

NOTES ON UROCLEIDOIDES RETICULATUS MIZELLE ET PRICE, 1964 (MONOGENEA : ANCYROCEPHALINAE)

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Abstract. *Urocleidoides reticulatus* Mizelle et Price, 1964 is comparatively described from the gills of guppies and "Black Molly" (Poeciliidae) from aquaria in Czechoslovakia. "Black Molly" (*Molliniesia* sp.) represents a new host record for this parasite.

In 1964, Mizelle and Price described a new species and a new genus of the subfamily Ancyrocephalinae — *Urocleidoides reticulatus* from the gills of *Poecilia reticulata* (Peters) (Cyprinodontiformes: Poeciliidae) from Capitol Aquarium, Sacramento, California. Trinidad was reported as the type locality.

Kritsky et al. (1986) state that *U. reticulatus* has not been found on *P. reticulata* from native habitats, but only on aquarium specimens of this species (Kohn and Paperna 1964, Lucký 1972) and that except *U. reticulatus*, all members of the genus *Urocleidoides* have been reported only from fishes of the superfamily Characoidea (Cypriniformes). The authors therefore assume that the infestation of *P. reticulata* may represent a spurious infestation and suggest that "...studies of the gill parasites of other characid fishes commonly found in community-type aquaria may be necessary to demonstrate the natural host of *U. reticulatus*".

In the period 1980—1983, fishes in several private aquaria were examined on occasion in Prague and České Budějovice (Czechoslovakia). *U. reticulatus* infestation was recorded on the gills of *P. reticulata* and also of "Black Molly". The morphological and metrical characterization of these parasites, as well as the evaluation of their finding on a new host species, is the subject of this paper.

MATERIALS AND METHODS

Twenty two specimens of *U. reticulatus* were obtained from the gill filaments of 7 out of 11 *P. reticulata* and 2 out of 3 "Black Molly" examined. The fish were examined immediately after extermination using the method described earlier (Ergens and Lom 1970). The parasites were fixed in ammonium picrate — glycerin mixture, dehydrated in alcohol and mounted in Canada balsam. Gussev's (1985) methods were used for measuring the sclerotized elements. Observations were made with a phase contrast microscope and illustrations were prepared with the aid of a camera lucida. All measurements are expressed in millimetres. The material is deposited in the collection of the Institute of Parasitology, Czechoslovak Academy of Sciences, České Budějovice.

Description of the found specimens of *U. reticulatus*

Dorsal anchors: outer length 0.020—0.021, inner length 0.018—0.019, length of their shaft 0.015, point 0.007—0.008, outer root 0.003—0.005, inner root 0.008—0.009. Ventral anchors: outer length 0.020—0.021, inner length 0.020—0.021, length of their shaft 0.017—0.018, point 0.008—0.009, outer root 0.003, inner root 0.008—0.009. Measurements of dorsal bar 0.004—0.005 × 0.023—0.025, ventral bar measures

0.002—0.003 × 0.023—0.025. Total length of marginal hooks 0.010. Copulatory complex composed of a coiled cirrus, base and accessory piece. Total length of copulatory complex 0.039—0.046. Length of vaginal sclerite about 0.018.

DISCUSSION

As it follows from the above description and illustration (Fig. 1) the measurements and shape of individual hard parts of opisthaptor of the specimens found by us are almost constant and are not affected by the host species. The same concerns the vaginal

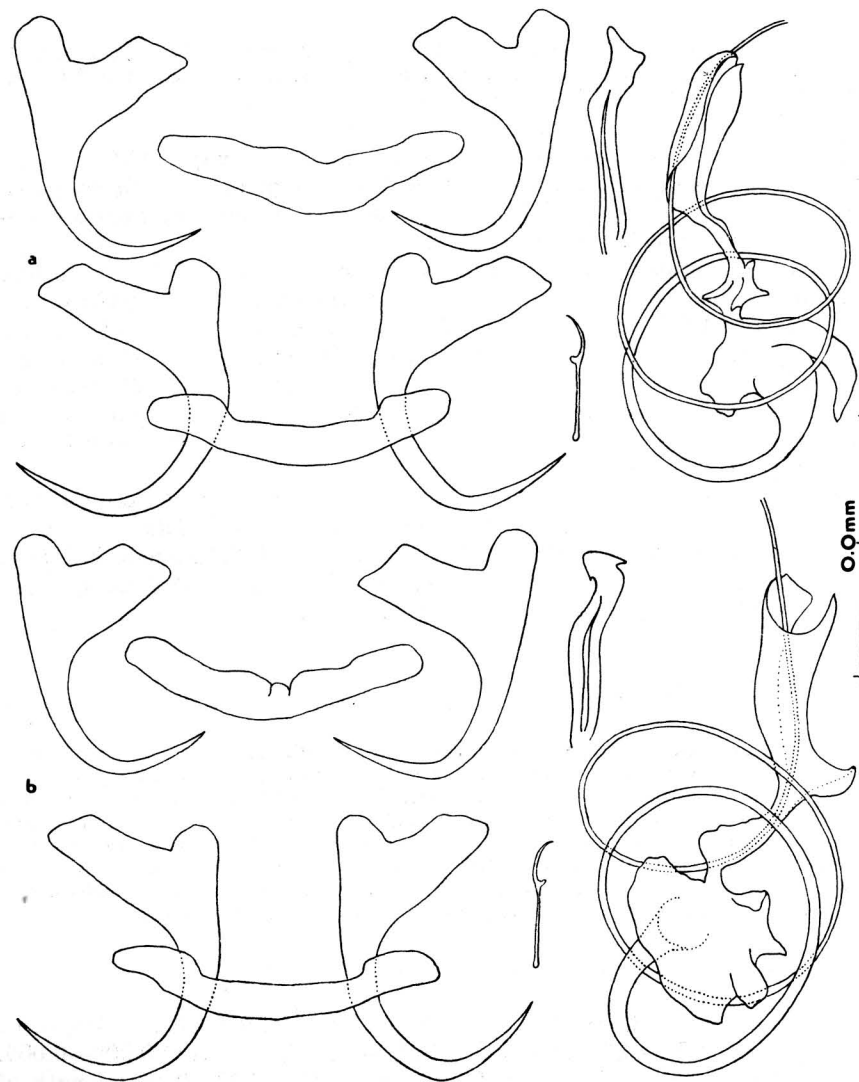


Fig. 1. Hard parts of haptor, vaginal sclerite and copulatory organ of *Urocleidoides reticulatus* Mizelle et Price, 1964. a — from *Poecilia reticulata*, b — from "Black Molly".

sclerite and even the copulatory organ, the total length of which varies only in relation to the position of the copulatory tube.

According to Sterba (1959) it is not always clear whether the aquarium specimens of "Black Molly" are the form *Molliniesia latipina* La Seur or *M. sphenops* (Cuvier et Valenciennes). Nevertheless, it represents another member of the family Poeciliidae, which can be infected by *U. reticulatus* to the same extent as guppies. This fact somewhat complicates the considerations by Kritsky et al. (1986) about the natural host of *U. reticulatus*. If this host were really some of the representatives of the characoid fishes, then the infestation of "Black Molly" would be a spurious as well, be the source of infestation a spurious (wrong) or natural (true) host. In this relation it should be noted that both the guppies and "Black Molly" harbouring *U. reticulatus* originated from two types of aquarium breeding. In one case there were only common Poeciliidae (*P. reticulata*, "Black Molly", *Xiphophorus helleri* Heckel), whereas in the other one there were mixed species including Poeciliidae and Characidae.

We could not obtain details of the anatomy of the reproductive system necessary for the definitive completion of the diagnosis of the genus *Urocleidoides*, because all parasites were fixed by the method enabling a detailed study of the hard parts of haptor, copulatory organ and vaginal sclerite, but not enabling to observe the structure of the internal organ system.

ЗАМЕЧАНИЕ О *UROCLEIDOIDES RETICULATUS* MIZELLE ET PRICE, 1964 (MONOGENEA: ANCYROCEPHALINAE)

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Резюме. Дано описание *Urocleidoides reticulatus* с хабр *Poecilia reticulata* и *Molliniesia* sp. из аквариумов в Чехословакии. *Molliniesia* sp. является новым хозяином этого паразита.

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