

RESEARCH NOTE.....**The flame cell pattern of the metacercaria of *Pseudogalactosoma macrostoma* YAMAGUTI, 1942 (Heterophyidae)**

The metacercaria of *Pseudogalactosoma macrostoma* was first demonstrated by YAMAGUTI (1942) from *Acanthogobius flavimanus* in Lake Hamana and Ago Bay, Japan. However, data are not yet available to elucidate the flame cell pattern of this fluke.

The purpose of this work is to describe the excretory system, with reference to the flame cell pattern of this metacercaria.

The metacercariae were obtained from the muscle of *Tridentiger obscurus* (TEMMINCK et SCHLEGEL) collected from Yamaguchi Prefecture, Japan. The observation of the excretory system was made on the living specimen. (Fig. 1)

The excretory vesicle is large, Y-form in shape and contains numerous fine excretory granules. The stem is very wide, occupying entire dorsal intercecal field. The main collecting tube starts from the anterolateral part of the excretory vesicle and runs downwards to near the level roughly of the acetabulum, where it divides into an anterior and a posterior secondary tube. The anterior secondary excretory tube runs forward and branches into two tertiary



Fig. 1 The encysted metacercaria of *Pseudogalactosoma macrostoma*

tubes, and the posterior secondary excretory tube runs posteriorly along the lateral side of the body and branches into two tertiary excretory tubes. Each of these excretory tubes has 5 pairs of flame cells. (Fig. 2) Thus the flame cell pattern of the metacercaria of *P. macrostoma* can be represented as

$$2 \times [\{(2+2+2+2+2) + (2+2+2+2+2)\} + \{(2+2+2+2+2) + (2+2+2+2+2)\}] = 80.$$

In 1942 YAMAGUTI described that the excretory vesicle opened into the ceca at the posterior extremity. But no such an opening was recognized around the posterior end of the excretory vesicle. It is considered that the excretory vesicle have no connection with the ceca.



Fig. 2 The excretory system of the metacercaria of *Pseudogalactosoma macrostoma*

REFERENCE

- 1) YAMAGUTI, S. (1942): Studies on the helminth fauna of Japan. Part 38, Larval trematodes of fishes. *Japan. J. Med. Sci.*, VI, 2 (3), 132-160.

Received for publication Feb. 25, 1971

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