OBSERVATIONS ON *EPISTHMIUM INTERMEDIUM*

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Episthmium intermedium Skrjabin, 1919 is being reported for the first time from India. *Egretta garzetta* has been found to be another host for this species. The shape and situation of the ovary have been found different from the original description.

Family **Echinostomatidae** Poche, 1926

Subfamily Echinochasminae Odhner, 1910

Episthmium intermedium Skrjabin, 1919

(Figs. 1, 2)

Two specimens of *Episthmium intermedium* Skrjabin, 1919 were collected from the intestine of a little egret, *Egretta garzetta* (Linn.), shot at Chandigarh. The fluke (Fig. 1) measures 1·946–2·058 mm. in length and 0·518–0·532 mm. in maximum breadth which occurs in the region above the acetabulum. The head collar is well developed, reniform, with a single, dorsally interrupted row of spines (Fig. 2). These spines, on the left side of the collar are eleven in number, whereas on its right side they are twelve. The spines are fairly large in size. The body itself is also spinose.

The oral sucker measures 0·061–0·091 × 0·061–0·126 mm. The ventral sucker, almost circular in outline, is muscular measuring 0·28–0·294 × 0·266–0·273 mm. and is situated more near the midbody than the anterior end. The ratio between the oral and the ventral suckers is 1 : 3·07–4·69. The ratio between the length of the ventral sucker and that of the body is 1 : 7.

The mouth leads into a short pre-pharynx which is followed by a globular, fairly muscular pharynx measuring 0·061–0·084 × 0·07–0·084 mm. The oesophagus is partly distinct as it was mostly covered over by the vitellaria intruding into the forebody. Similarly, the entire course of intestinal caeca could not be clearly traced due to the dense distribution of the vitellaria.

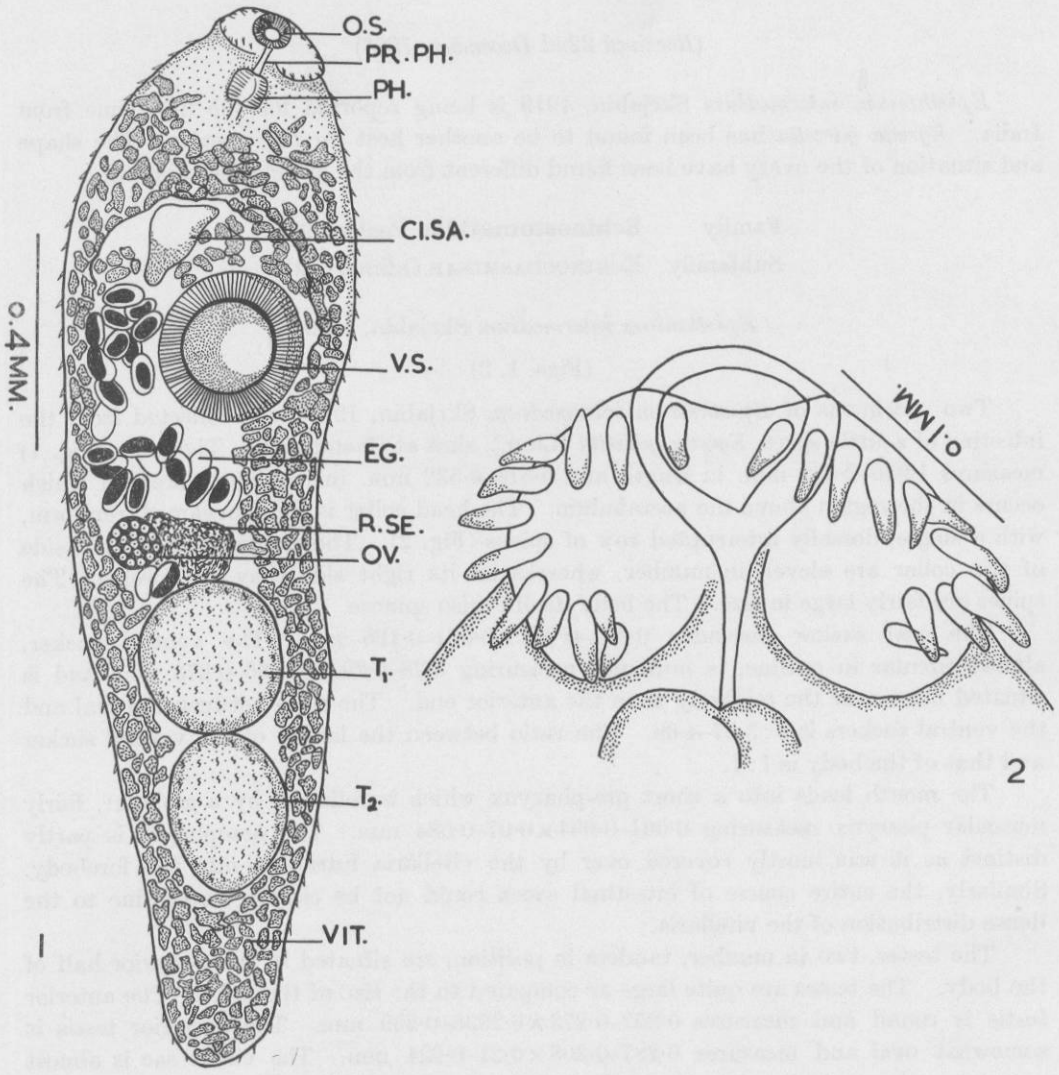
The testes, two in number, tandem in position, are situated in the posterior half of the body. The testes are quite large as compared to the size of the fluke. The anterior testis is round and measures 0·252–0·273 × 0·2338–0·259 mm. The posterior testis is somewhat oval and measures 0·287–0·308 × 0·21–0·224 mm. The cirrus sac is almost anterior to the ventral sucker, situated a little right to the median line.

The ovary is situated to the right of the median line at the middle of the body and measures 0·084 × 0·084–0·091 mm. The eggs are large, yellow in colour and each measures 0·07 × 0·042–0·049 mm. The genital pore is pre-acetabular and post-bifurcal.

The vitelline follicles are profusely developed. They occupy all the available space in the forebody, whereas in the hindbody they extend laterally covering the intestinal

caeca. The vitellaria of the two sides meet behind the posterior testis, thus filling the entire post-testicular space.

Host: *Egretta garzetta* (Linn.)
Habitat: Intestine
Locality: Chandigarh



FIGS. 1 and 2. 1, whole mount of *Episthmium intermedium* Skrjabin, 1929; 2, anterior portion of the same showing magnified spines.

Abbreviations :

CI.SA.—cirrus sac; *EG.*—egg; *O.S.*—oral sucker; *OV.*—ovary; *PH.*—pharynx; *PR.PH.*—prepharynx; *R.SE.*—receptaculum seminis; T_1—anterior testis; T_2—posterior testis; *V.S.*—ventral sucker; *VIT.*—vitellaria.

Remarks: Up till now no representative of the genus *Episthmium* Lühe, 1909 has been reported from India. Therefore, *Episthmium intermedium* Skrjabin, 1919 is being described for the first time from this country. The observations of the author with respect to this species differ slightly from those of the original description in measurements of the body and its organs. The shape and situation of the ovary are also different. In the original sketch of the species, the ovary is somewhat triangular in shape and is situated in the posterior region of the fore-body, whereas in the specimens studied by the author it is rounded and is placed just at the middle of the body. A new host *Egretta garzetta* has been recorded for this species.

[Yamaguti, 1958 in his 'Systema Helmithum, The Digenetic Trematodes', Volume II (Pl. 69 ; Fig. 829), has wrongly referred to the diagram of *Episthmium intermedium* Skrjabin, 1919 as *Episthmium bursicola* (Creplin, 1837) Odhner, 1910].

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