# PSEUDOCAPILLARIA (ICHTHYOCAPILLARIA) MARICAENSIS N. SP. (NEMATODA, CAPILLARIIDAE) AND REMARKS ON THE HELMINTHOLOGICAL FAUNA OF LIOLAEMUS LUTZAE MERTENS, 1938 (LACERTILIA, IGUANIDAE)

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Pseudocapillaria (Ichthyocapillaria) maricaensis n. sp. is described from the small intestine of the lizard, Liolaemus lutzae Mertens, 1938, collected in the State of Rio de Janeiro, Brazil. The author compares the new species with Capillaria crotali (Rudolphi, 1819) Travassos, 1915, Capillaria freitaslenti Araujo & Gandra, 1941, Pseudocapillaria (Pseudocapillaria) amarali (Freitas & Lent, 1934) Moravec, 1952, Pseudocapillaria (Pseudocapillaria) cezarpintoi (Freitas & Lent, 1934) Moravec, 1952 and Pseudocapillaria (Ichthyocapillaria) murinae (Travassos, 1914) Moravec, 1952 previously reported from lizards in Brazil.

The nematode Thelandros sceleratus Travassos, 1923 and the trematode Paradistomum parvissimum (Travassos, 1918) Travassos, 1919 are for the first time reported from this same host.

Key words: Nematoda – Pseudocapillaria maricaensis n. sp. – Thelandros sceleratus – Trematoda – Paradistomum parvissimum – Lacertilia – Liolaemus lutzae – Brazil

Liolaemus lutzae Mertens, 1938 is a small lizard which is white ash-coloured and lives in sandy regions of the coast of Rio de Janeiro State.

There is only a single reference to heminths in this species of lizard (Rocha, 1986) in which study the parasites of 280 *Liolaemus lutzae* from Maricá and the recovery of the nematodes *Physaloptera* sp. and *Pharyngodon* sp. were reported.

More recently, Rodrigues et al. (1990) in a study of the helminthological fauna of vertebrates from Maricá, examined four *Liolaemus lutzae* which were negative for helminths.

In this work two nematodes and a trematode species recovered from this host, captured in State of Rio de Janeiro were studied.

## MATERIALS AND METHODS

Thirty lizards were examined as follows: 16 from Maricá (one of them was positive for

nematodes), eight from Cabo Frio and four from São Pedro da Aldeia (which were negative for parasites) and two from Recreio dos Bandeirantes, one out which was positive for nematodes and a trematode.

Samples were collected in a 0.8% NaCl solution, fixed in Railliet & Henry solution, stained in alcoholic carnine, dehydrated in ethyl alcohol, cleared in beechwood creosote and preserved in balsam as whole mounts. Drawings were made with a Carl Zeiss Jena camera lucida. Measurements are in millimeters (mm). Type and voucher specimens were deposited in the Instituto Oswaldo Cruz Helminthological Collection (CHIOC).

#### **RESULTS**

Pseudocapillaria (Ichthyocapillaria) maricaensis n. sp. (Figs 1-6)

Length – male: 8.0-8.7; female: 11.20-12.30. Width – male: 0.032-0.038; female: 0.038-0.052.

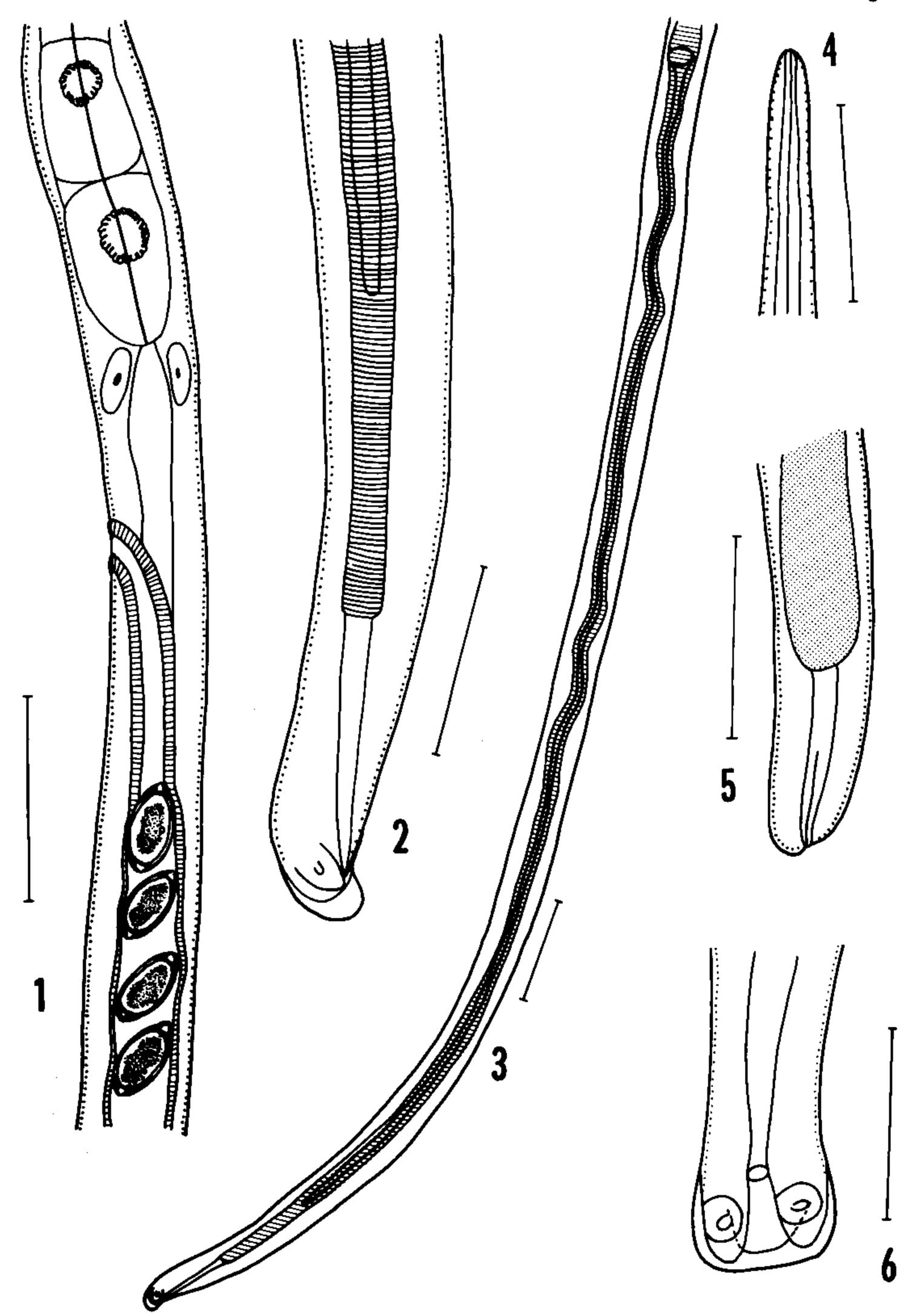
Very slender nematodes. Body with thin transverse striations. Head end attenuated.

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Pseudocapillaria (Ichthyocapillaria) maricaensis n. sp. – Fig. 1: vulvar region (32,796 d; bar = 0,1 mm). Fig. 2: tail of male, lateral view (32,796 a; bar = 0,05 mm). Fig. 3: posterior region of male (32,796 a; bar = 0,1 mm). Fig. 4: anterior end of female (32,796 e; bar = 0,05 mm). Fig. 5: posterior end of female (32,796 e; bar = 0,1 mm). Fig. 6: tail of male, ventral view (32,796 a; bar = 0,05 mm).

Mouth very small. Entire oesophagus with 4.00-4.30 long in the males and 4.30-4.80 long in the females. Nerve ring 0.12 from anterior end in males and 0.14 in females.

Male with a long spicule well sclerotized, with blunt point and proximal extremity widened; 1.36-1.44 long by 0.008 wide. Spicular sheath un-spined; 0.016 in width. Cloacal aperture subterminal. Posterior end rounded, provided with two large round subventral lobes located below cloacal opening and with a dorsal cuticular membrane connecting the lobes.

Female with vulva situated a short distance (0.096-0.110) below end of stichosome; distance of vulva from anterior extremity 4.58-4.90. Vulval lips not prominent. Eggs barrel-shaped with polar plugs, measure: 0.052-0.056 x 0.028-0.032. Posterior end of the body rounded. Anal opening subterminal.

Host: Liolaemus lutzae Mertens, 1938.

Site: small intestine.

Distribution: Maricá, RJ.

Holotype male no. 32,796 a and paratypes no. 30,796 b-i, deposited in the CHIOC (whole mount).

Discussion: the taxonomy of the family Capillariidae Neveau-Lemaire, 1936 is very difficult. It results from inadequate knowledge of the morphology of some species and others being described only from females or even from eggs. Moreover there is much controversy among the authors in relation to the toxonomic value of various characters in these nematodes.

Moravec (1982) suggested the division of capillarids in 16 genera of which *Capillaria* Zeder, 1800, *Pseudocapillaria* Freitas, 1959 and *Paracapillaria* Mendonça, 1953 have species parasitizing reptiles.

In Brazil, Travassos (1914, 1915), Freitas & Lent (1934a, b), Araujo & Gandra (1941), studied capillariids species from reptiles and the species that have been reported parasitizing these hosts are: Capillaria crotali (Rudolphi, 1819) Travassos, 1915 in Crotalus durissus terrificus (Laur.), Capillaria freitaslenti Araujo & Gandra, 1941 in Tropidurus torquatus Wied, Pseudocapillaria (Pseudocapillaria) amarali (Freitas & Lent, 1934)

Moravec, 1952 in Liophis milliaris (L.), Pseudocapillaria (Pseudocapillaria) cezarpintoi (Freitas & Lent, 1934) Moravec, 1952 in Leimadophis poecilogyrus (Wied) and Pseudocapillaria (Ichthyocapillaria) murinae (Travassos, 1914) Moravec, 1952, in Eunectes murinus murinus (L.).

The new species differs from *C. crotali* and *C. freitas-lenti* by not having the eggs enclosed in capsules and by having a spineless spicular sheath; it differs from *P. (P.) amarali* and *P. (P.) cezarpintoi* by the presence of a dorsal cuticular membrane connecting the subventral lobes of the male tail; finally, it differs from *P. (I.) murinae* because the spicule is longer, the proximal extremity of the spicule is wider and the vulvar lips are not prominent.

Thelandros sceleratus Travassos, 1923

This nematode is a common parasite of lizards and was recovered from the large intestine of one specimen from the Recreio dos Bandeirantes, Rio de Janeiro. This is the first record of this parasite for *Liolaemus lutzae* Mertens, 1938.

Voucher specimen deposited in the CHIOC no. 32,708 a-b (whole mount).

Paradistomum parvissimum (Travassos, 1918) Travassos, 1919

This trematode is also a common parasite of lizards and snakes and was recovered from the gall blader of one specimen from Recreio dos Bandeirantes, Rio de Janeiro and it is the first record of this parasite in *Liolaemus lutzae* Mertens, 1938.

Voucher specimen deposited in the CHIOC no. 32,709.

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