

RESEARCH NOTE /NOTA CIENTÍFICA

GEOGRAPHIC DISTRIBUTION AND HOSTS OF *ANCYLOSTOMA PLURIDENTATUM* (ALESSANDRINI, 1905) (NEMATODA, ANCYLOSTOMATIDAE) IN THE AMERICAS

DISTRIBUCIÓN GEOGRÁFICA Y HOSPEDEROS DE *ANCYLOSTOMA PLURIDENTATUM* (ALESSANDRINI, 1905) (NEMATODA, ANCYLOSTOMATIDAE) EN LAS AMÉRICAS

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Abstract

To date there were no reports of the history of *Ancylostoma pluridentatum* that was described in Italy, on the basis of Brazilian specimens in 1905. The only two further autochthonous references of the species occurred in 1910 and 2008, respectively, with no previous historical data during those 98 years in which the species was ignored in Brazil; in the present note, the occurrence of *A. pluridentatum* in the Americas is briefly accounted, on what concerns geographical distribution and hosts. In South America, *A. pluridentatum* is referred in the southeast (Atlantic Forest) and north (Amazon rain forest) regions of Brazil, in Argentina (Formosa Province) and in Colombia (Choco, Nariño); in Central America is cited in Panama (Achiote, Colon) and in North America in north, southern and south regions of Florida.

Key words: Nematoda - *Ancylostomatidae pluridentatum* - History - Hosts - Distribution

Resumen

Hasta el momento no hay registros de la historia de *Ancylostoma pluridentatum* que fue descrita en Italia con base en especímenes brasileños en 1905. Solo dos referencias autóctonas son disponibles, una de 1910 y otra de 2008, sin datos históricos durante los 98 años en que la especie ha sido ignorada en Brasil. En la presente nota la ocurrencia de *A. pluridentatum* en las Américas es compendiada con brevedad en lo que se refiere a su distribución geográfica y huéspedes. En América del Sur, *A. pluridentatum* es citada en las regiones Sudeste (Mata Atlántica) y Norte (Floresta Amazónica) de Brasil, en Argentina (provincia de Formosa) y en Colombia (Choco, Nariño); en América Central es referida en Panamá (Achiote, Colon) y en América del Norte en Norte, Sudeste y Sur de Florida.

Palabras clave: Nematoda - *Ancylostomatidae pluridentatum* - Historia - Huéspedes - Distribución

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Ancylostoma pluridentatum was described in Italy by Alessandrini (1905) as *Uncinaria pluridentata*, on the basis of specimens parasitizing a Brazilian wild cat [*Felis mitis* Cuvier, 1820 = *Leopardus pardalis* (L., 1758)]. In the remarks the author affirms: “Questa piccolo Uncinaria, che ebbe la cortesia di inviarmi da San Paulo (Brasile) il dottor Adolpho Lutz, si riscontra nell’intestino del *Felis mitis*.” Interestingly, five years later, the only available reference of *A. pluridentatum* in a Brazilian publication was that of Faria (1910), when *Ancylostoma braziliense* was described. In the discussion the buccal capsule of the two species are compared: “.....Alessandrini (1905) described amongst his “*Uncinariae*” an *Ancylostoma pluridentatum* Alessandrini from a Brazilian wild cat. Comparing the buccal capsule with a series of 3 teeth on the lateral margin of the buccal capsule we see that there is no reason for confusion...”. After this, in a period of 98 years the species had been overlooked by Brazilian researchers.

Nevertheless, *A. pluridentatum* was referred overseas occurring in our country by Schwartz (1927) in a review of the genus *Ancylostoma* Dubine, 1843 (with the best camera-lucida drawings figuration to date), Yamaguti (1961) in general survey of nematodes parasites of mammals, Thatcher (1971) (that accepted the subgenus *Americancylostoma* Biocca & Le Roux, 1957 for the species) in a study of hookworms from the Colombia-Panama area. In the occasion, *Leopardus wieddi* (Schinz, 1821) (= *Felis wieddi*), *F. yagouaroudi* (Geoffroy, 1803) and *F. catus* L., 1758 were listed as hosts for *A. pluridentatum* in Colombia and *F. onca* L., 1758 in Panama. Moriena (1981) reported the species in Argentina (with scanning electron microscopy images and drawings), parasitizing specimens of the puma, *Felis concolor* (L., 1771). McLaughlin et al. (1993), during necropsies of 85 bobcats (*Felis rufus* Schreber, 1777) in Florida, USA, referred to the presence of *A. pluridentatum* represented at prevalences of 11% to 29%, depending on the collection areas; the lower percentage was observed in animals from the county of Highlands and the higher from those of Dade. According to O’Brien et al. (1990) it seems that this nematode species was introduced into the population of the Florida panther [*Puma concolor coryi* (Bangs, 1899) (= *Felis concolor coryi*)], through the release of an infected South American puma between 1965 and 1966 in the southern Florida. About twenty years later, *A. pluridentatum* was one of the most prevalent and abundant parasites found in

this host in accordance with data after Forrester et al. (1985). In despite of the great amount of available data on *A. pluridentatum*, Vicente et al. (1997), in an extensive survey of nematodes parasites of Brazilian mammals do not refer to the presence of the species. Only more recently, *A. pluridentatum* was cited again by Brazilian authors (Vieira et al. 2008) parasitizing specimens of *Leopardus wieddi* (Schniz, 1821) and *Puma concolor* (L., 1771) in a checklist of helminth parasites in wild carnivore mammals on the basis of data files no. 8959 a-f [from Duque de Caxias, RJ, Brazil] 36811 a-d [derived from the sample 9041] 36817 a-c [derived from the sample 8997] (whole mounts) 8997 [Duque de Caxias, RJ], 9041 [from Belém, PA, Brazil], 28137 [from the state of Amazonas, Brazil] (wet material), available at the Helminthological Collection of the Oswaldo Cruz Institute, Rio de Janeiro, Brazil.

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