

## **Anoplocephalid cestodes of Australasian mammals: diversity and origins**

**Ian BEVERIDGE**

Department of Veterinary Biosciences, University of Melbourne, AUSTRALIA

Herbivorous or omnivorous mammals (marsupials and rodents) in Australasia harbour a diverse assemblage of anoplocephalid cestodes, most of them endemic to the region. Currently, 72 species are recognised but knowledge of the full extent of the fauna is limited by that fact that many host species have not been examined for cestodes, or too few hosts have been examined, and by the difficulties (geographical and legal) in sampling these hosts for parasites. Molecular methods have revealed a number of species complex and only some of these have been able to be resolved using

morphological data. The phylogenetic affinities of this group of cestodes remain uncertain as Australasian herbivorous marsupials evolved in isolation and are derived from carnivorous ancestors. None of the current hypotheses for their evolutionary relationships within the family is satisfactory, either primary diversification within Australasia or introduction from eutherian mammals in Asia, but with newer molecular evidence for the genus *Bertiella* providing additional possibilities.