

Studies on Digenetic Trematodes of Vertebrates
Part. II. A Trematode, *Gorgoderina guptai* n. sp.
from the Urinary Bladder of a Toad
from Lucknow

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Gorgoderina guptai n. sp.
(Figs. 1-2)

Only one specimen of this form was collected from the urinary bladder of a toad, *Bufo* sp. from Lucknow.

Description: Body elongated, 3.58 mm. long, 0.62 mm. wide. Oral sucker terminal, subspherical, 0.39 mm. long, 0.35 mm. wide. Pharynx absent. Esophagus short, 0.13 mm. long, dividing into two simple, tubular, intestinal caeca, terminating a little anterior to hind end of body. Ventral sucker spherical, larger than oral sucker, 0.50 mm. in diameter at 0.90 mm. i.e. one third from anterior end of body.

Genital pore submedian, just behind intestinal bifurcation, lying on left intestinal caeca at 0.65 mm. from anterior end of body.

Excretory bladder tubular, opening at posterior end of body.

Testes elongated, entire, diagonally tandem, intercaecal close together in posterior half of body. Anterior testis 0.49 mm. long 0.31 mm. wide at 1.90 mm. from anterior end of body. Posterior testis larger than anterior testis, 0.57 mm. long, 0.33 mm. wide at 2.22 mm. from anterior end of body. Vesicula seminalis pre acetabular, saccular 0.18 mm. long, 0.16 mm. wide. Pars prostatica short, 0.06 mm. long opening into genital pore by a small ejaculatory duct. Cirrus sac absent.

Ovary ovoid, submedian, equatorial, lying on right side of body 0.16 mm. long, 0.18

mm. wide at 1.70 mm from anterior end of body. Vitellaria lobed, paired, in front of ovary and behind ventral sucker. Right vitelline gland 0.38 mm. long, 0.16 mm. wide. Left vitelline gland 0.25 mm. long, 0.15 mm. wide. Uterus with both descending and ascending limbs, occupying mostly posterior part of body, intruding into extracaecal fields and also extend anterior to ventral sucker. Eggs oval, non operculated, 0.010 to 0.020 mm. long, 0.008 to 0.010 mm. wide.

Host: Toad, *Bufo* sp.

Location: Urinary bladder

Locality: Lucknow.

Discussion: The new form belongs to the genus *Gorgoderina* (Looss, 1899) Looss, 1902. Pereira and Cuocolo (1940) divided the genus *Gorgoderina* into two subgenera i.e. *Gorgoderina* and *Neogorgoderina* with *G. (G.) vitelliloba* (Olsson) and *G. (N.) simplex* (Looss) as type species respectively. Pigulewsky (1952) divided the genus *Gorgoderina* Looss, 1902 into two subgenera i.e. *Gorgoderina* and *Gorgorinma*. The subgenus *Gorgoderina* is distinguished in having vitellaria far posterior to ventral sucker and the subgenus *Gorgorinma* in having vitellaria directly posterior to ventral sucker. Yamaguti (1958) suppressed the genus *Neogorgoderina* and included *Gorgorinma* Pigulewsky, 1952 into the genus *Gorgoderina* and the author is in agreement with Yamaguti as the distinguishing character of vitellaria with relation to ventral sucker is a variable character.

The new form differs from all the known

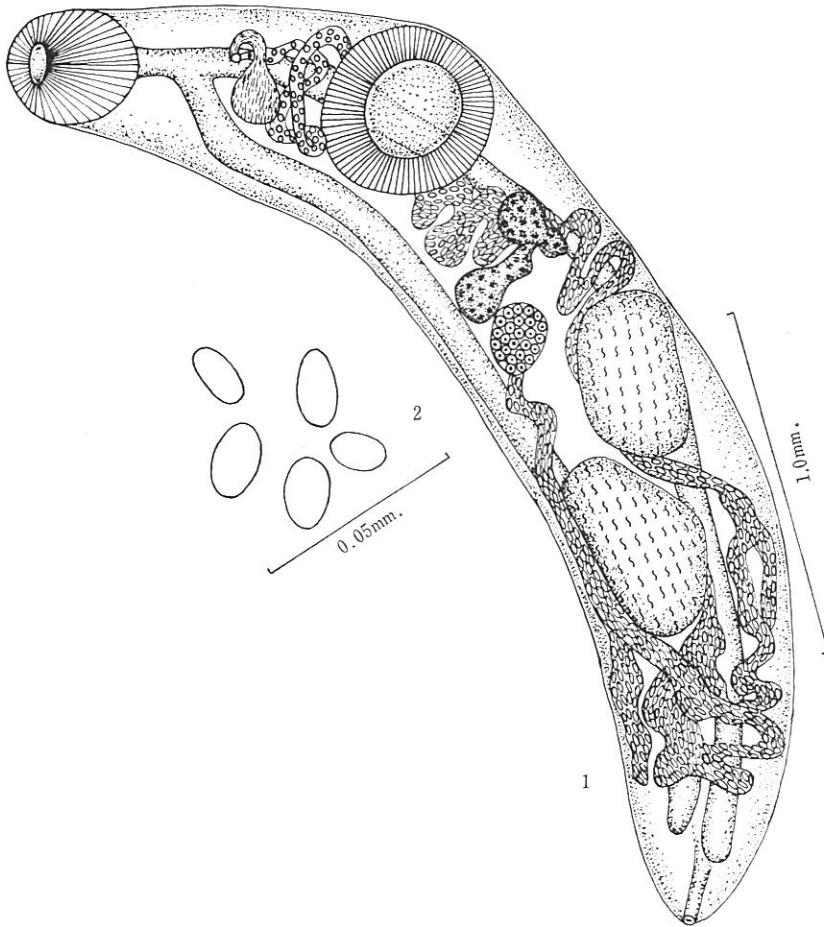


Fig 1. *Gorgoderina guptai* n. sp.
 1 Adult worm (Ventral view)
 2 Eggs

species of the genus *Gorgoderina* except *G. parvicava* Travassos, 1922; *G. cedroi* Travassos, 1924; *G. cryptorchis* Travassos, 1924; *G. permagna* Lutz, 1926; *G. diaster* Lutz, 1926; *G. carli*, Baer, 1930; *G. tenua* Rankin, 1937; *G. schistorchis* Steelman, 1938; *G. ellipticum* Dwivedi, 1967; *G. symmetriorchis* Dwivedi, 1967 and *G. infundibulata* Dwivedi, 1967 in having vitellaria directly posterior to ventral sucker. The new form differs from *G. ellipticum*, *G. symmetriorchis*, *G. infundibulata*, *G. parvicava*, *G. carli*, *G. cryptorchis* and *G. cedroi* in having lobed vitellaria, It differs from *G. permagna* and *G. diaster* in having distinctly separated

vitellaria; from *G. schistorchis* in having testes slightly elongated and in the extension of uterine coils anterior to ventral sucker; from *G. tenua* in having vesicula seminalis away from ventral sucker, in having genital pore on the left intestinal caecum, in the extension of uterine coils anterior to ventral sucker and in the relative size of various organs.

Accordingly it is regarded as a new species with the specific name *G. guptai* n. sp.

The new species is named in honour of my teacher Dr. (Mrs.) Vinod Gupta, Lecturer in Zoology, Lucknow University, Lucknow.

Summary

A new trematode, *Gorgoderina guptai* n. sp from *Bufo* sp. has been described from Lucknow.

Type specimen of this form described in this paper will be deposited in Dr. G. S. Thapar's, Helminthological Collection, Lucknow, U. P. INDIA.

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