



Digeneans in *Trachemys callirostris callirostris* and *Podocnemis lewyana* (Testudinata) from the Magdalena River, Colombia: description of *Pseudonematophila* n. gen. and amendment of *Nematophila* Travassos, 1934 (Cladorchiidae: Schizamphistominae)

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Abstract

A survey of the parasites associated with the nesting freshwater turtles *Podocnemis lewyana* and *Trachemys callirostris callirostris* revealed the presence of seven Digenea species. *Pseudonematophila* n. gen. is described from the stomach of *P. lewyana*. The new genus is distinguished from other Schizamphistominae because it possesses a genital sucker and numerous tegumental papillae from the posterior level of the genital sucker to the posterior end of the body, which had not been described before for this subfamily. *Nematophila ovalis* Cordero & Vogelsang, 1940 is transferred to *Pseudonematophila* n. gen. as *P. ovalis* n. gen. n. comb, based on morphological characteristics. The genus *Nematophila* Travassos, 1934 is emended by the inclusion of *Allassostoma venezuelensis* and *Paramphistomum argentinum* described by Cordero & Vogelsang in 1940. Both species are redescribed based on Colombian specimens, and the first key for the genus is provided. *Telorchis hagmanni* Lent & Freitas, 1937 is redescribed from Colombian specimens, and *Telorchis corti*, *Heronimus mollis* and *Neodeuterobaris pritchadae* are reported. Prevalence, mean intensity, and mean abundance values are estimated for all species. Host feeding habits and behavior are considered the main factors determining the taxonomic composition founded in these turtles species.

Key words: *Trachemys callirostris callirostris*, *Podocnemis lewyana*, *Podocnemis* sp., Key to *Nematophila*, *Telorchis corti*, *Telorchis hagmanni*, *Heronimus mollis*, *Neodeuterobaris pritchadae*, Depresión Momposina, Colombia, Venezuela

Introduction

Examinations of turtle parasites are typically random affairs that process limited number of turtles taken from relatively small geographical areas (Tkach & Snyder 2003). Owing to the opportunistic nature surrounding the collection of the turtles (such as turtles debilitated with diseases, lesions or by the hunt for the food trade), it has been possible to generate data regarding species richness, prevalence, abundance and intensity of the parasite in the sea turtles *Lepidochelys olivacea* (Pérez–Ponce De León *et al.* 1996), *Caretta caretta* (Aznar *et al.* 1998; Valente *et al.* 2009) and *Chelonya mydas* (Santoro *et al.* 2006).

Colombia harbors 19 species of freshwater turtles (Rueda–Almonacid *et al.* 2007), and only five species have been examined for parasitic helminths. The helminth species previously recorded includes the digenean *Neuderotterobaris pritchardae* Brooks, 1976; the nematodes *Buckleyatractis marinkelli* Khalil & Gibbons, 1988, *Paratractis hystrix* Khalil & Gibbons, 1988, *Podocnematractis colombiaensis* Gibbons, Khalil & Marinkelle, 1995, *Podocnematractis ortleppi* Gibbons, Kkalil & Marinkelle, 1995, and *Orientatractis leiperi* Buckley, 1969 (Burse *et al.* 2009); and the monogenean *Polystomoides magdalenensis* Lenis & García–Prieto, 2009. Only in this latter work were ecological parameters of infection recorded.

The Magdalena River turtle, *Podocnemis lewyana* Duméril, 1852 (Podocnemididae), and the Colombian slider, *Trachemys callirostris callirostris* Gray, 1885 (Emydidae), are endemic to northern Colombia. As part of an