

SHORT COMMUNICATION

FIRST REPORT OF *Ancylostoma buckleyi* LE ROUX and BIOCCA, 1957 (NEMATODA: ANCYLOSTOMATIDAE) INFECTING *Cerdocyon thous* LINNAEUS, 1766 (MAMMALIA: CANIDAE) FROM BRAZIL

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BSTRACT:- SANTOS, K.R DOS; CATENACCI, L.S.; PESTELLI, M.M.; TAKAHIRA, R.K.; LOPES, R.S.; SILVA, R.J. DA. **First Report of *Ancylostoma buckleyi* Le Roux and Biocca, 1957 (Nematoda: Ancylostomatidae) Infecting *Cerdocyon thous* Linnaeus, 1766 (Mammalia: Canidae) from Brazil.** [Primeiro relato de *Ancylostoma buckleyi* Le Roux e Biocca, 1957 (Nematoda: Ancylostomatidae) Infectando *Cerdocyon thous* Linnaeus, 1766 (Mammalia: Canidae) no Brasil]. *Revista Brasileira de Parasitologia Veterinária*, v. 12, n. 4, p. 179-181, 2003. Departamento de Parasitologia, Instituto de Biociências, Unesp, Campus de Botucatu, Distrito de Rubião Júnior, Botucatu, São Paulo, 18618-000, Brasil. E-mail: reinaldo@ibb.unesp.br

The occurrence of *Ancylostoma buckleyi* Le Roux and Biocca, 1957 (Nematoda: Ancylostomatidae) in the small intestine of a young *Cerdocyon thous* Linnaeus, 1766 (Mammalia: Canidae) was reported in this paper. The host was from Itatinga, State of São Paulo, Brazil. This is the first report on the presence of this nematode in *C. thous* and the second note on the occurrence of *A. buckleyi* in Brazil.

KEY WORDS: *Ancylostoma buckleyi*, Nematoda, Ancylostomatidae, *Cerdocyon thous*, Canidae.

RESUMO

No presente trabalho descreve-se a ocorrência de *Ancylostoma buckleyi* Le Roux e Biocca, 1957 (Nematoda: Ancylostomatidae) no intestino delgado de um filhote de *Cerdocyon thous* Linnaeus, 1766 (Mammalia: Canidae). O hospedeiro foi coletado em Itatinga, Estado de São Paulo, Brasil. Este é o primeiro relato sobre a presença deste nematódeo em *C. thous* e a segunda nota sobre a ocorrência de *A. buckleyi* no Brasil.

PALAVRAS-CHAVE: *Ancylostoma buckleyi*, Nematoda, Ancylostomatidae, *Cerdocyon thous*, Canidae.

Studies on the helminthofauna of Brazilian wild mammals have been published, among them, nematodes of the family Ancylostomatidae. In Brazil, the mammals' parasites of this family are represented by species from the genera *Ancylostoma* Dubine, 1843, *Necator* Stiles, 1903, *Bunostomum* Railliet, 1902, *Uncinaria* Froelich, 1789, *Monodontus* Molin, 1861, *Gaigeria* Railliet and Henry, 1910, and *Globocephalus* Molin, 1861. For the *Ancylostoma* genus, there are five registered species in Brazil: *A. bidens* (Molin, 1861) Freitas, 1951, *A. braziliense* Faria, 1910, *A. buckleyi* Le Roux and Biocca, 1957, *A. caninum* (Ercolani, 1859) Hall, 1913, and *A. duodenale* (Dunine, 1843) Creplin, 1845 (VICENTE et al., 1997).

The crab-eating fox (*Cerdocyon thous*) is distributed from Colombia and Venezuela south to Paraguay, Uruguay and Northern Argentina. The habitat of *C. thous* includes mostly savannahs and woodlands, however this species is known to

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inhabit a variety of other areas including edge and forested areas. These foxes may use higher ground during the rainy season, and lowlands during the dry season. Generally, the crab-eating fox resembles the size and shape of most foxes. The coat is gray-brown on dorsally, with the face, ears, and legs reddish. The throat and underside of *C. thous* is white. The tips of the ears, tail, and legs are black. *C. thous* has short, robust legs. The head and body length averages 643 mm and the average tail length is 285 mm. These foxes weigh between five and eight kg (BERTA, 1982; FONSECA et al., 1996; RODRIGUES; AURICCHIO, 1994; EISENBERG; REDFORD, 1999; NOWAK, 1999).

Cerdocyon thous Linnaeus, 1766 (Mammalia: Canidae) was reported as a host for only three nematodes: *Uncinaria carinii* Travassos, 1915, *Angiocaulus rallieti* Travassos, 1927, and *Haemostrongylus* sp. Travassos and Freitas, 1943 (VICENTE et al., 1997). On the other hand, *A. buckleyi* was only described as a parasite of *Felix concolor* Linnaeus, 1771 from Argentina (LE ROUX; BIOCCA, 1957), *Atelocynus microtis* Schlater 1883 from Colombia (THATCHER, 1971), domestic dogs from Australian (SETASUBAN, 1976) and fox from Brazil (PADILHA; DUARTE, 1980).

There are few works in the literature regarding parasites of *C. thous* as well as of *A. buckleyi*. So, the objective of the present study is to report the occurrence of *A. buckleyi* in *C. thous* from Itatinga, State of São Paulo, Brazil.

The young *C. thous* specimen was assisted in the Veterinary Hospital of Faculdade de Medicina Veterinária e Zootecnia (FMVZ), Unesp, Botucatu, Brazil, after being run over by a car. A fecal sample was analyzed by a flotation test (Willis), in which nematode eggs were identified. The *C. thous* specimen has deceased and the necropsy has revealed the nematode specimen in the small intestine. This helminth was fixed in AFA and deposited in the helminthological collection, in the Departamento de Parasitologia, Instituto de Biociências, Unesp, Botucatu, State of São Paulo, Brazil, under the register number NO-284. For the identification, the nematode was clarified with phenol for accomplishment of morphologic and morphometric analysis in Qwin Lite 2.5 computerized system for analysis of images (Leica).

The morphology of the nematode buccal capsule allowed the characterization of the genus as *Ancylostoma*. The teething of this specimen was constituted of 3 pairs of ventro-lateral teeth and 2 pairs of dorso-lateral teeth. Other characteristics observed for this nematode were 15.43 mm length, 0.51 mm width, buccal capsule with 0.21 mm, esophagus with 1.12 mm, and the distance of the vulva to the anterior extremity of 10.26 mm. The eggs measured 107.9 (105-136) mm length and 83.3 (76-95) mm width.

Those morphologic data allowed to conclude that the nematode species involved in the parasitism is the *A. buckleyi*

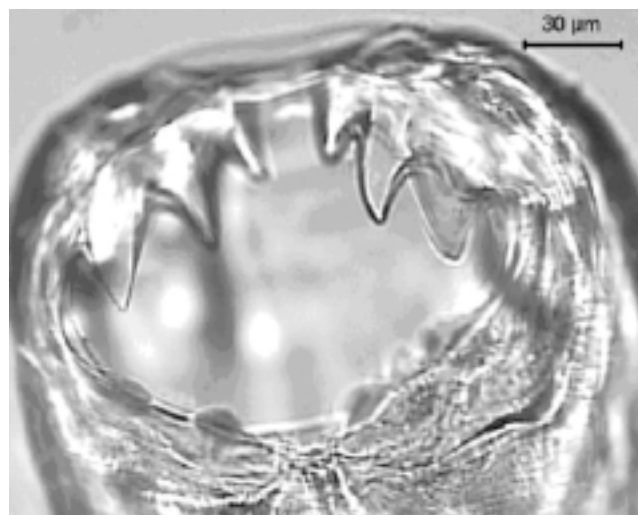


Figure 1. *Ancylostoma buckleyi* (Nematoda, Ancylostomatidae) found in the intestine from *Cerdocyon thous* (Mammalia, Canidae).

(Figure 1). This conclusion was based in the papers of Padilha and Duarte (1980) and Thatcher (1971) in which the following comment is presented: “*A. buckleyi* – this species has three pairs of ventro-lateral teeth, similar to *A. caninum*, but it also has two pairs of dorso-lateral teeth which are not found in the other species”. In addition, the morphometric analysis of this nematode are in agreement with data presented by Padilha and Duarte (1980), which compared all the morphometric data of *A. buckleyi* of the literature.

The occurrence of *A. buckleyi* in *C. thous* represents the first report of this nematode parasitizing this host and the second note on its occurrence in Brazil. Those data contribute for the knowledge of the geographical distribution of this helminth and the variety of hosts for this parasite.

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