

Communication

(Comunicação)

Occurrence of *Haplometroides odhneri* (Trematoda, Digenea, Plagiorchiidae) infecting *Leptotyphlops koppesi* (Serpentes, Leptotyphlopidae)

[Ocorrência de *Haplometroides odhneri* (Trematoda, Digenea, Plagiorchiidae) parasitando *Leptotyphlops koppesi* (Serpentes, Leptotyphlopidae)]

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The *Haplometroides* genus belongs the subfamily Styphlodorinae, family Plagiorchiidae (Travassos et al., 1969; Yamaguti, 1971). Three trematode species are included in this genus: 1) *H. buccicola* (Odhner, 1911; Ruiz and Perez, 1959), 2) *H. odhneri* (Ruiz and Perez, 1959; Silva and Barrella, 2002) and 3) *H. rappiae* (Szydat, 1932).

The aim of this study was to report the occurrence of *H. odhneri* in specimens of *Leptotyphlops koppesi*. The voucher host snakes were from the Corumbá I Hydroelectric Power Plant, Caldas Novas city, Goiás State, Brazil. These animals were preserved properly and deposited in the Herpetological Collection of the Centro de Estudos de Pesquisas Biológicas, Universidade Católica de Goiás. Preserved specimens were necropsied and the trematodes were collected from the trachea and esophagus of three snakes (CEPB4482 – N=10; CEPB4483 – N=3; CEPB4484 – N=16). Helminths were transferred to AFA solution without flattening, stained with carmine, clarified with creosote, and mounted in Permount resin. Morphometric analysis was performed using the Leica Qwin Lite 2.5 computerized system. All measurements were reported as the mean and range for four specimens.

The characteristics of the trematodes (Figure 1) were: body elongated, spined, flattened, with 4408µm (3637-5611) length and 1055µm (946-1188) width, with maximum breadth at about the equatorial region. Oral sucker subterminal, 377µm (293-428) long and 389µm (343-434) wide. Prepharynx was not observed. Muscular pharynx 177µm (142-202) long and 177µm (163-192) wide. Esophagus 274µm (235-310) long. Intestinal ceca not very sinuous, slightly unequal, with smooth walls, being distributed until the testicular region. Acetabulum pre-equatorial, 294µm (242-353) long and 292µm (229-347) wide. Genital pore pre-acetabular, postbifurcal, submedian, opening up on the right cecal branch. Cirrus pouch relatively small, with elongated cirrus, located below the acetabulum, with curvature opposed beside the ovary. Testes ovoid, with irregular contours, in a diagonal position, postacetabular, intercecal. Anterior testis 361µm (266-445) long and 275µm (231-356) wide, and posterior testis 356µm (211-451) long and 348µm (224-419) wide. Ovary just behind the acetabulum, ovoid, with regular contours, pre-testicular, lateral, intercecal, measuring 267µm (218-310) long and 230µm (191-282) wide. Mehlis' gland located below and to the right of the ovary. Seminal receptacle located below Mehlis' gland. Vitellaria

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consisting of developed not very numerous follicles in bunch shape, in a lateral position, extracecal, distributed from the zone of the genital pore to the testicular zone. Uterus well developed, occupying most of the post-testicular

region and presenting branches that reach the medium zone. Vagina long and narrow. Eggs 44µm (38-48) long and 24µm (20-31) wide. Excretory pore terminal.

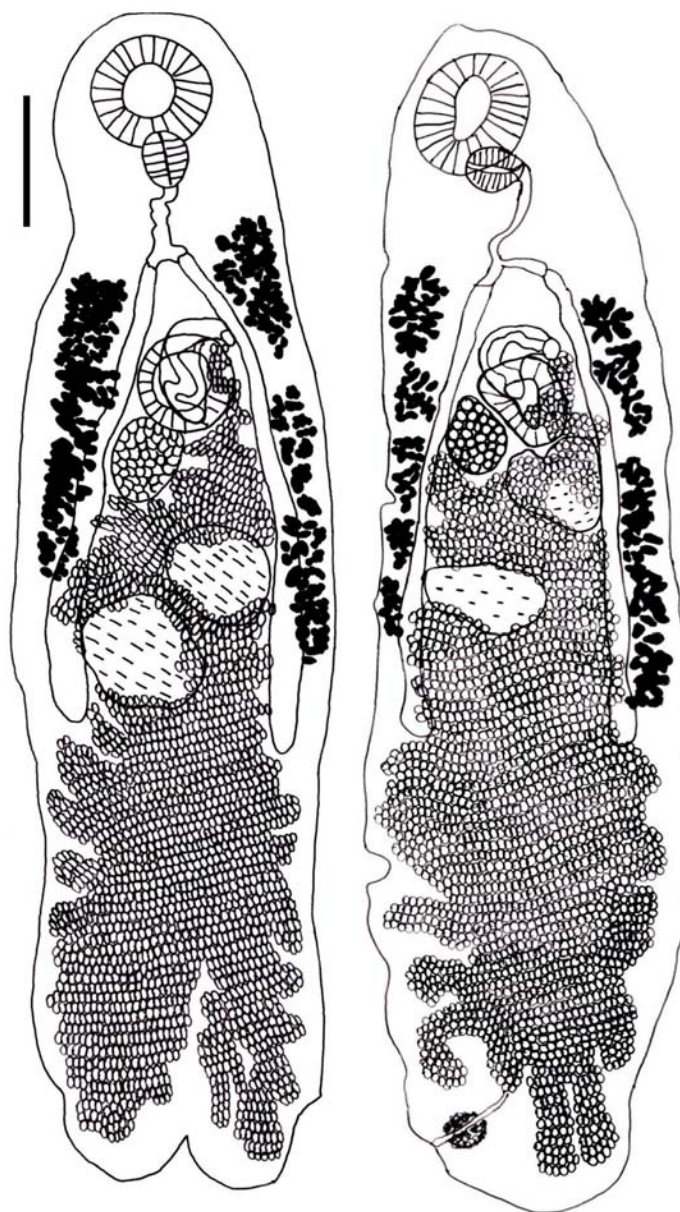


Figure 1. *Haplometroides odhneri* (Trematoda, Digenea, Plagiorchiidae) from the trachea and esophagus of *Leptotyphlops koppesi* (Serpentes, Leptotyphlopidae). Drawings prepared by P. A. Andrade and H. A. Monteiro e Silva (Bar scale = 500µm).

The occurrence of trematodes in *Leptotyphlops* spp. snakes has not been previously reported. This is the first report of *Leptotyphlops* sp. as a host for trematodes and the first description of *L.*

koppesi as a host for *H. odhneri*.

The species *O. odhneri* described in this article agrees with the data presented by Ruiz and Perez

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(1959). Compared with the species *O. buccicola*, the trematodes presented smaller dimensions, the acetabulum was more developed, the esophagus was shorter, the tegument presented more spines and the genital pore was more lateral. However, the vitellines of the studied specimens reach the testicular area and no ovarian area as mentioned by these authors.

For the snake group, the species of the *Haplometroides* genus were described parasitizing species of the Elapidae (Odhner, 1911; Ruiz and Perez, 1959; Silva and Barrella, 2002) and Boidae (Ruiz and Perez, 1959) families. The *Micrurus* species (family Elapidae) mentioned as hosts of *Haplometroides* spp. are preferentially ophiophagus and of fossorial habits while the species of the *Epicrates* genus

(family Boidae) are of terrestrial habits, living on the soil and in shaded places, but they can also be found on tree trunks and branches, and feed of birds and small mammals. The species of the *Leptotyphlops* genus (family Leptotyphlopidae) have fossorial habits and feed preferentially on small insects, termites and ants (Silva, 2000). In spite of the wide diversity of feeding habits and environments occupied by these snakes, all are parasitized by trematodes of the *Haplometroides* genus, showing the great potential of parasite adaptation to the host.

Keywords: Serpentes, *Leptotyphlops koppesi*, Leptotyphlopidae, *Haplometroides odhneri*, Trematoda

RESUMO

Descreveu-se a ocorrência de *Haplometroides odhneri* (Trematoda, Digenea, Plagiorchiidae) na traquéia e esôfago de *Leptotyphlops koppesi* (Serpentes, Leptotyphlopidae) proveniente da Usina Hidrelétrica Corumbá I, município de Caldas Novas, Goiás. Este é o primeiro relato sobre a ocorrência de *H. odhneri* parasitando *L. koppesi*.

Palavras-chave: serpentes, *Leptotyphlops koppesi*, Leptotyphlopidae, *Haplometroides odhneri*, Trematoda

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