



Title	THE JUVENILE FORM OF CENTRORHYNCHUS ELONGATUM YAMAGUTI, 1935
Author(s)	MACHIDA, Masaaki; FUJIMAKI, Yuzo
Citation	Japanese Journal of Veterinary Research, 13(3), 85-86
Issue Date	1965-09
DOI	<a href="https://doi.org/10.14943/jjvr.13.3.85">https://doi.org/10.14943/jjvr.13.3.85</a>
Doc URL	<a href="https://hdl.handle.net/2115/1825">https://hdl.handle.net/2115/1825</a>
Type	departmental bulletin paper
File Information	KJ00002369156.pdf



**THE JUVENILE FORM OF  
*CENTRORHYNCHUS ELONGATUM* YAMAGUTI, 1935**

Masaaki MACHIDA\*<sup>1</sup> and Yuzo FUJIMAKI\*<sup>2</sup>

*Department of Parasitology  
Faculty of Veterinary Medicine  
Hokkaido University, Sapporo, Japan*

(Received for publication, July 9, 1965)

Sixteen encysted juvenile forms of *Centrorhynchus elongatum* YAMAGUTI were found on the mesentery and great omentum of one male *Sorex unguiculatus* DOBSON which was captured November 22, 1963 on Mt. Moiwa, Sapporo.

The cyst was oval, 1.7×1.0 mm, and was attached directly or with a filiform structure of about 5 mm length to the mesentery and great omentum. Within the cyst capsule, the proboscis and posterior part of the parasite were invaginated into the trunk. The parasites were fixed in 70% alcohol under slide glass pressure, stained with DELAFIELD's hematoxylin and mounted in balsam.

Body plump, 3.2~3.7 mm long by 0.75 mm broad at about middle, slender at posterior part of the trunk. Proboscis subglobular, 0.36~0.39×0.30~0.36 mm. Neck 0.30~0.38×0.28~0.31 mm. Hooks on proboscis and neck in 28~29 longitudinal rows of 14~15 each, up to 61 μ long. Proboscis sheath subcylindrical, 0.77~0.79×0.21 mm. Lemnisci elongate club-shaped, 0.59~0.64×0.10~0.11 mm, reaching backward beyond proboscis sheath.

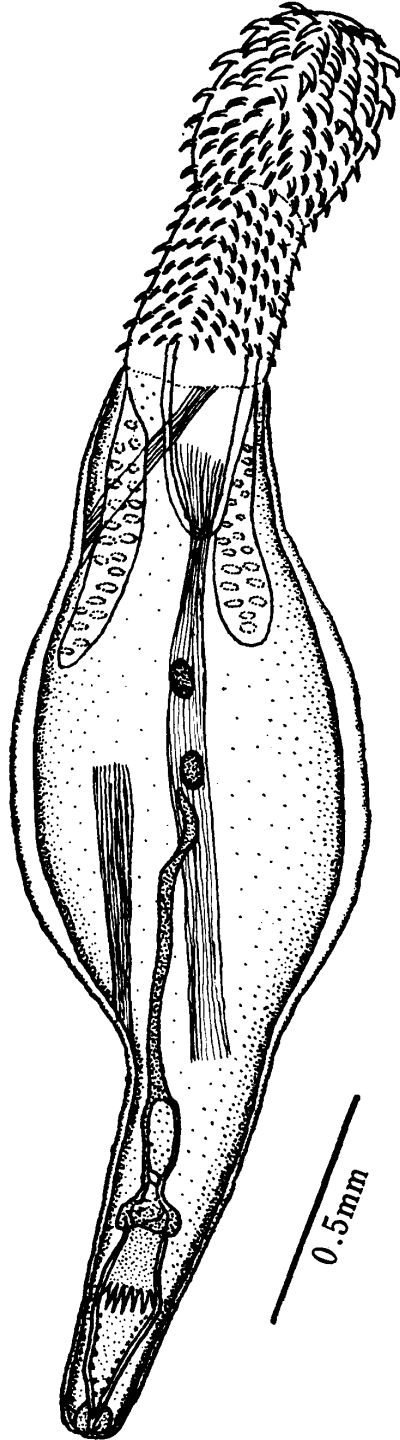
In the male, testicular anlagen 82~94×55~63 μ, lie tandem and a little separated from each other at about middle of the trunk. The four long cement glands begin just behind the posterior testis, go through the center line of the trunk and then pass along the sides of the SÄFFTIGEN's pouch. The SÄFFTIGEN's pouch club-shaped, 0.26×0.06 mm. Digitiform rays of bursal cap 14~16 in number, about 0.06 mm long.

In the female, ovarian anlagen attached slenderly to the suspensory ligament at about middle of the trunk, 0.18~0.20 mm long. Uterine bell and uterus 0.54~0.57 mm long. Outer anterior vaginal sphincter 62~82 μ, posterior one 51~62 μ in diameter. Vaginal funnel 41 μ in diameter. Vulva subterminal.

The adults of this parasite have already been taken from the small intestine of *Otus asio semitorques* TEMM. et SCHL. (= *O. bakkamoena semitorques* TEMM. et SCHL.), *Asio otus otus* (LINNÉ) and *Strix uralensis hondoensis* (CLARK) from Honshu (YAMAGUTI; 1935, '39), *Strix u. japonica* (CLARK) and *Buteo buteo*

\*<sup>1</sup> Present address: Department of Zoology, National Science Museum, Tokyo, Japan

\*<sup>2</sup> Institute of Applied Zoology, Faculty of Agriculture, Hokkaido University, Sapporo, Japan

FIGURE *Male juvenile*

*burmanicus* HUME from Hokkaido of Japan (the present authors' unpublished data). The life history of this parasite is still unknown. The present report is the first one concerning the juvenile form.

If the authors' supposition is correct, eggs of *C. elongatum* are ingested by the intermediate host such as coprophagous insects, in which the eggs develop to acanthors, acanthellas and lastly juveniles. When the intermediate host is ingested by animals of the genus *Sorex* or others, the juveniles migrate into the body cavity or other tissues of these animals where they encyst again. The authors, therefore, believe the genus *Sorex* may possibly be a transport host.

## REFERENCES

- 1) VAN CLEAVE, H. J. (1947): *J. Parasitol.*, **33**, 118
- 2) YAMAGUTI, S. (1935): *Jap. J. Zool.*, **6**, 247
- 3) YAMAGUTI, S. (1939): *Ibid.*, **8**, 386
- 4) YAMAGUTI, S. (1963): *Systema helminthum*, Vol. 5, New York & London: Interscience Publishers Inc.