



Checklist of helminth parasites of Soricomorpha (= Insectivora) of North America north of Mexico

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Abstract

A parasite-host and a host-parasite checklist of helminths found in Soricomorpha (= Insectivora) of North America north of Mexico are presented. The parasite-host checklist includes a total of 114 species of helminth parasites reported in the literature from 28 species of insectivores, totaling 349 records. These include 97 species from shrews (9 trematodes, 34 cestodes, 50 nematodes, 4 acanthocephalans) and 23 species from moles (3 trematodes, 4 cestodes, 10 nematodes, 6 acanthocephalans). Each helminth species is listed under its most current accepted taxon, with all known synonyms, distribution by state/province, and references for each geographic location. The following new combinations are proposed: *Lineolepis pribilofensis* (Olson, 1969) n. comb. for *Hymenolepis pribilofensis* Olson, 1969; *Monocercus soricis* (Neiland, 1953) n. comb. for *Molluscotaenia soricis* (Neiland, 1953) Spasskii & Andreiko, 1971; and *Eucoleus blarinae* (Ogren, 1953) n. comb. for *Capillaria blarinae* Ogren, 1953. The state of knowledge of helminths of insectivores in North America is briefly discussed.

Key words: helminths; Soricomorpha; Insectivora; shrews; moles; North America

Introduction

Shrews and moles have traditionally been classified in the order Insectivora, but more recently have been placed in the order Soricomorpha (Wilson & Reeder 2005). These small mammals are found on all continents except Australia and Antarctica. In South America, they are represented only by several species of the genus *Cryptotis* Pomel. In North America north of Mexico, Wilson & Reeder (2005) recognize 36 species of shrews (Soricidae) in 4 genera (*Blarina*- 4; *Cryptotis*- 1, *Notiosorex*- 3, *Sorex*- 28), and 7 species of moles (Talpidae) in 5 genera (*Condylura*- 1, *Neurotrichus*- 1, *Parascalops*- 1, *Scalopus*- 1, *Scapanus*- 3). No checklist or any work summarizing data on the helminth parasites of North American insectivores has ever been published. Most of the literature is taxonomic in nature, mainly consisting of the descriptions of new species, and the majority of the studies were done before 1960.

Herein we present a checklist of the helminths of species of Soricomorpha north of Mexico in the hope of stimulating new research into the biodiversity of the parasite fauna of this group of mammals as well as life cycles and evolutionary relationships of the helminths. An attempt has been made to present each species in its most currently accepted genus, and to list all known synonyms and geographic locations by state/province.

Material and methods

A checklist of the helminth parasites of Soricomorpha was compiled from published records. The checklist follows the classification of Gibson *et al.* (2002) and Jones *et al.* (2005) for Digenea; Chabaud (1975),