

INTRASPECIFIC VARIATIONS IN
PLEUROGENOIDES SITAPURII (SRIVASTAVA, 1934)
(TREMATODA : LECITHODENDRIIDAE)

By

P. D. GUPTA*

Zoological Survey of India,
Calcutta

(With one Text-figure)

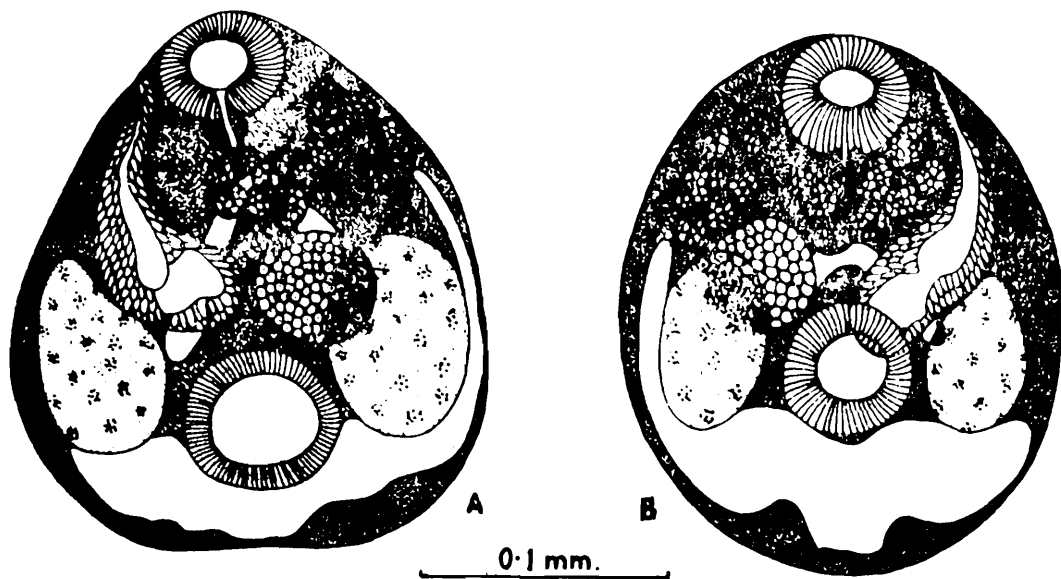
The author collected six specimens of *Pleurogenoides sitapurii* from *Rana cyanophlyctis* in Chittorgarh (= Chittor) Rajasthan and about 150 specimens from the same host in Poona (Maharashtra State). Only one out of 14 host specimens examined in Chittorgarh was found parasitized, while 5 out of 43 (11.6%) were found infected in Poona. The intensity of infection in Poona was two over 100 specimens. Here in the case when they were found in maximum number, there was a concomitant infection with numerous immature specimens of *Trematorchis ranarum* Mehra and Negi, 1926. Present material though fairly agrees with the account given by Srivastava (1934), it shows some important variations due to their developmental stages and state of body at the time of preservation. These variations are described in this paper. *Pleurogenoides sitapurii* is reported for the first time Western Ghats of India.

Body in mounted specimens measures 0.187—0.740** in length and 0.148—0.507 in maximum breadth in acetabular zone. Suckers may be equal in size or the acetabulum may be slightly larger. Oral sucker circular or transversely elongated and measures 0.043—0.109 X 0.051—0.113. Acetabulum measures 0.051—0.139 X 0.051—0.144, situated from preequatorial region to very near the posterior end of the body. In one specimen it is approaching paramphistomid condition (Text-fig. 1), situated 0.023 from posterior end of body. Srivastava (1934) described the acetabulum as being post-equatorial¹ only.

The left testis 0.062—0.152 X 0.039—0.129, is circular, oval or elongated antero-posteriorly, situated postero-lateral to the cirrus

* Present Address : Gangetic Plains Regional Station, zoological Survey of India, Patna, India.

** All measurements in millimetres.



Text-fig.-1. (A-B) *Pteuregenordes ritapurii* (Srivastava, 1934)

sac. The right testis, $0.062-0.195 \times 0.047-0.148$, situated on the side of ovary, is rounded in shape and usually larger than the left one, some times the two testes are equal in size. The testes frequently extend behind the centrum of the ventral sucker. In some cases the left testis has been observed reaching posterior margin of the acetabulum (Text-fig. 1B). Srivastava (1934) has described their position in front of the centrum of the acetabulum. In the present material they occupy a position far behind. In gravid specimens the testes assume the anterior position as described by Srivastava. The cirrus such is clubshaped with various degree of curvature of its stem to appear somewhat 's' shaped, and measures $0.101-0.312 \times 0.035-0.078$.

Ovary, subglobular; $0.043-0.101 \times 0.039-0.097$, its position varying from immediately behind the intestinal bifurcation to very close to or sometimes partly overlapping the acetabulum. It is almost rounded in shape but irregular or somewhat lobed condition was also met with as a result of pressure of the coverslip at the time of preservation.

The uterine space behind the gonads increases with the attainment of gravid condition, resulting in the variation of relative position of gonads, suckers and compactness of different organs. In one case the uterine loop between the right testis and the body wall has been observed extending in front of the posterior margin of the oral sucker.

Genital pore usually located near the anterior margin of oral sucker. Only in well-extended specimens, it is situated at the level of pharynx as stated by Srivastava (1934).

Vitelline follicles are usually distributed in two groups. The left group occupying median position and the right marginal group may or may not be cephalad to the left one. The space between these two groups is wanting in many cases so that they appear coalescing with each other.

REFERENCE

- SRIVASTAVA, H. D. 1934. On new trematodes of frogs and fishes of the United Provinces, India. Part III. On a new genus *Mehraorchis* (Pleurogenetinae) with a systematic discussion and revision of the family Leicthodendriidae *Bull. Acad. Sci. U. P.*, 3 (4) : 239—256.