

ON LATERAL TESTES IN THE GENUS *GANEO*
KLEIN, 1905 WITH REMARKS ON SYNONYMY OF
G. GASTRICUS SRIVASTAVA, 1933 AND *G.*
SRINAGARENSIS KAW, 1950 WITH *G. TIGRINUM*
MEHRA & NEGI, 1928 (TREMATODA :
LECITHODENDRIIDAE)

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(With one Text-figure)

The author (Gupta, 1970) published a review of the genus *Ganeo* Klein and regarded *G. gastricus* and *G. srinagarensis* as valid species. Subsequent study of additional 136 examples of *G. tigrinum* collected during 1973-1975 from frogs and toads in the vicinity of Poona, Maharashtra State indicates that *G. gastricus* and *G. srinagarensis* should be treated synonyms of *G. tigrinum* for reasons given below. The collection of *G. tigrinum* from Poona included one specimen with lateral testes as described below.

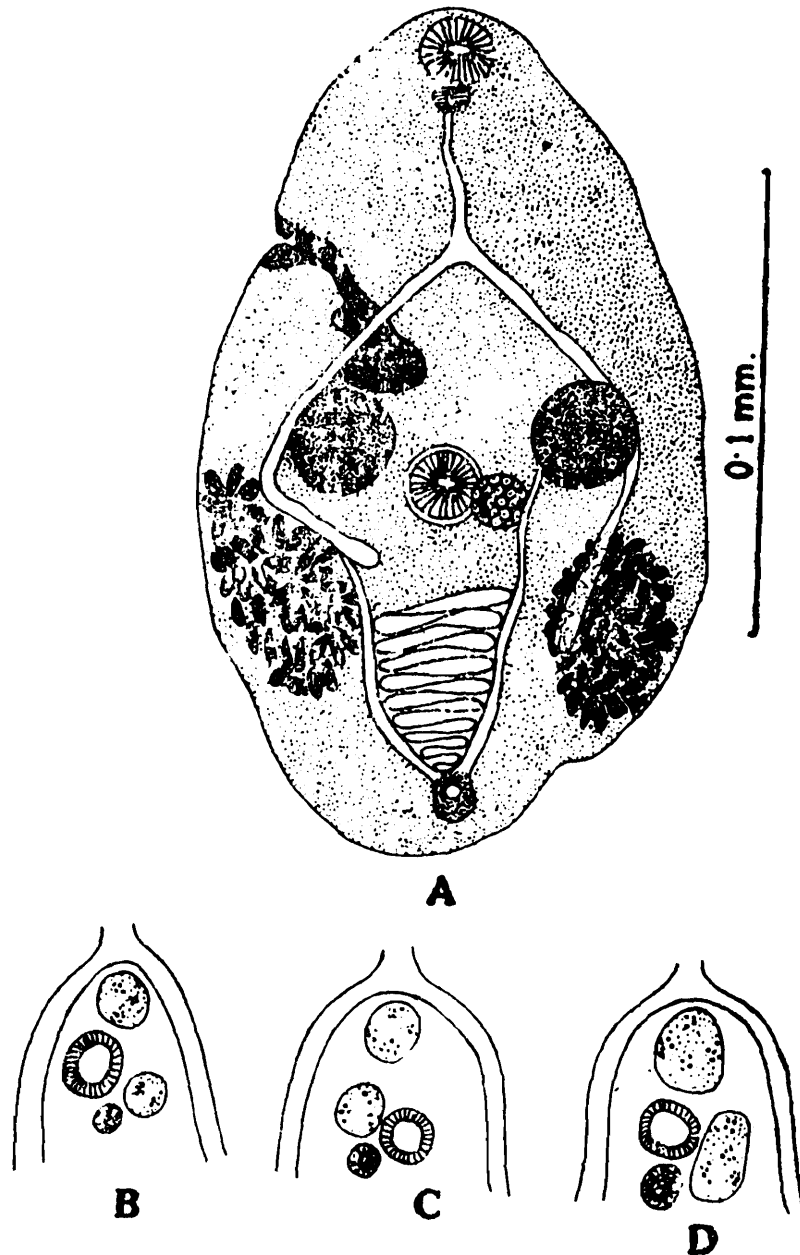
Body 0.936** in length and 0.378 in width. Oral sucker 0.068×0.086 . Ventral sucker 0.082×0.090 , just post-equatorial in position. Pharynx 0.047×0.043 . Oesophagus 0.125. Intestinal bifurcation at the junction of first and second quarters of body length. Intestinal caeca reaching $\frac{4}{5}$ th of the body length. Testes almost equatorially placed in the body antero-lateral to the ventral sucker. Left testis 0.109×0.117 , right testis 0.097×0.109 . Ovary dextrally placed adjoining the ventral sucker. Genital pore sinistral, marginal, at the level of oesophageal bifurcation. Very few uterine coils which lack eggs due to early stage of maturity of the worm. Vitelline follicles post equatorial and amassed at caecal terminations.

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** All measurements in millimetres.

DISCUSSION

In addition to the above specimen (Fig. 1) some other variations observed in relative position of gonads and acetabulum are diagrammatically shown in figure 2 which indicates a tendency of a gap between the two testes. *G. gastricus*, the specimen described above and *G. srinagarensis* form a series showing posterolateral migration of anterior testis to the left side of the body.



Text-fig. 1 (A—D) *Ganeo tigrinum* A—with lateral testes, (B—D) Variations in relative position of gonads and acetabulum in *G. tigrinum*.

Another trend regarding position of gonads in relation to body length is noticeable. In the specimen in early stage of maturity described above, the gonads are almost equatorial in position. In *G. srinagarensis*,

showing further stage of maturity and eggs filling up the uterus, the gonadial complex occupies comparatively anterior position. Finally in *G. gastricus* which appears to be gravid, the uterus is completely filled with eggs, the gonads occupy second quarter of the body length.

The anterior change in the position of gonads in the series formed by the present specimen, *G. srinagarensis* and *G. gastricus* can be explained by two alternatives. Either the whole gonadial complex is pushed forward by the growth of the uterus or the uterus and the posterior part of the body grow independently of the anterior part of the body and the gonads assume its position in second quarter of the body length in gravid specimens. The gonads and ventral sucker are situated in the second quarter of body length in normal specimens indicating the second possibility to be more probable. Hence the difference in the position of gonads in relation to body length shows only the developmental stages instead of characters of any taxonomic importance.

Mehra and Negi (1928) and Srivastava (1933) have rightly concluded that the oblique position of testes in the genus *Ganeo* is peculiar for the subfamily Pleurogenetinae. Specimens with lateral testes indicate a reversion to the primitive condition which is met with in the genus *Pleurogenes*. The lateral position of testes should be treated only as an aberration and in view of the close similarity of other characters like distribution of vitellaria in relation to body length and smaller ventral sucker *G. gastricus* Srivastava, 1933 and *G. srinagarensis* Kaw, 1950 should be treated synonyms of *G. tigrinum*.

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