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A taxonomic revision of the genus *Anoplocephaloides* Baer, 1923 *sensu* Rausch (1976), with the description of four new genera (Cestoda: Anoplocephalidae)

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Abstract

The present study reviews the generic classification of all species assigned to *Anoplocephaloides* Baer, 1923 *sensu* Rausch (1976) (Cestoda: Anoplocephalidae) and related taxa, and proposes four new genera of anoplocephaline cestodes: *Genovia* **n. g.** for *Anoplocephaloides wimerosa* (Moniez, 1880), *A. pseudowimerosa* Tenora, Murai, Valero & Cutillas, 1982 and *A. floresbarroetae* Rausch, 1976, *Sciurotaenia* **n. g.** for *Anoplocephaloides transversaria* (Krabbe, 1879) and *A. wigginsi* (Rausch, 1954), *Parasciurotaenia* **n. g.** for *Anoplocephaloides ryjikovi* (Spasskii, 1950), and *Equinia* **n. g.** for *Anoplocephaloides mamillana* (Mehlis in Gurlt, 1831). The other new combinations are *Microcephaloides neofibrinus* (Rausch, 1952), *Microcephaloides mascomai* (Murai, Tenora & Rocamora, 1980) and *Microcephaloides nevoi* (Fair, Schmidt & Wertheim, 1990). In this revision, the emphasis is on morphological features that are shown to differ predictably between the monophyletic groups in the "arvicoline clade" of cestodes (i. e. among *Anoplocephaloides* s. str., *Microcephaloides* Haukisalmi, Hardman, Hardman, Rausch & Henttonen, 2008, *Paranoplocephala* Lühe, 1910 s. str. and *Diandrya composita* Darrah, 1930) and the phylogenetically related, basal *Andrya rhopalocephala* (Riehm, 1881), *Neandrya cuniculi* (Blanchard, 1891) and *A. mamillana*. These characters are the various external features, alternation of the genital pores, prominence of the genital atrium (=presence/absence of a genital papilla), and the structure and position of the uterus. Additional distinguishing features include the number and distribution of the testes (antiporal vs. poral+antiporal), length and shape of the cirrus sac, presence/absence of the retractor muscle of the cirrus sac, size and shape of the ovary and length of the vagina. In the key provided, the basal dichotomies are based on the alternation of the genital pores and the capability to form a genital papilla, which are easily observed in stained specimens.

Key words: Parasites, tapeworms, Cyclophyllidea, *Equinia* **n. g.**, *Genovia* **n. g.**, *Sciurotaenia* **n. g.**, *Parasciurotaenia* **n. g.**, rodents, lagomorphs, perissodactyls

Introduction

Baer (1923) proposed the genus *Anoplocephaloides* Baer, 1923 (Cyclophyllidea: Anoplocephalidae) for *Anoplocephala infrequens* Douthitt, 1915 (type species) and several other species from rodents, lagomorphs and perissodactyls. Baer (1927) later synonymized *Anoplocephaloides* with *Paranoplocephala* Lühe, 1910, but the former genus was resurrected and redefined by Rausch (1976), who included 18 species within it, many of which had previously been assigned to *Paranoplocephala* or *Aprostatandrya* Kirshenblat, 1938. Rausch (1976) showed that *Paranoplocephala*, as then conceived, included species with either a tubular or reticular early uterus. The species with a tubular uterus were assigned to *Anoplocephaloides* and those with a reticular uterus to *Paranoplocephala*; *Aprostatandrya* was synonymized with the latter genus. In addition to the tubular early uterus, *Anoplocephaloides* spp. *sensu* Rausch (1976) were primarily characterized by a single set of genitalia and antiporally positioned testes.

Rausch's (1976) revision stabilized the genera *Anoplocephaloides* and *Paranoplocephala* and made it possible to assign species unambiguously to them. However, as noted by Rausch (1976), *Anoplocephaloides* then became a rather heterogeneous genus, particularly with respect to the body size and shape of the species

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