

## STUDIES ON THE AMPHIBIAN TREMATODES FROM TAMIL NADU AND KERALA

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### INTRODUCTION

Mukherjee and Ghosh (1970; 1972) reported on the Amphibian trematodes collected from West Bengal, Uttar Pradesh and Maharashtra. Very little work has been done on the Amphibian trematodes of Kerala and Tamil Nadu. Hence the present communication on the Amphibian trematodes from Tamil Nadu and Kerala. The collections were made in the course of the faunistic survey to Tenmalai, Punalur, Andoorpacha, Kulathupuzha of Kerala State and Madras, Courtalam, Schencottah of Tamil Nadu recently undertaken by this department. The detailed descriptions of the species are not given as most of them have been already dealt with. This paper includes relevant references, material examined, distributional range and the variations observed. The parasites were washed in saline, fixed in F.A.A. under cover glass pressure, stained in alum caramine and mounted in Canada balsom.

### SYSTEMATIC ACCOUNT

Family 1. LECITHODENDRIDAE Odhner, 1910

Subfamily 1. PLEUROGENETINAE Looss, 1899

1. *Pleurogenoides gastropus* (Luhe, 1910)

1901. *Pleurogenes gastropus* Luhe, *Zentbl. Bak. Parasitkde. Abt.*, 30 (4): 166.

*Material.* —8 exs. (i) 2 exs. from the intestine of *Rana tigrina*, Madras 10.10.73. (ii) 2 exs., from the intestine of *Rana cyanophlyctis* Courtalam, 12.11.73. (iii) 1 ex. from the intestine of *Rana tigrina*, Punalur, 15.11.73. (iv) 1 ex. from the intestine of *Rana tigrina* Poonamalle, 11.10.73. (v) 1 ex. from the intestine of *Rana cyanophlyctis*, Thiruvannamayar, 12.10.73. (vi) 1 ex. from the intestine of *Rana cyanophlyctis*, Kunrathur, 9.10.73.

*Distribution.*—Uttar Pradesh, Maharashtra and West Bengal (Mukherjee and Ghosh 1972), Andhra Pradesh (Simha 1958), Madras, Poonamalle, Thiruvannamayur, Kunrathur and Kourtalam in Tamil-Nadu, Punalur (Kerala).

*Remarks.*—This species is reported from different parts of North India. This is the first report of the species from Tamil Nadu and Kerala. Mukherjee and Ghosh (1972) reported it from *Rana tigrina* and *Rana cyanophlyctis* in Uttar Pradesh, Maharashtra and West Bengal. Simha (1958) recorded the same from a reptilian *Chamaeleon zeylanicus* from Hyderabad (A.P.)

Subfamily 2. GANEONIAE Yamaguti, 1958

2. *Ganeo tigrinum* Mehra and Negi, 1928.

1928. *Ganeo tigrinum* Mehra and Negi, *Allahabad Univ. Stud.*, 4 : 63.

*Material.*—10 exs. (i) 5 exs. from the intestine of *Rana tigrina*, Madras; 21.11.73. (ii) 3 exs. from the intestine of *Rana cyanophlyctis* Courtalam, 4.12.73. (iii) 2 exs. from the intestine of *Rana cyanophlyctis*, Kunrathur, 15.12.73.

*Distribution.*—Madras. Kunrathur. Courtalam and Courtalam in Tamil Nadu. Uttar Pradesh, Maharashtra and West Bengal (Mukherjee and Ghosh 1972). Hyderabad (A.P.) (Simha 1958). So far it has not been recorded from Madras.

Family 2. PARAMPHISTOMATIDAE Fishoeder, 1901

Subfamily 3. DIPLODISCINAE Cohn, 1904

3. *Diplodiscus amphichrus* Tubangui, 1973

*Material.*—10 exs., (i) 6 exs. from the rectum of *Rana tigrina*, Kunrathur 15.10.73. (ii) 2 exs. from the rectum of *Rana tigrina* Kunrathur, 12.11.73. (iii) 2 exs. from the rectum of *Rana tigrina*, Courtalam 13.11.73. (iv) 2 exs. from the rectum of *Rana tigrina*, Madras. 12.10.73.

*Distribution.*—Uttar Pradesh, Maharashtra and West Bengal (Mukherjee and Ghosh 1972). Madras, Kunrathur and Courtalam in Tamil Nadu. Punalur (Kerala)

Family 3. PLAGIORCHIDAE Ward, 1917

4. *Tremiorchis ranarum* Mehra and Negi, 1925

1925. *Tremiorchis ranarum* Mehra and Negi, *Parasit*, 18 (2) : 168.

*Material.*—12 exs. (i) 2 exs. from the Intestine of *Rana cyanophlyctis* Punalur, 10.11.73. (ii) 5 exs, from *Rana tigrina*, intestine, Courtalam, 15.11.73. (iii) 3 exs. from the intestine of *Rana cyanophlyctis* Kunrathur

& Madras. 10.9.73 (iv) 2 exs. from the intestine of *Rana cyanophlyctis*, Kulathupuzha 9.11.73.

*Distribution.*—Uttar Pradesh, Maharashtra and West Bengal (Mukherjee and Ghosh 1970; 1972). Punalur and Kulathupuzha in Kerala, Madras, Kunrathur, Courtalam in Tamil Nadu.

*Remarks.*—This species is distributed widely and its incidence was recorded in almost all the frogs.

Family 4. LECITHODENDRIIDAE Odhner, 1910

Subfamily 5. PROSTOCINAE Yamaguti, 1958

5. *Mehraorchis ranarum* Srivastava, 1934

1934. *Mehraorchis ranarum* Srivastava, *Bull. Acad. Sci. U.P. Allahabad*, 3 (4) : 239.

*Material.*—5 exs. (i) 2 exs. from the intestine of *Rana tigrina*, Punalur 10.11.73. (ii) 3 exs. from the gall Bladder of *Rana tigrina*, Tenmala 14.11.73. (iii) 1 ex. from the intestine of *Rana tigrina*, Madras 12.11.73.

*Distribution.*—Uttar Pradesh, Maharashtra and West Bengal (Mukherjee and Ghosh 1970; 1972). Punalur, Tenmala and Andoor Pacha in Kerala. Madras in Tamil Nadu.

*Remarks.*—In all these specimens ovary was post acetabular vitellaria diffusely distributed in anterior part. Apart from the other two members *Ganeo* and *Pleurogenoides* of this family Lecithodendriidae this specimen shows the extracaecal Bile duct.

Family 5. HEMIURIDAE Lühe, 1901

Subfamily 6. HALIPEGINAE Ejsmout, 1931

6. *Halipegus mehransis* Srivastava, 1933.

1933. *Halipegus mehransis* Srivastava, *Bull. Acad. Sci. U. P. Allahabad* 3 (1) : 42.

*Material.*—4 exs. from the stomach of *Rana cyanophlyctis*, Madras, 10. 10. 1973. (ii) 2 exs. from the intestine of *Rana tigrina*, Punalur 1. 12. 73.

*Distribution.*—Uttar Pradesh, Maharashtra and West Bengal (Mukherjee and Ghosh, 1970; 1972). Madras (Tamil Nadu). Punalur (Kerala).

Family 6. PLAGIORCHIIDAE Ward, 1917

Subfamily 7. HAEMATOLECHINAE Yamaguti, 1958.

7. *Haematolechus almorai* Pande, 1973

1937. *Pneumonaeces almoraj* Pande, *Proc. Indian Acad. Sci.*, 6 : 114.

*Material.*—4 exs. from the lungs of *Rana cyanophlyctis*, Madras, 12.12.73. (ii) 2 exs. from the lungs of *Rana cyanophlyctis*, Kovelong 14.12.73. (iii) 1 ex. from the lungs of *Rana cyanophlyctis*, Punalur 10.11.1973.

*Distribution.*—Sitapur, Barielly (U.P.) Ramtek (Maharashtra) West Bengal (Mukherjee and Ghosh 1970, 1972). Punalur (Kerala) Madras, Kovelong (Tamil Nadu).

Family 7. BRACHIOCOELIDAE Jhonston 1912

Subfamily 8. MESOCOELINAE Dollfus 1929

8. *Mesocoelium sociale* Lühe, 1901

1901. *Distoma Sociale* Luhe, 1901, *Zentrbl. Bakt. Parasitkde Abt. 1* : 30 (4) : 171.

*Material.*—5 exs. (i) 3 exs. from the intestine of *Bufo melanostictus*. Courtalam, 8.11.73. (ii) 2 exs. from the intestine and stomach of *Bufo melanostictus*, Andoorpacha, 10.11.73.

*Distribution.*—Uttar Pradesh, West Bengal, Maharashtra, (Ghosh, & Mukherjee) Courtalam (Tamil Nadu). Andoorpacha (Kerala).

SUMMARY

The present paper deals with the various trematode parasites found in the Amphibians of Tamil Nadu and Kerala states with their distributional range.

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