

SUMMARY AND DISCUSSION

Within the frame of eradication campaigns against snails effects of chemicals on the mortality of snail species have often been studied. The physical effects of light and temperature on snails, particularly their survival rate and reproduction, have only been reported for a few species. In above paper the results on tests with the effect of light and temperature on Bithynia snails, the intermediate hosts of Opisthorchis viverrini, are given. As the three tested species, B. laevis MORELET, B. goniomphalus MORELET and B. funiculata WALKER are species typical to low altitudes in tropical Southeast Asia it is no surprise, that they discontinued all activities at temperature below 18°C and died at temperatures between $+8^{\circ}$ and -10°C in a time between 24 and 6 hours. The surprise was that already a temperature 45°C has to be considered the thermal death point for above snails. Shallow waters may reach this temperature when exposed to uninterrupted sun-light during the hot season. It is shown that the close relatives of the local Bithynia from Europe, B. leachi and B. tentaculata survive several weeks frozen in solid ice without any damage. The exposure to

light showed that with regard to growth and reproduction, the most favorable time for B. laevis is 8 hours and for B. goniomphalus 16. From these results we may deduct that rearing snails in the laboratory for studies of trematodes will show the best effect when exposed to normal daylight time and kept at a temperature whose average lies a little below that of natural waters in the plains of Thailand.

BIOGRAPHY

Name: Mr. PAKORN SUMETHANURUGKUL

Date of Birth: April 1, 1937.

Place of Birth: Thonburi THAILAND

Institutions Attended:

Certified Ministry of Education.

1956 Certificate of Mathayom VI

Certified Ministry of Education.

1957 Certificate of Mathayom VIII

Certified Ministry of Education.

1961 Diploma in Education

Chulalongkorn University, Bangkok

Department of Biology, Faculty of Science

May 4, 1966. Bachelor of Science (B.Sc.)