SUMMARY: This paper presents the first record of the nematode *Dirofilaria spectans* Freitas & Lent, 1949 in the otter *Lutra longicaudis* Olfers, 1818, based on 11 specimens collected on cardiac cavity of the adult male (111.7 cm total length), found on Lagoa da Conceição, Florianópolis (27°30'S, 48°28'W), Santa Catarina, southern Brazil. This record extend the geographic distribution, the host spectrum and show the fatal pathologic effect produced by *D. spectans*.

KEY WORDS: dirofilariasis, nematode, *Dirofilaria spectans*, *Lutra longicaudis*, new host, distribution.

INTRODUCTION

The filarides are common nematodes with worldwide distribution, that mainly occur in specimens of the order Carnivora, with citations for the humans too (FREITAS & MAYALL, 1953; VICENTE et alii, 1997). *Dirofilaria spectans* was described from the circulatory system of the giant otter (ariranha) *Pteronura brasiliensis* by FREITAS & LENT (1949), and according to VICENTE et alii (1997), the list of the hosts for *D. spectans* includes only *P. brasiliensis* and *Homo sapiens*, the first for Mato Grosso do Sul and the second for Rio de Janeiro, Brazil. The same authors include only one record of nematode for *Lutra longicaudis* in Brazil, the *Dioctophyma renale* (Goeze, 1782) (Dioctophymatidae).

MATERIALS AND METHODS

An otter *Lutra longicaudis* Olfers, 1818 (Carnivora, Mustelidae), adult male, 1117 cm total length was found alive on Lagoa da Conceição, Florianópolis, Santa Catarina, southern Brazil (27°30'S, 48°28'W) on 20 March 1996. The specimen was captured in dying condition and sended to Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA). The death was inevitable and the sample was donated to Museu Oceanográfico do Vale do Itajaí (MOVl 05710) on 2 April 1996. At necropsy, not any abnormality was pointed, except a great number of nematodes in the cardiac cavity – right ventricle (Fig. 1). Eight specimens of *D. spectans*, 6 males and 5 females were photographed, collected, fixed in 70°GL alcohol and deposited in the Helminthological Collection of the same museum (MOVl 15041 to 15048).

Measurements were made with Caliper (0.1 mm) and the sex determinations were, made according FREITAS & LENT (1949).

RESULTS AND DISCUSSION

The size, of the nematodes were on females 164.1-207.2 mm long and 0.7-0.8 mm wide, and on males 95.6-136.5 mm long and 0.3-0.5 mm wide (Tab. 1). The necropsy of the host indicate this infestation the indirect causa-mortis; due the cardiac insufficiency, mitral prolapse and finally heart stopped. The presence of *D. spectans* in the State of Santa Catarina wakes up the sanitary authorities for more a filariosis, generally transmitted by mosquitos and common in coastal urban centers with great number of dogs, principally males (GERMANO et alii, 1985; RAWLINGS & CALVERT, 1992; SOUZA et alii, 1997). Dogs blood examination for detection of microfilaremy is recommended in the urban zone of Florianópolis, utilizing the methods of microhaemathocrit (JAIN, 1986), wet drop (KNIGHT, 1977) and knott modified (NEWTON & WRIGHT, 1956).

The present paper extend the geographic distribution of *D. spectans* to State of Santa Catarina and the host spectrum, based on association with *L. longicaudis* and report the first fatal case due to infestation by *D. spectans*.
SUMÁRIO

É apresentado o primeiro registro do nematóide *Dirofilaria spectans* Freitas & Lent, 1949 na lontra *Lutra longicaudis* Olfers, 1818, baseado em 11 espécimes coletados na cavidade cardíaca de um macho adulto (111,7 cm comprimento total), encontrado na Lagoa da Conceição, Florianópolis (27°30’S, 48°28’W), Santa Catarina. Este registro amplia a distribuição geográfica, o espectro de hospedeiros a apresenta o efeito patológico fatal produzido por *D. spectans*.


REFERENCES


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