australia.

**Key words:** Platyhelminthes, *Gieysztor*, copulatory organ, taxonomy

### Introduction

The turbellarian taxon Dalyelliidae Graff, 1905 is worldwide and includes sixteen genera and over one hundred species occupying a variety of aquatic habitats. Among the turbellarian fauna recorded from Australia, several unidentified dalyellioid species are known from freshwater habitats in northern Queensland (Rohde et al. 1988; Watson & Rohde 1995) with only a single taxonomic description from the entire continent (Hartenstein & Dwine 2000). Other accounts of freshwater rhabdocoel Turbellaria include species of Temnocephalida (Cannon 1991), Typhloplanidae (Kolasa & Schwartz 1988), and Tricladia (Sluys & Rohde 1991).

Species of Dalyelliidae are characterized by cask-shaped pharynx, single ovary and often complex male reproductive organ, the last of which is of considerable taxonomic value (Cannon 1986). Since the comprehensive account by Luther (1955), several species have been added based on the uniqueness of the male organ (Young 1977; Noreña-Janssen