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BRIEF COMMUNICATION

METACERCARIA OF *LILIATREMA SOBOLEVI* GUBANOV, 1953, FROM *HEXAGRAMMOS OTAKII* JORDAN ET STARKS

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MACHIDA (1966) reported *Liliatrema skrjabini* GUBANOV, 1953, and *L. sobolevi* GUBANOV, 1953, from a pelagic shag, *Phalacrocorax pelagicus* PALLAS, captured in Hokkaido, Japan. On the other hand, OHBAYASHI & KONNO (1966) found the metacercaria of *L. skrjabini* from a marine fish, *Sebastes schlegeli* HILGENDORF, in Hokkaido. Thereafter, OHBAYASHI and co-workers have also noticed metacercariae of this species in other marine fishes, e. g., *Sebastes taczanowskii* (STEINDACHNER) and *S. trivittatus* HILGENDORF (unpublished data).

Recently, the authors have obtained eight encysted metacercariae of *L. sobolevi* for the first time in Japan. The metacercariae were found in the muscle tissue of one specimen of *Hexagrammos otakii* captured at Shukuzu, Otaru, Hokkaido, on the coast of the Japan Sea, on May 27, 1973. The host fish was 28 cm in body length. The cyst was subspherical with one-layered wall, 4.9~5.2×3.5~3.9 mm in size, and was surrounded by a thin layer of connective tissue accompanied by a few pigment cells. The morphology of the metacercariae, based on specimens fixed by ethanol and stained by Delafield's hematoxylin, are as follows (measurement in mm):—Body elongated, 4.13~7.57×1.30~1.79, about middle portion narrower. Anterior body spined. Muscular oral sucker terminal, cup-shaped, 0.660~0.825 long and 0.990~1.073 wide, with 7 petal-like projections, each of them with a papilla. Acetabulum subglobular, at

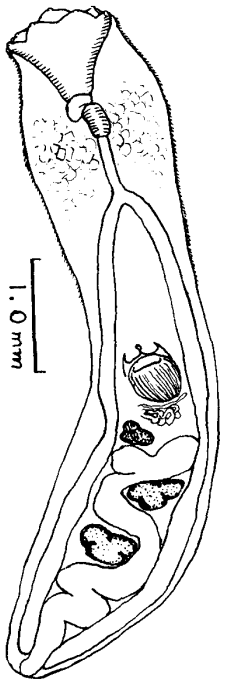

FIGURE
Metacercaria of Liliatrema sobolevi GUBANOV

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about middle of body, 0.325~0.455×0.357~0.423; a pair of apron-like projections anterior to acetabulum. Prepharynx up to 0.330 in length, but usually unrecognizable or very short, because of insertion into posterior part of oral sucker. Pharynx 0.297~0.412×0.198~0.248. Massive glandular cells around pharynx. Esophagus 0.248~0.709 long. Long ceca extend to posterior extremity, connecting with long Y-shape excretory vesicle. Testes transversely elongate and indented, tandem in posterior half of body: anterior testis sinistral to midline of body, 0.160~0.292×0.357~0.747, posterior testis 0.160~0.357×0.422~0.715. Ovary trilobular, 0.162~0.260×0.097~0.230, between acetabulum and anterior testis, dextral to midline. Vitellaria undeveloped. Anlage of uterus recognizable between acetabulum and ovary.

In the genus *Liliatrema* GUBANOV, the absence of the prepharynx is pointed out by many authors. The present authors, however, recognized this organ in some stretched specimens. Presence of a pair of apron-like projections anterior to the acetabulum (MACHIDA, 1966) was also reconfirmed in this paper.

REFERENCES

1) GUBANOV, N. M. (1953): Rabot. Gelmintol. 75-Let. SKRJABIN, 176, Moscow: Acad. Sci. USSR (in Russian) 2) MACHIDA, M. (1966): *Bull. natn. Sci. Mus., Tokyo*, **9**, 447 3) OHBAYASHI, M. & KONNO, T. (1966): *Jap. J. Parasit.*, **15**, 511 (in Japanese with English summary) 4) SKRJABIN, K. I. & KOVAL, V. P. (1966): (translated title) Trematodes of animals and man, **22**, 509, Moscow: Acad. Sci. USSR (in Russian)