

## TWO CASES OF FISTULATED ABCESES CAUSED BY *LAGOCHILASCARIS MAJOR* IN THE DOMESTIC CAT

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J. F. A. Sprent (1971, *Parasitology*, 62: 71-112) reviewed the problem of speciation in the genus *Lagochilascaris* Leiper, 1909. The author mentioned the record by J. E. Led et al. (1968, *Gaceta Veterinaria*, 30: 407-410) of *Lagochilascaris* sp. from the esophagus, stomach, intestine and trachea of a domestic cat in Argentina. Latter, J. F. A. Sprent (1971, *Parasitology*, 63: 45-48) confirmed that those specimens from Argentina were *L. major* Leiper, 1909, and that they had a special difference: the lips were slightly wider than the interlabial collar.

In addition to the two cases of infection of domestic cats by *L. major* presented in this note, occurred in 1974, there is the case reported to one of us (JFRA) by Dr M. D. Little of Tulane University. He received worms collected from a domestic cat, sent in for identification by Dr Shirley P. Oba, from the Departamento de Parasitologia, Universidade de São Paulo, São Paulo, Brazil. Dr Little indicated that: "the worms appeared to be closer to *L. major* than any of the other described species of *Lagochilascaris*". He also told Dr Oba that: "the worms she had found were very similar to the worms from the cat in Argentina described by J. F. A. Sprent (1971, *loc. cit.*). "In all specimens", continued Dr Little, "the collar is relatively inconspicuous and the margins of the lips extend laterally beyond the collar" (pers. comm. to JFRA). Dr Oba passed away without publishing her findings, and nobody knows about the helminths of her work at the Universidade de São Paulo. Considering Dr Oba's as the first case, the two cases being reported in the present note are the second

and the third cases, respectively, of infection of the domestic cat by a species of the genus *Lagochilascaris* in Brazil. In September of 1974, Drs Günther Chamal and Judith Chamal, clinical veterinarians of the city of Petrópolis, State of Rio de Janeiro, Brazil, examined two cats, which had purulent fistulated abscesses in the pharyngeal area.

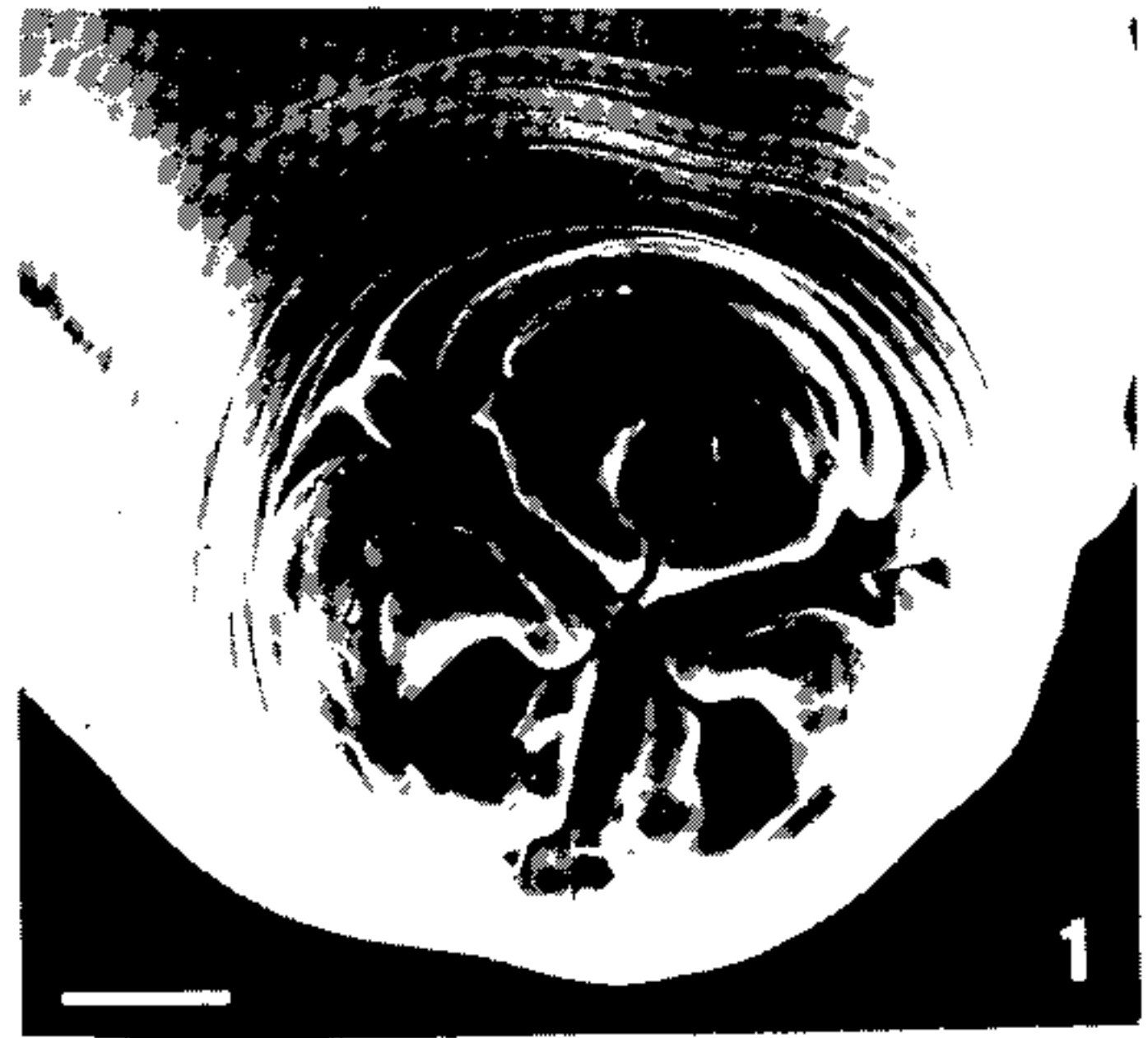


Fig. 1: *Lagochilascaris major*. En face electron photomicrography of the anterior extremity. Bar = 45  $\mu$ m.

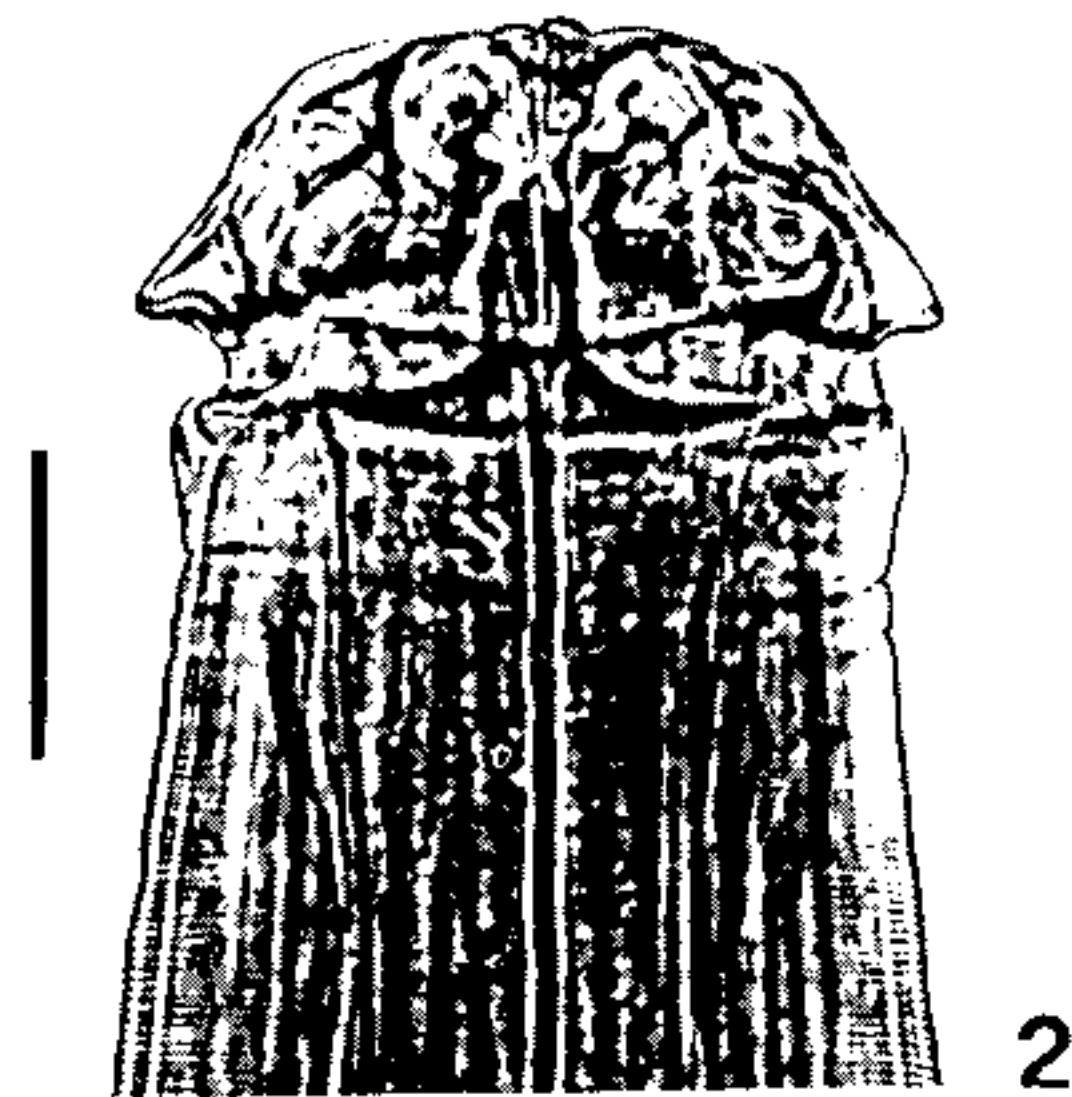


Fig. 2: *Lagochilascaris major*. Photomicrography of anterior region showing the lips wider than the collar. Bar = 60  $\mu$ m.

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TABLE

Main measurements (in micrometers unless otherwise indicated) of adult *Lagochilascaris major* from domestic cats of Petrópolis, Rio de Janeiro, Brazil

Characters and distances measured	Five females	Five males
Length	18.63 – 21.29 mm	17.25 – 19.70 mm
Width <sup>a</sup>	38 – 42	37 – 43
Lip length	66 – 73	56 – 72
Lip width	128 – 138	123 – 141
Interlabia length	49 – 62	47 – 57
Nerve ring <sup>b</sup>	399 – 552	417 – 456
Esophagus length	1.81 – 2.10 mm	1.88 – 2.14 mm
Tail length	258 – 244	–
Ejaculatory duct	–	1.26 – 1.39 mm
Spicule length	–	630 – 894
Eggs diameter	58 – 62	–
No. of pits of <i>in utero</i> eggs	22 – 36	–

a: maximum at end of esophagus.

b: from anterior extremity.

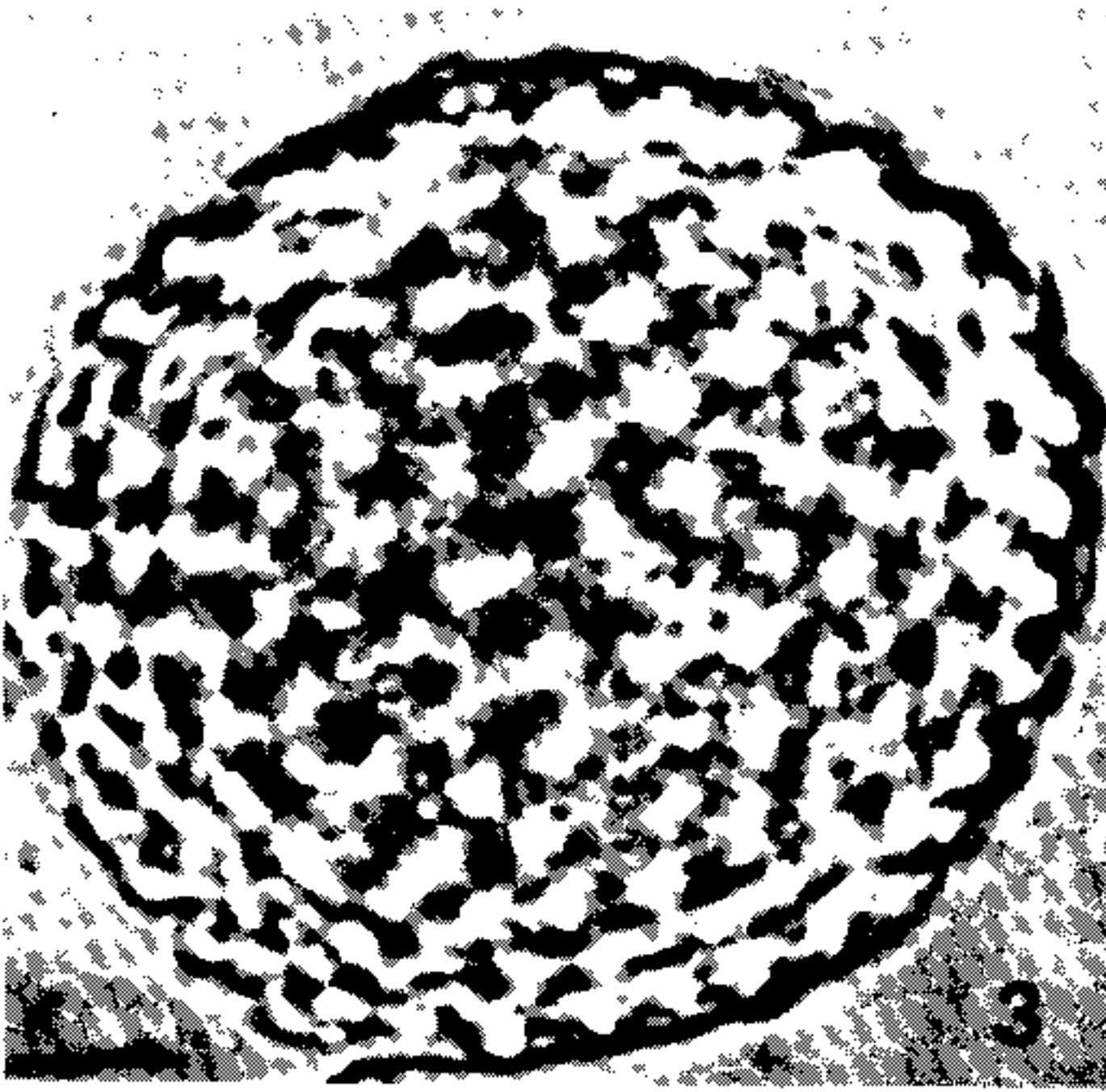


Fig. 3: *Lagochilascaris major*. Egg. Bar = 10  $\mu$ m.

*Case 1* – Two year old female, crossbred, born and raised in Petrópolis, incapable of swallowing, coughing, weak, with a fistulated abcess at the level of the first pharyngeal ring, on the right side, with an excess of pus and 45 adult nematodes.

*Case 2* – One and a half year old male, crossbred, born and raised in Petrópolis, incapable of swallowing, coughing, weak, with a fistulated abcess at the level of the first pharyngeal ring on the right side, with an excess of pus and 31 adult nematodes.

The abcesses and the nematodes were removed surgically and the two cats recovered. The helminths were fixed and sent to our laboratory at the Universidade Federal Rural do Rio de Janeiro, for identification. The main body measurements of some adult specimens studied appear in the Table below.

The number of pits around the circumference of the eggs was counted in *in utero* eggs. One hundred eggs from different females from Cat 1 and from Cat 2 were used to count the pits (Fig. 1). The range in the number of pits found in the eggs of females from Cat 1 was 24-36, with an average of 29.22 pits per egg, while in eggs of females from Cat 2 the range was 22-32, with an average of 27.56 pits per eggs. Our specimens agree with existing descriptions of *L. major*. Fig. 2 shows an *en face* scanning electron photomicrography of the anterior extremity of an adult worm, and Fig. 3 shows that our specimens also have the lips wider than the collar, as was observed by J. F. A. Sprent (1971, *loc. cit.*) and M. D. Little (pers. comm. to JFRA).

The specimens studied were deposited in the Helminthological Collection of the Instituto Oswaldo Cruz, Rio de Janeiro under the numbers 32,346 and 32,441 a-h.

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