

## A new acuariid species (Spirurida, Acuariidae) and other nematodes from *Hydromys* (Muridae, Hydromyinae) from Papua, Indonesia and Papua New Guinea

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### Abstract

From a survey of the intestinal helminths of 8 common water rats, *Hydromys chrysogaster*, and 1 Shaw Mayer's water rat, *Hydromys shawmayeri*, from Papua New Guinea and 1 *H. chrysogaster* from Papua Indonesia, an acanthocephalan, *Porrorchis hydromuris*, a cestode *Hymenolepis diminuta*, a notocotyloid and a psilostomid trematode and the nematodes *Heterakis fieldingi*, *Subulura* sp., *Toxocara mackerrasae*, *Trichuris* sp., *Uncinaria hydromyos* were found, all being new records for *Hydromys* in the Island of New Guinea. *Tikusnema intersedis* sp. nov. (Acuariidae), differing from its congeners in the number of teeth on the leaves of the pseudolabia and the length and morphology of the left spicule, was described from *H. chrysogaster*. Similar life styles and diets provide a common link between the rodent hosts of *Tikusnema* spp. The commonalities between the helminth communities of *H. chrysogaster* in northern Australia and New Guinea support the hypothesis that *H. chrysogaster* originated in New Guinea and subsequently migrated south.

**Key words:** Acanthocephala, Cestoda, Trematoda, Nematoda, water rat, rodent, Muridae, Australia, Papua New Guinea, Papua Indonesia *Tikusnema*

### Introduction

The origins of the rodents of New Guinea, all from the family Muridae, are still not certain but are thought to have radiated from 3 or 4 separate invasions from south-east Asia (Flannery 1995). From one of these invasions the Hydromyini, a monophyletic group of 9 genera, is thought to have originated in montane New Guinea (Flannery 1995). Of the 9 genera, 7 are found only in New Guinea, the monotypic genus *Xeromys* is found only in