On two unknown and one known monogenetic trematodes, from the gills of *Wallago attu* Schneider

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Abstract. Two new monogenetic trematodes, *Thaparocleidus yogendraii* n.sp., *T. jaini* n.sp. and *Dactylogyrus kontii* Tripathi, 1957 have been described from the gills of *Wallago attu* Schneider at Lucknow. *Thaparocleidus yogendraii* is characterised by the shape of ventral anchor, number of marginal hooklets and absence of a handle in the accessory piece of cirrus and *T. jaini* by the shape and arrangement of anchors and marginal hooklets. Moreover, certain features of interest have been added to the original description of *D. kontii* Tripathi, 1957.

Keywords. *Thaparocleidus yogendraii* n.sp.; *T. jaini* n.sp.; *Dactylogyrus kontii* Tripathi; monogeneans; *Wallago attu*.

1. *Thaparocleidus yogendraii* n. sp. (Figures 1-3)

Out of 134 fish of *Wallago attu* Schneider, examined at Lucknow, the gills of one of them were found infected with a dozen specimens of the rare genus *Thaparocleidus* Jain, 1952. On subsequent study, these monogeneans appeared to be new and are described in this paper as *Thaparocleidus yogendraii* n. sp., named in honour of Dr Y R Tripathi, Former Director, Fisheries, Lucknow, for his outstanding contributions in the field of monogenetic trematodes.

The body is elongated, with clearly demarcated haptor at the posterior end. The body proper measures 0.62-0.78 x 0.10-0.22 mm. The head is four lobed, bearing 4 pairs of head organs and two pairs of eye spots. The pharynx is oval, muscular and measures 0.04-0.05 x 0.05-0.07 mm. The intestinal caeca are united posteriorly. The haptor is somewhat disc-shaped and measures 0.06-0.08 mm. It is armed with two pairs of dissimilar anchors and marginal hooklets. The two dorsal anchors are somewhat broad at the base, with a pointed and curved tip. They are connected together by a transverse bar. Similarly, the ventral anchors are two, thin, rod like structures, with curved tip and measure 0.03-0.04 mm. They are joined together by a pair of transverse bars. The two, thin transverse bars of ventral side, meet on mid ventral line, each measuring 0.035-0.046 mm. The marginal hooklets are 6-10 in number and each measures 0.01-0.02 mm.
The testis is elongated, overlapping the ovary and measures 0.175-0.181 x 0.056-0.061 mm. The vas deferens is sigmoid. The vesicula seminalis is tubular, elongated and extends obliquely up to the intestinal bifurcation. It measures 0.07-0.10 mm. The cirrus is tubular, looped and measures 0.12-0.19 mm. The cirrus bears an accessory piece which is horse-shoe shaped but the handle is absent. The two prostatic reservoirs are present. The ovary is round to oval and measures 0.20-0.25 x 0.05-0.06 mm. A receptaculum seminis is present. A large hyaline gland, with star shaped pigments, is present in the region of receptaculum seminis. The vaginal duct is tubular, looped, cuticularized and sinistral. The vitellaria extend throughout the body, from the pharyngeal region up to the haptor.

1.1. Discussion

As far as the author is aware, so far only one species has been described from the gills of Wallago attu viz. T. wallagonius Jain, 1952. The present form differs from T. wallagonius in the shape of ventral anchors, number of marginal hooklets and absence of a handle in the accessory piece of cirrus. In the light of present study, the generic diagnosis of Thaparocleidus is amended as follows:


2. Thaparocleidus jaini n. sp. (Figures 4 to 7)

The gills of only one specimen of Wallago attu Schneider, out of 134 examined, was found infected with half a dozen specimens of a new species viz. T. jaini, named in honour of Dr S L Jain of Indian Statistical Institute, Calcutta, for his outstanding contribution on monogeneans.

Body is elongated and measures 0.65-0.67 x 0.12-0.13 mm. The haptor is clearly distinguished from the body proper and measures 0.10-0.12 x 0.07-0.08 mm. It is disc-shaped and armed with two pairs of unequal anchors and marginal hooklets. The two dorsal anchors are with bifid, broad base and pointed curved tip. Each measures 0.045-0.050 mm. They are connected together by a V-shaped transverse bar, measuring 0.021-0.025 mm. The ventral anchors are two in number. They are rod like with pointed tips. Each ventral anchor measures 0.028-0.030 mm. They are supported by a pair of similar transverse bar. The basal portions of these two bars are folded, which support the ventral hook of each side. The tip of ventral anchor is sickle-shaped. The two transverse bars do not meet in the mid ventral line. They measure 0.02-0.03 mm. The marginal hooklets are 6-8 in number, sickle-shaped and measure 0.009-0.01 mm.