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First Report of Monogeneans in Developed Tilapias in Veterinaria of Cuba

Fayme Poulin

Abstract: The parasitologic test of Oreochromis aureus (Steindachner, 1864); Oreochromis niloticus (Linnaeus, 1758) and cross breed red of tilapia (Oreochromis mossambicus (Peters, 1852) x Oreochromis spp.) stomach from serious enclosure culture, originating from various freshwater supplies of Cuba, uncovered the nearness just because of two agents having a place Enterogyrus Paperna, 1963 (Monogenea: Ancyrocephalidae): Enterogyrus malmbergi bilong, 1988, and Enterogyrus coronatus Pariselle, Lambert and Euzet, 1991. The gathered parasites were fixed in ammonium-picrate arrangement and glycerine as per Malmberg (1957) so as to mention objective fact on sclerotised parts and were mounted in glycerine-jello for the biometric contemplates. The Digital pictures and morfometric information are introduced for every specie. The markers biological (predominance, force, wealth) are broke down of these species in development tilapias in Cuba in the long periods of May and June of 2009. This investigation comprises the primary report of monogeneans of the genera Enterogyrus for ciclids in Cuba.

Keywords: Enterogyrus; Enterogyrus malmbergi; Enterogyrus coronatus; Ancyrocephalidae; Oreochromis aureus; Oreochromis niloticus; red tilapia; commonness; force; Cuba

Introduction

Among the parasites that most influence the concentrated development of tilapia in Cuba, are the delegates of the Monogenea class (Van Beneden, 1858), supported by the administration of high planting densities, by their immediate life cycle and good biological conditions for its improvement (Prieto et al. 1993; Vidal-Martínez et al., 2002).

The majority of the types of monogeneous parasites of fish are ectoparasites of gills, a couple are found in the skin, just like the instance of delegates of the Gyrodactylidae family and a little gathering are endoparasites situated in the throat (Diplectanotrema Johnston and Tiegs, 1922); urinary bladder and ureters (Acolpenteron Fiscthal and Allison, 1940; Urogyrus cichlidarum Bilong, Birgi and Euzet, 1994); nasal hole (Dactylogyrus nasalis Strelkov and Kha Ki, 1964); oviducts (Dactylogyrus n. sp. Yukhimenko and Danilov, 1988) and stomach (Enterogyrus Paperna, 1963) (Paperna 1996; Pariselle et al., 1991).

The delegates of the sort Enterogyrus are endoparasites of the stomach and front piece of the digestive system of different cichlid species. So as to add to the better information on the fauna of parasitic helminths of Cuba, we portray right now new records of monogeneos of this class for the island, the species Enterogyrus malmbergi bilong, 1988 and E. coronatus Pariselle, Lambert and Euzet , 1991.

Results and discussion

Two types of the variety Enterogyrus, Paperna, 1963, were recognized overrunning stomach: Enterogyrus malmbergi Bilong, 1988, in Oreochromis niloticus (Linnaeus, 1758); Oreochromis aureus (Steindachner, 1864) and red half breeds of tilapia (O. mossambicus (Peters, 1852) x Oreochromis spp.) And E. coronatus Pariselle, Lambert and Euzet, 1991, in red crossovers of tilapia (O. mossambicus x Oreochromis spp .).

Conclusions

The morphological and biometric attributes of the examples gathered match with the class Enterogyrus Paperna, 1963, and compare to those revealed by Bilong (1988) for Oreochromis niloticus (Linnaeus, 1758, for example, Enterogyrus malmbergi; and by Pariselle et al. (1991) for Tilapia guineensis Bleeker, 1862, as Enterogyrus coronatus.

In the morphometric information of the two species alluded to right now contrasted and those offered by the creators for these equivalent species in the equivalent and various hosts. On account of Enterogyrus malmbergi, a few varieties were seen corresponding to those displayed by Bilong (1988); the parasites gathered in Cuba were seen as more noteworthy in the biometrics of the dorsal snares (a, b, c, d, e); ventral snares (a, b, c, d, e); ventral bar and minor miniaturized scale snares. This variety can be ascribed to the methods utilized for its obsession and get together, which involve leveling of the example. The remainder of the morphological attributes introduced were fundamentally the same as.

The trademark structure and association of the Opistohaptor of Enterogyrus coronatus Pariselle, Lambert and Euzet, 1991, very much characterized from the remainder of the body by a slight choking and separated into two areas, a pedunculated extended back (incorporates the dorsal and ventral snares, the ventral transverse bar V-molded, and ventral miniaturized scale snares I and II); and a past one as a bulb that juts in width of the body and twice as wide as the back (it incorporates the minimal small scale snares III and IV (dorsal) and from V to VII (ventral)); the thick and transversely striated fingernail skin; just as the commonplace type of ring of the copulatory organ, coming up short on an embellishment piece; Together with the area inside the host (stomach) and the biometrics performed on the gathered parasites, they made their distinguishing proof conceivable. The morphometric estimations displayed right now (2) for red half breeds of tilapia in Cuba are like the qualities shown by Pariselle et al. (1991) for Tilapia guineensis Bleeker, 1862, from Ivory Coast.

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