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ON A NEW MONOGENETIC TREMATODE, *DOGIELIUS GUSSEVI* N. SP. FROM A FRESHWATER FISH, *RITA RITA* (HAM.)

HRIDAYA SHANKER SINGH AND AMITA JAIN
ZOOLOGY DEPARTMENT, INSTITUTE OF ADVANCED STUDIES, MEERUT UNIVERSITY, MEERUT-250005

In the present paper, a new monogenetic trematode, *Dogielius gussevi* n. sp. collected from the gill filaments of a freshwater fish, *Rita rita* (Ham.) obtained at Meerut is described herewith. The new species differs from previously described three species in the number of head organ, by the presence of wings and accessory piece on the anchors, in having elongated cirrus and in the shape of copulatory complex.

Dogielius gussevi n. sp. (Figs. 1-4)

Host : *Rita rita* (Ham)

Location : Gill filaments

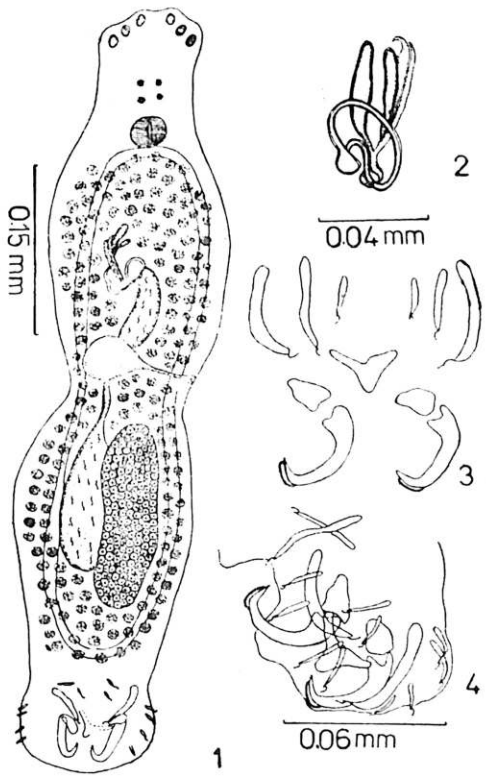
Locality : Meerut

Frequency : 15 specimens from 1 host out of 7 examined

Body elongate, with rounded extremities, constricted in the middle, 710-730* long and 110-150 wide. Head lobed, bears three pairs of head organs and two pairs of eye-spots. Pharynx spherical, muscular, 25-30 in diameter. Intestinal

*All measurements are in micrometers (μm)

caeca terminate up to anterior level of haptor where they unite and form cyclocoel. Testis single, longitudinally elongate, post-equatorial, intercaecal, partly dorsal to ovary, 120–130 long and 55–57 wide. Vas deferens dialates distally to form an elongated oval seminal vesicle, 50-60 long and 22-25 wide. Cirrus tubular, coiled, with a swollen base and elongated body, 80–90 long. An accessory piece, consisting of two pieces, curved at the tip, sickle shaped, attached at the base of cirrus, 50-60 long. A pair of prostrate glands attached at the base of cirrus Ovary



Figs. 1–4. **1.** *Dogielius gusseri* n. sp., **2.** Cirrus enlarged. **3.** Isolated armature of haptor, **4.** Haptor enlarged.

longitudinally elongate, post-equatorial, larger than the testis, intercaecal, 150–160 long and 50–60 wide Vagina opens outside laterally in the equatorial region and internally into oval seminal receptacle lying behind seminal vesicle, 30–40

long and 40–50 wide. Eggs absent Vitelline follicles numerous, coextensive with intestinal caeca.

Haptor well marked from body proper, 70-80 long, 50-60 wide Armature of haptor consists of a pair of large anchors, accessory pieces of anchors, transverse bar and seven pairs of marginal hooklets. Dorsal anchors large, with broad bifid base, tips curved, strong shaft, 50–60 long. Tips of anchors provided with small wings. Dorsal transverse bar roughly V-shaped, strong, stout, 30-40 long. Anchors provided with broad triangular accessory pieces at their base, 15–17 long. A pair of large marginal hooklets, crechot-shaped, 40-50 long. Rest six pairs of marginal hooklets small, similar in shape, 15–35 long.

Three species are known in the genus *Dogielius* Bychowsky, 1936 *viz. D. forcopus* Bychowsky, 1936; *D. planus* Bychowsky, 1958 and *D. indicus* Agrawal and Singh, 1984

The present form differs from *D. forcopus* in having three pairs of head organs instead of two pairs; in having accessory piece of cirrus sickle-shaped instead of filamentous; in having wings and accessory piece on dorsal anchors (being absent in *D. forcopus*); from *D. planus* differs in having more elongated cirrus; in having accessory piece and wings on dorsal anchor (being absent in *D. planus*) and in having dorsal transverse bar V-shaped instead of straight and from *D. indicus* differs in having three pairs of head organs instead of two, in having different shape of copulatory complex, accessory piece of copulatory complex, dorsal anchor and dorsal transverse bar.

In view of these differences the present form is, therefore, regarded as a new species and given the specific name *D. gussevi* n. sp. in honour of Dr. A. V. Gussev, Zoological Institute, Leningrad, USSR in recognition of his valuable contribution to the field of monogenetic trematodes.

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