Oligacanthorhynchus lamasi (Freitas and Costa, 1964) comb. n. from Domestic Cats of Brazil

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Research Note

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Freitas and Costa (1964, Arq. Esc. Vet. Univ. Fed. Minas Gerais 16:231–234) described a new species, Echinopardalis lamasi, from two acanthocephalans (1♂, 1♀) of a cat, Felis domestica (=F. catus), captured in Belo Horizonte, Minas Gerais. These specimens have been lost (Freitas, 1975, personal communication). Until two of 127 domestic cats, F. catus, from Porto Alegre, Rio Grande do Sul, captured between October 1973 and July 1976, were found to harbor respectively two and nine acanthocephalans conspecific with those described by Freitas and Costa, no additional specimens of this species were available for study. These new specimens assist in clarifying the generic affinities of E. lamasi and permit additions to the species description.

In a revision of the Archiacanthocephala, Schmidt (1972, J. Parasitol. 58:290–297) synonymized Echinopardalis and Oligacanthorhynchus but a list of species made no mention of E. lamasi. Later, without comment (Schmidt, 1977, J. Parasitol. 63:508–510), he assigned this species to Oncicola presumably because the anterior testis reaches into the front half of the trunk, a feature (Schmidt, 1972, loc. cit.) by which Oncicola differs from Oligacanthorhynchus. Although resembling Oncicola in this regard, we consider the species in question to belong to Oligacanthorhynchus as redefined by Schmidt (1972, loc. cit.) because of the slender body and the narrowness of the trunk anteriorly (Fig. 5).

As was to be expected, study of additional specimens revealed slightly more variation than described for the two specimens by Freitas and Costa (1964, loc. cit.). When proboscis armature is described in 12 approximately longitudinal rows of three hooks each, hook lengths, in micrometers, from anterior to posterior were 158–163, 120, and 72–86 for those in the six rows reaching farthest anteriad and 149–154, 91–106, and 53–62 in alternate rows (Figs. 1–3). Except for the first hook in the anteriormost rows which is longer, these hooks are shorter than those described by Freitas and Costa (1964, loc. cit.). Egg dimensions, not given in the original description, averaged 58 × 38 μm.

Oligacanthorhynchus lamasi differs from all other members of the genus in features typically used to distinguish among acanthocephalans. Features of proboscis armature, however, are similar in several genera of the Oligacanthorhynchidae, and, in regard to these, O. lamasi most resembles Oncicola martini Schmidt, 1977. Schmidt (1977, loc. cit.) distinguished O. martini from O. lamasi by lengths of the first hook in the anteriormost rows and the last hooks in each row. Differences in the first hooks are apparently not so great as previously thought while those of the last hooks may be greater. The two species were further distinguished by barbs on all hooks except the last in each row of O. martini. According to Schmidt (1977, loc. cit.), barbs occur only on the first hook of anteriormost rows in O. lamasi. Freitas and Costa did not specifically mention
Figures 1–5. Camera lucida drawings of *Oligacanthorhynchus lamasi*. 1. Anteriormost hook of a longitudinal row. 2. Middle hook of a longitudinal row. 3. Basal hook of a longitudinal row. 4. Proboscis and neck. 5. Entire male. Scale for Figure 1 applies equally to Figures 2 and 3.
barbs for hooks of *O. lamasi*, but illustrated the pattern described by Schmidt. All hooks except the last in each row on Porto Alegre specimens possessed barbs (Fig. 4).

*Oligacanthorhynchus lamasi* has not been reported since its original description, although Federman, Holanda, and Evangelista (1973, Rev. Pat. Trop. 2:207–215) did report unidentified acanthocephalans in two cats from Belo Horizonte. Our study confirms the occurrence of *O. lamasi* in Brazilian domestic cats and suggests that the prevalence may not be as low as previously assumed.

Specimen deposition: Instituto Oswaldo Cruz, Rio de Janeiro (Helm. Coll. No. 31.798a, ♂; 31.798b, ♀).

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