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ON THE OCCURRENCE OF *ANCHITREMA SANGUINUM*
(SONSINO, 1894) IN A PRIMATE, *NYCTICEBUS COUCANG*
(BODDAERT), IN INDIA

por

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SUMMARY

Anchitrema sanguinum (Sonsino, 1894) Looss, 1899, hitherto known to parasitize chamaeleons and bats in Africa (Tunisia and Egypt) is being reported, for the first time, from a primate viz., *Nycticebus coucang*, in India. Previously, Pande (1935) had reported it in India from bats at Allahabad. A brief account of the fluke is included in this paper.

INTRODUCTION

Three specimens of a fluke were obtained from the intestine of a slow loris, *Nycticebus coucang* (Boddaert) brought alive from the Moore market, Madras. It could not be known from the dealer where exactly the primate was caught.

A cursory examination of the material showed it to conform to the characters of the genus *Anchitrema* Looss, 1899. However, a deep study of the same revealed it to closely resemble *A. sanguinum* (Sonsino, 1894) Looss, 1899; the differences found being quantitative rather than qualitative. Hence, the writer identified the fluke as being *A. sanguinum*. Originally, this fluke was found by Sonsino (1894) in *Chamaeleo vulgaris* in Gabes, Tunisia. Later, Looss (1896, 1899) restudied and redescribed this species from materials obtained from cha-

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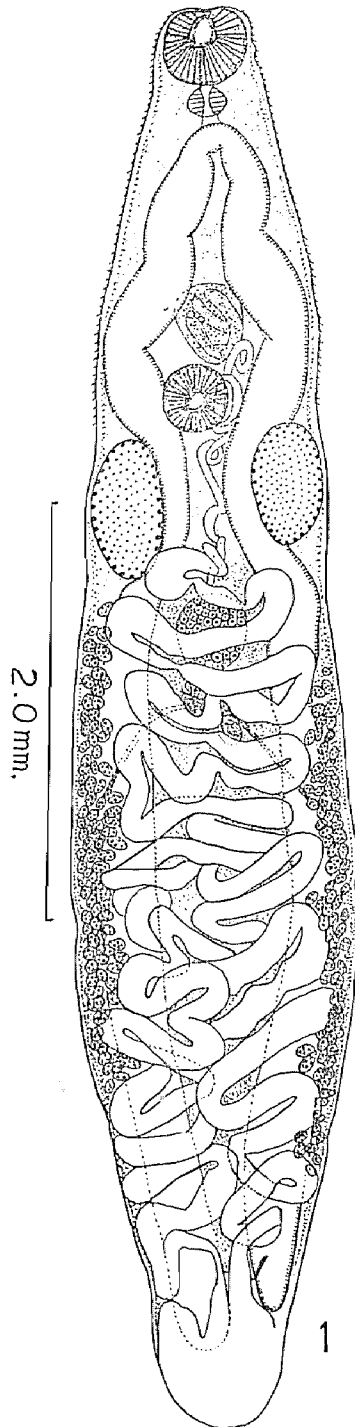


Fig. 1.—Ventral view of a specimen of *Anchitrema sanguinum* (Sonsino, 1894). Vitellaria asymmetrically developed in this specimen

maeleons and bats in Egypt. As evident from the works of Macy et al. (1961) and Heyneman et Macy (1962), this fluke is a common parasite of bats in Egypt. Pande (1935) reported this fluke from insectivorous bats viz., *Nycticejus kuhli* and *N. dormeri* in India at Allahabad. To the best knowledge of the writer, this is the first report of its occurrence in a primate, *Nycticebus coucang*. This primate, being insectivorous as well as frugivorous (Prater, 1965) like bats, forms a compatible host for this fluke.

DESCRIPTION

Anchitrema sanguinum (Sonsino, 1894) Looss, 1899

Body elongated, broad in the middle region, but gently tapering towards the extremities (Fig. 1) which are bluntly rounded. It measures 5.65-6.67 mm in length and 1.14-1.34 mm in width at the middle region. Oral sucker is subterminal, measuring 0.344-0.396 mm × 0.360-0.377 mm. Ventral sucker is situated in the anterior third of the body at a distance of 1.279-1.640 mm from the anterior extremity, It is smaller than oral sucker and measures 0.328-0.344 mm × 0.311-0.344 mm. The appended table (Table I) collates the measurements of various structures of the present material and Pande's.

TABLE I

Various measurements, in millimeters, and salient features of *A. sanguinum* (Sonsino, 1894) according to Pande (1935) and the writer.

	Pande (1935)	Writer
Length	3.23 - 5.15	5.65-6.67
Breadth	1.1	1.14-1.34
Body spines	present	present
Oral sucker	0.29-0.41 × 0.32-0.46	0.344-0.396 × 0.360-0.377
Ventral sucker	0.27-0.32 × 0.37	0.328-0.344 × 0.311-0.344
Pharynx	0.12 (diameter)	0.131-0.164 × 0.164-0.180
Oesophagus	short	0.018
Left testis	0.34-0.65 × 0.22-0.35	0.560-0.691 × 0.328-0.377
Right testis	0.34-0.58 × 0.25	0.641-0.754 × 0.344-0.396
Cirrus sac	?	0.377-0.376 × 0.278-0.344
Ovary	0.24-0.27 (diameter)	0.262-0.328 × 0.245-0.295
Receptaculum seminis	absent	present
Eggs	0.022 × 0.012	0.0208-0.0234 × 0.0130
Host	<i>Nycticejus kuhli</i> <i>N. dormeri</i>	<i>Nycticebus coucang</i>

Interrogation-mark shows data lacking.

Mouth leads directly into a well-developed pharynx measuring 0.131-0.164 mm × 0.164-0.180 mm. Then follows a short oesophagus measuring about 0.018 mm in length. Oesophageal bifurcation occurs about 0.508-0.574 mm behind the anterior extremity of the body. Intestinal caeca run backwards, terminating almost at the posterior extremity of the body. During their course, they approach each immediately behind the ventral sucker, but thereafter they again deflect and continue their backward course along the sides of the body.

Testes are large, elongate to elongate-oval in outline, equal or subequal in size, and extracaecal and post equatorial in position. Left testis measures 0.560-0.691 mm × 0.328-0.377 mm, while right one 0.641-0.654 mm × 0.344-0.396 mm. A membranous cirrus-sac, enclosing a convoluted vesicula seminalis, pars prostatica and ductus ejaculatorius, is located immediately in front of the ventral sucker and measures 0.377-0.396 mm × 0.278-0.344 mm. Genital pore is median situated in front of the ventral sucker.

Ovary is globular or subglobular in outline; median, intercaecal and post-testicular in position. It measures 0.262-0.328 mm × 0.245-0.295 mm. Vitellaria extend laterally, symmetrically or asymmetrically, from behind the testes to the middle of the posterior third of the body. Follicles are small; mostly they are extracaecal, but some of them partly overlap the intestinal caeca. Laurer's canal and receptaculum seminis are present. Pande did not find a receptaculum seminis in his specimens. In this point, the present material differs from Pande's. This structure is found in the genus *Anchitrema*. The writer believes it to have been present in Pande's material, but quite likely that it was overlooked by him. Uterine coils comprising both descending and ascending limbs fill up almost the entire post-testicular field of the body, and at places extending laterally into the extracaecal field. The ascending limb eventually runs forward by the left side of the ventral sucker and is continued into a metraterm which opens to the exterior by the genital pore. The eggs are small, numerous and measure 0.0208-0.0234 mm × 0.0130 m.

Excretory bladder Y-shaped.

RESUMEN

Anchitrema sanguinum (Sonsino, 1894) Looss, 1899, hasta ahora conocido como parásito del camaleón y murciélago en Africa (Tunez y Egipto), se encuentra por primera vez en un primate, *Nycticebus coucang*, en la India. Previamente, Pande (1935) lo había encontrado en murciélagos en la India en Allahabad. Se hace una breve descripción del trematode.

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