

Two new freshwater rhabdocoels, *Austrodalyellia* gen. nov. and *Haplodidymos* gen. nov. (Platyhelminthes), from Queensland, Australia

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Abstract

Two new genera and species of Rhabdocoela from a freshwater lake in Queensland, Australia are described. *Austrodalyellia ariena* gen. nov. sp. nov. is a member of the Dalyelliidae Graff, 1905. The female system is typical of the family and includes paired finger-like vitellaria, a single ovary, bursa copulatrix and receptaculum seminis. The male system includes paired posterior testes and a copulatory organ with contained vesicula seminalis, vesicula granulorum and a complex stylet. Stylet structure is unique in the family and consists of five layered tines connected by a bifid base. The stylet appears to be derived from forms similar to those of *Dalyellia* and *Microdalyellia*. *Haplodidymos rubroculatus* gen. nov. sp. nov. is a member of the Typhloplanidae Graff, 1905 and characterized by a pair of large red eyes and posterior pharynx rosulatus. The female system includes paired vitellaria, a single ovary, bursa copulatrix, receptaculum seminis and uterus. The male system is characterized by the unique presence of a single, long testis that runs medially and ventral to the gut. Posterior to the pharynx it connects with a copulatory organ that houses a well-defined vesicula seminalis, ill-defined vesicula granulorum, and weakly sclerotic stylet. *Haplodidymos* is placed in the Protoplanellinae based on the ventral position of the testes and the absence of excretory pores in the mouth.

Key words: Turbellaria, Rhabdocoela, Australia, fresh water

Introduction

The order Rhabdocoela embraces a heterogenous group of marine and freshwater turbellarians. The best known rhabdocoels from Australia include the symbiotic Temnocephalida (Haswell 1893; Cannon 1993; Cannon & Sewell 1995; Sewell & Cannon 1995, 1998) and the parasitic Neodermata (Bray & Cribb, 1989; Cribb 1988, 1992; Dove *et al.* 1997).