

**OCCURRENCE OF *CHAETOGASTER LIMNAEI LIMNAEI* (OLIGOCHAETA) IN THE
GASTROPOD SNAIL *LYMNAEA PHILIPINENSIS* NEVILL IN METRO
MANILA, AND ITS POSSIBLE ROLE IN THE CONTROL OF FASCIOLIASIS**

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The gastropod snail *Lymnaea philipinensis* in addition to being the secondary host of trematode larvae also harbors an oligochaete, *Chaetogaster limnaei limnaei*. Shigina (1970) found that *C. limnaei* actively fed on

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trematode larvae. But Basch and Altomar (1969) reported the penetration of *C. limnaei* by cercariae bringing about its destruction.

In this study it was found that *C. limnaei* with mucus as its food had a longer survival period than those with cercariae.

From 720 snails collected from 4 stations in Metro Manila during the period September 1981 to February 1982, a regression line of the number of *C. limnaei* per snail on the incidence of trematode infections was computerized and given as $Y = -2.731X + 3.855$. The percentage infestation of *C. limnaei* in snails ranged from 90% in Malabon to none in Las Pinas. Conversely, trematode infection was highest (25.6%) in Las Pinas and lowest (5.6%) in Malabon. The absence of *C. limnaei* in Las Pinas was related to the PO_4^{3-} and NO_3^- concentrations.

Regression of the number of *C. limnaei* per snail on the length of the snail gave the equation $Y = 0.088X + 2.249$. There was also a significant seasonal variation in the number of *C. limnaei* per snail.

Although *C. limnaei* was not an obligate predator, there was evidence that its presence arrested the incidence of trematode infection.

References

1. Basch, P. F. and Altomar L. Jr. *Trans. Am. Micros. Soc.* **88** (4) 593-595 (1969).
2. Shigina, N. G. *Zool. Zh.* **49** 673 (1970).