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NEW RECORD OF *Haplometroides intercaecalis* (DIGENEA, PLAGIORCHIIDAE) INFECTING A BRAZILIAN SNAKE

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ABSTRACT: *Phalotris matogrossensis* (Serpentes, Colubridae) was reported as a new host for *Haplometroides intercaecalis* (Digenea, Plagiorchiidae). The host snake was obtained from the municipality of Anastácio, state of Mato Grosso do Sul, Brazil. One specimen of *H. intercaecalis* was recovered from the esophagus of the host and identified by the intercecal position of the vitellaria in the pre-acetabular region. This paper describes the second report of the occurrence of this trematode in fossorial snakes of the genus *Phalotris* in the state of Mato Grosso do Sul, Brazil.

KEY WORDS: Digenea, *Haplometroides intercaecalis*, Plagiorchiidae, *Phalotris matogrossensis*, Colubridae, new host.

CONFLICTS OF INTEREST: There is no conflict.

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Species of the genus *Haplometroides* parasitize snakes and amphisbaenians in South America; currently, only three species are included in this genus: *H. buccicola*, *H. odhneri* and *H. intercaecalis* (7). The aim of this study is to report a new host species for *H. intercaecali*s.

The host snake, an adult male *Phalotris matogrossensis*, measuring 430mm in snout-vent length and 45mm in tail length, was collected on November 11, 1992, in the municipality of Anastácio, Mato Grosso do Sul State, Brazil. This snake is deposited in the Zoology Collection - Professor Arlindo de Figueiredo Béda [Coleção Zoológica - Professor Arlindo de Figueiredo Béda] (collection number = AFB 749), of the Federal University of Mato Grosso do Sul, Aquidauana, Mato Grosso do Sul State, Brazil. The necropsy of the host revealed only one specimen of Digenea in the esophagus. The parasite was collected and transferred to 70% alcohol and stained with carmine, clarified with creosote, and analyzed with a computerized system for image analysis (Qwin Lite 3.1, Leica). The Digenea was deposited in the Reference Helminthological Collection [Coleção Helmintológica de Referência] (CHIBB 2367) of the Department of Parasitology, Botucatu Institute of Biosciences, São Paulo State University (UNESP), municipality of Botucatu, São Paulo State, Brazil.

The body of *Haplometroides intercaecalis* (Figure 1) is elongated, flattened, 4371.3μm long and 553.3μm wide, and is covered with spines. The oral sucker is subterminal, 314.1μm long and 271.6μm wide. A prepharynx was not observed. The pharynx is muscular, short, subspherical, 151μm long and 120.4μm wide. The esophagus is long, narrow, 511.4μm long and 28.3μm wide. Intestinal ceca are bifurcated, slightly sinuous and unequal, with smooth walls, terminating at the posterior region of the testis, about 1360.4μm from the posterior end. The acetabulum is pre-equatorial, muscular, 212.1μm long and 198.6μm wide. The genital pore is pre-acetabular, postbifurcal, submedian, and opens near the right cecal branch. The cirrus pouch is pre-acetabular, small, with an opposed curvature beside the ovary, presenting a seminal vesicle and elongated cirrus. Testes are ovoid, pos-ovarian, intercecal, with regular contours, in a diagonal position. The anterior testis is 134.1μm long and 185.4μm wide and the posterior is 175.4μm long and 187μm wide. The ovary is pos-acetabular, ovoid, with regular contours, intercecal, 138.3μm long and 170.5μm wide. The Mehlis' gland is median, located below and to the right of the ovary. The seminal receptacle is elongated, submedian,

and placed near the ovary and Mehlis' gland, 162.7μm long and 51.6μm wide. The vitellaria consist of numerous follicles in a bunch shape, distributed from the zone slightly posterior to the cecal bifurcation to the posterior testis zone. In the pre-acetabular region, the vitellaria are intercecal and extracecal and only extracecal in the testicular region. The Laurer's channel was not observed. The uterus is well-developed, occupying most of the post-testicular region, with branches reaching the acetabular region. Metraterm is long and narrow. Eggs are ovoid, operculated, with a thick shell, and with two small, apical and lateral expansions, 51.9μm long and 36.2μm wide. An excretory vesicle was not observed. The excretory pore is terminal, at the middle line of the posterior end.

The genus *Haplometroides* presents three species: *H. buccicola, H. odhneri* and *H. intercaecalis* (7). *Haplometroides odhneri* has been described in *Micrurus lemniscatus* in Brazil (4) and later reported in *Micrurus frontalis* (6) and *Leptotyphlops koppesi* (8). These specimens were reviewed by Silva *et al*. (5), who verified that the species reported from *M. lemniscatus* and from *L. koppesi* was *H. buccicola*. Until now, *M. frontalis* from São Paulo State, Brazil, represented the only record for *H. odhneri*.

Haplometroides buccicola was originally described in Paraguay from *Micrurus* sp. (2, 9). Posteriorly, it was reported in the elapids *M. frontalis* and *M. coralinus* from Brazil (1, 6), the leptotyphlopid *L. koppesi* (8), the colubrid *Phalotris lativittatus* (1, 5), the boid *Epicrates cenchria crassus* (4) and the amphisbaenian *Amphisbaena alba* (4), also all from Brazil. *Haplometroides buccicola* was also reported in *M. frontalis* in Argentina (3).

Haplometroides intercaecalis has been reported only in *Phalotris nasutus* from the municipality of Corumbá, Mato Grosso do Sul State, Brazil (7). The present paper reports a new host for *H. intercaecalis* and confirms the occurrence of this trematode in fossorial snakes of the genus *Phalotris* in the state of Mato Grosso do Sul, Brazil.

Figure 1. *Haplometroides intercaecalis* (Digenea, Plagiorchiidae) from the esophagus of *Phalotris matogrossensis* (Serpentes, Colubridae). Note the intercecal distribution of the vitellaria in the preacetabular region (arrow).

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