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**Description of capillariid nematodes (Trichinelloidea: Capillariidae)  
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DAVID M. SPRATT



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### Table of contents

Abstract .....	4
Introduction .....	4
Materials and methods .....	6
Taxonomy .....	9
Key to genera of capillariid nematodes from Australian mammals .....	9
Genus <i>Eucoleus</i> Dujardin, 1845 .....	9
Key to species of <i>Eucoleus</i> from Australian mammals .....	9
<i>Eucoleus gastricus</i> (Baylis) .....	11
<i>Eucoleus rickardi</i> (Beveridge & Barker, 1975) Moravec, 1982 .....	15
<i>Eucoleus breviductus</i> <b>sp. nov.</b> .....	18
<i>Eucoleus buckenbourensis</i> <b>sp. nov.</b> .....	24
<i>Eucoleus fluvidus</i> <b>sp. nov.</b> .....	27
<i>Eucoleus longiductus</i> , <b>sp. nov.</b> .....	30
<i>Eucoleus parvulus</i> <b>sp. nov.</b> .....	35
<i>Eucoleus perplexus</i> <b>sp. nov.</b> .....	39
<i>Eucoleus plumosus</i> <b>sp. nov.</b> .....	42
<i>Eucoleus posterus</i> <b>sp. nov.</b> .....	46
<i>Eucoleus pseudoplumosus</i> <b>sp. nov.</b> .....	49
<i>Eucoleus</i> sp. 1 .....	53
<i>Eucoleus</i> sp. 2 .....	55
<i>Eucoleus</i> sp. 3 .....	56
Genus <i>Baruscapillaria</i> Moravec, 1982 .....	59
<i>Baruscapillaria conspecta</i> <b>sp. nov.</b> .....	59
Genus <i>Capillaria</i> Zeder, 1800 .....	65
<i>Capillaria ornamentata</i> <b>sp. nov.</b> .....	65
Genus <i>Aonchotheca</i> López-Neyra, 1947 .....	69

<i>Aonchotheca praeputialis</i> (Obendorf, 1979) <b>comb. nov.</b> .....	69
<i>Anatrichosoma haycocki</i> Spratt, 1982 .....	72
Host parasite list .....	73
Acknowledgments .....	76
References .....	76
Appendix .....	81

## Abstract

Capillariid nematodes (Trichinelloidea: Capillariidae) parasitic in Australian dasyurid, peramelid and potoroid marsupials and murid rodents are described. Diagnosis of the genus *Eucoleus* and a key to species are given. Two species are redescribed: *E. gastricus* (Baylis) and *E. rickardi* (Beveridge and Barker), **comb. nov.** Nine species are described as new: *E. breviductus* **sp. nov.**, *E. buckenboureensis* **sp. nov.**, *E. fluvidus* **sp. nov.**, *E. longiductus* **sp. nov.**, *E. parvulus* **sp. nov.**, *E. perplexus* **sp. nov.**, *E. plumosus* **sp. nov.**, *E. posterus* **sp. nov.** and *E. pseudoplumosus* **sp. nov.** Three additional species are recognized but not named. Species of *Eucoleus* occur in a diverse range of epithelial tissue habitats in Australian hosts throughout eastern Australia; one species is known from peramelids in Western Australia. Members of the genus have not been found in any other families of Australian marsupials. Three species are parasites of dasyurids, eight species are parasites of peramelids, two species occur in both dasyurid and peramelid hosts and two species are parasites of murid rodents. Morphologically, species of *Eucoleus* appear to be reasonably host specific at the family level. Molecular evidence indicates that sibling species of *Eucoleus* occur in distinct but closely related host species. *Baruscapillaria conspecta* **sp. nov.** is described from murid rodents and the potoroid marsupial rufous rat kangaroo, *Aepyprymnus rufescens*, primarily in north Queensland. *Capillaria ornamentata* **sp. nov.** is described from the distal nasal sinus behind the orbit of the eye of species of dasyurids of the genus *Antechinus* in southeastern Australia. *Aonchotheca praeputialis* (Obendorf, 1979) **comb. nov.** is redescribed and appears to occur exclusively in the native *Rattus fuscipes*. New host and geographic records, and tissue localities of the trichurid nematode, *Anatrichosoma haycocki* (Trichinelloidea: Trichuridae, Trichosomoidinae) are given.

**Key words:** Nematoda, Trichinelloidea, Capillariidae, *Eucoleus*, *Baruscapillaria*, *Capillaria*, *Aonchotheca*, Dasyuridae, Peramelidae, Muridae, Trichuridae, Trichosomoidinae, *Anatrichosoma*, Australia.

## Introduction

Anderson & Bain (1982) retained Roman's (1965) classification dividing the nematode superfamily Trichinelloidea (formerly Trichuroidea) into three families, the Trichuridae (including subfamilies Capillariinae, Trichurinae and Trichosomoidinae), Trichinellidae and Cystoosidae (with subfamilies Cystoosinae and Dioctowittinae). They recognised only one genus, *Capillaria* Zeder, 1800 *sensu lato*, within the Capillariinae; 20 other capillariid genera were placed as synonyms.