

RESEARCH NOTE**Parasitic helminths of Antarctic animals****(2). *Corynosoma hamanni* (LINSTOW, 1892) from weddell seal, *Leptonychotes weddelli* caught on the Ongul Isl., Antarctic**

During the 4th Japanese Antarctic Research Expedition (1959–1960) at Ongul Isl. (39° 35' E, 69° 00' S), some weddell seals, *Leptonychotes weddelli*, were caught on January, 1960 for scientific studies. A part of small intestine, which had been preserved in formalin solution, were forwarded to our museum for examination on intestinal parasites in May, 1960. Total length of examined small intestine was approximately 30 cm.

Fifty two matured acanthocephala were found in the intestine. They having been preserved in fixative for many days, flattening them for whole mount was impossible. Observations were based either on serial transverse and saggital sections (20–40 μ thick), or on the internal organs taken out from the worms in creosote by dissection under the bionocular microscope with the device of fine forceps, needles and razor. Especially, inverted distal part of proboscis of all the worms were retracted in anterior part of the trunk, it was necessary to take entire proboscis out of the worm to be observed in lateral view.

They were identified as *Corynosoma hamanni* (LINSTOW, 1892). Following is a brief description of our materials.

Body pipe-shaped, female more roundish than male: 2–4 \times 1.7–2.1 mm in male, 3–5 \times 2–2.6 mm in female, (measurements of body size based on unflattened solid male and female of 3 each); maximum width at level of anterior trunk, which always bent ventrad at right angle. All worms retracted anterior part of trunk and posterior extremity of trunk. Body spines around anterior trunk extend to posterior extremity of trunk on ventral surface and around genital pore. Proboscis club-shaped, about

1 mm long; maximum width at postequatorial level of proboscis. Proboscis hooks arranged in 20–22 longitudinal rows of 12–14 each; proboscis sheath double walled, slightly longer than proboscis; ganglion postequator of proboscis sheath. Lemnisci fan shaped, irregularly folded transversely, 0.8 mm long in saggital sections, 25 μ in thick in transverse section (Fig. 1). Testes elliptical, about 1 \times 0.7 mm, situated symmetrically at pre-equatorial level. Cement glands 6, immediately posterior to testes, in two groups of three each. Eggs elliptical, outer shell 97–115 \times 29–31 μ , middle shell 88–95 \times 25–30 μ , inner shell 70–76 \times 22–25 μ .

Morphological features and the measurements agreed well with the description of *C. hamanni* of LINSTOW from *Stenorhynchus leptonyx* (= *Hydrurga l.*) and the more detailed descriptions of this species recently

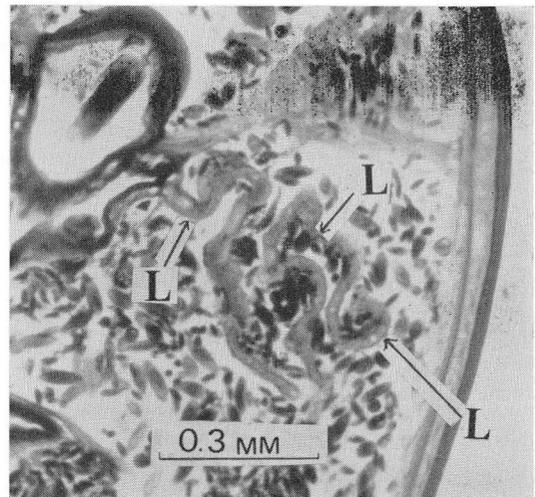


Fig. 1. Transverse section of *Corynosoma hamanni* at level of neck, showing irregularly folded lemniscus. (L: Lemniscus).

Received for publication Feb. 18, 1973

Satoru KAMEGAI and Atsuo ICHIHARA (Meguro Parasitological Museum, Tokyo)

made by NICKOL and HOLLOWAY (1968) and HOLLOWAY and NICKOL (1970), both based on the materials from the weddell seal on McMurdo Sound, Antarctic.

This species has also been reported from weddell seal off Enderby land (54° 23'E, 65° 50'S) near Ongul Isl. by EDMONDS (1957). According to these facts, *C. hamanni* seems to be common parasite of weddell seal in Antarctic region.

REFERENCES

- 1) EDMONDS, S. J. (1957): Acanthocephala. *Re-ports of B. A. N. Z. Antarctic Research Expedition. (1929-1931). Series B*, 6 (5), 96-97.
- 2) HOLLOWAY, H. L. and NICKOL, B. B. (1970): Morphology of the trunk *Corynosoma hamanni* (Acanthocephala: Polymorphidae). *Jour. Morph.*, 130 (2), 151-162.
- 3) LINSTOW, O. (1892): Helminthen von Süd-Georgien. Nach der Ausbeute der Deutschen Station von 1882-1883. *Jahrb. Hamb. Wiss. Anst.*, 9 (2), 68-69.
- 4) NICKOL, B. B. and HOLLOWAY, H. L. (1968): Morphology of the presoma of *Corynosoma hamanni* (Acanthocephala: Polymorphidae). *Jour. Morph.*, 124 (2), 217-220.

1) EDMONDS, S. J. (1957): Acanthocephala. *Re-*