

NEPHROSTOMUM CHANDIGARENSIS n. sp. (TREMATODA: DIGENEA)  
FROM A BIRD AT CHANDIGARH

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ABSTRACT

For the first time a representative of the genus *Nephrostomum* Dietz, 1909, is being reported from India. Recovered from *Bubulcus ibis*, *Nephrostomum chandigarensis* n. sp. measures 12.28-16.47 mm. in length. Head collar is reniform with single row of dorsally uninterrupted row of spines. Cup-like ventral sucker is situated very near to the anterior extremity. Excretory vesicle is with many side branches and the excretory pore lies at posterior extremity.

Validity of the new species has been discussed.

- Family **Echinostomatidae** Poche, 1926
- Subfamily **ECHINOSTOMATINAE** Faust, 1929
- Genus *Nephrostomum* Dietz, 1909

*Nephrostomum chandigarensis* n. sp.

A few specimens of *Nephrostomum chandigarensis* n. sp. were collected from cattle egret, *Bubulcus ibis* (Linn.), shot at Chandigarh. The live specimens are elongate, opaque-white in colour. The parasite measures 12.285-16.477 mm. in length and 2.457-2.730 mm. in maximum breadth. The head collar is well developed, reniform in shape and is armed with a single row of dorsally uninterrupted row of spines. The spines are very small; those on the dorsal side are smaller than the ones on the ventrolateral sides.

The oral sucker measures 0.273-0.455 x 0.318-0.364 mm. The small prepharynx measures 0.182 mm. in length. The pharynx is small, globular and muscular, 0.2-0.25 x 0.15-0.3 mm. in size. The oesophagus, 0.4075-0.455 mm. in length, divides into two intestinal caeca which extend up to the posterior end of the body.

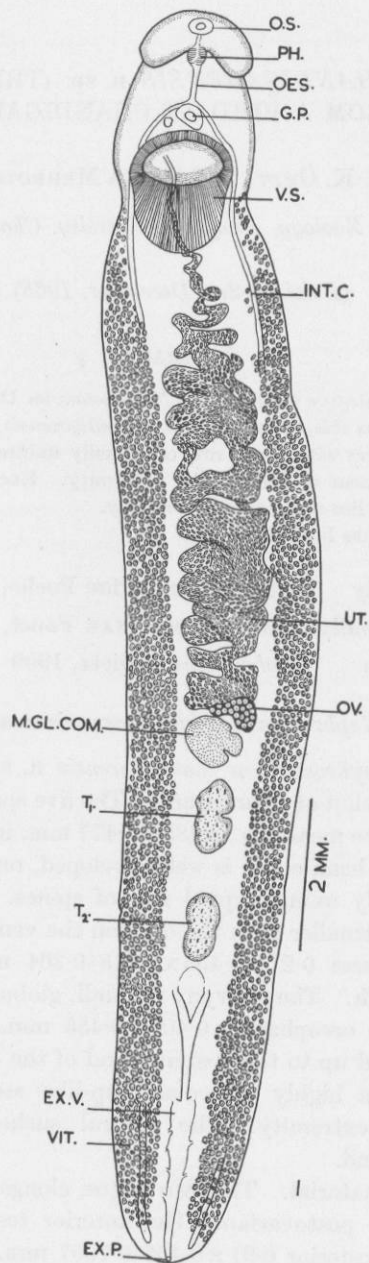
The ventral sucker is a highly muscular, cup-like structure situated 1.456-1.638 mm. behind the anterior extremity. The ventral sucker, 1.456-1.638 x 1.456 mm., is sufficiently depressed behind.

The gonads are postequatorial. The two testes, elongate-oval in shape with somewhat indented margins are postovarian. The anterior testis measures 1.0465-0.192 x 0.546-0.682 mm. and the posterior 0.91 x 0.455-0.7007 mm. The cirrus pouch is small, situated in between the intestinal fork and the ventral sucker.

The ovary, measuring 0.455 x 0.728-0.773 mm., is somewhat irregular in shape and is situated in the postequatorial region. The Mehlis' gland complex is situated behind the ovary and measures 0.819 x 0.864 mm. The uterus extends in the region between ovary and the acetabulum and has both ascending and descending coils. It is fully packed with small eggs measuring 0.088-0.0902 x 0.038-0.049 mm. The genital pore

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*Abbreviations:*

*EX.P.*—excretory pore; *EX.V.*—excretory vesicle; *G.P.*—genital pore; *INT.C.*—intestinal caecum; *M.GL.COM.*—Mehliss' gland complex; *O.S.*—oral sucker; *OES.*—oesophagus; *OV.*—ovary; *PH.*—pharynx; *T<sub>1</sub>*—anterior testis; *T<sub>2</sub>*—posterior testis; *UT.*—uterus; *V.S.*—ventral sucker; *VIT.*—vitellaria.

is preacetabular, behind the intestinal bifurcation. The vitellaria are small follicles which extend laterally from the acetabular zone to the posterior extremity covering the intestinal caeca.

The excretory vesicle is an irregular sac, which opens by an excretory pore situated at the posterior extremity of the body.

Host: *Bubulcus ibis* (Linn.)

Habitat: Intestine

Locality: Chandigarh

Discussion: The genus *Nephrostomum* Dietz, 1909, comprises the following already known species: *Nephrostomum australe* (Johnston, 1928) Mendheim, 1943; *N. limai* Travassos, 1926; *N. ramosum* (Sonsino, 1895) Dietz, 1909 (Syn. *N. bicolanum* Tubangui, 1933; Prudhoe, 1944; *N. garzettae* MacCallum, 1904) and *N. robustum*\* Vigueras, 1944.

*Nephrostomum chandigarensis* n. sp. has been compared with all the already known forms of the genus and has been found distinct from all of them in having different number of collar hooks, position and shape of the testes, ovary and the general body shape. This species has been named after the locality from where the host was caught and examined.

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\* Literature not available.