Knowledgeable Research *ISSN 2583-6633* Vol.02, No.07, February, 2024
An International Peer-Reviewed Multidisciplinary Journal

Knowledgeable Research
ISSN 2583-6633
Vol.02, No.07, February,2024
http://knowledgeableresearch.com/

Yogendrotrema multiclampii n.sp. (Trematoda: Microcotylidae) from the Gill of a fresh water fish Mystus vittatus (Bloch.)"

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Abstract: Yogendrotrema multiclampii n.sp. from a fresh water Mystus vittatus (Bloch.) is described from River Kailash, Faridpur, Bareilly (India). It is distinguished from other species in having 30-35 pairs of clamps, 8-9 spines at genital atrium and in the extension of vitelline follicles. A key to the species of the genus Yogendrotrema Kumar and Agarwal 1983 is provided.

Keywords: *Microcatylidae, Yogendrotrema, Trematode, Mystus vittatus.*

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INTRODUCTION

Attention has been focused on incidence of infestation of monogenetic trematode parasites (Kumar and Agarwal 1983) & Tripathi 1991, detailed descriptions of trematode parasites from fish have been ignored. The genus Yogendrotrema, tripathi & Johari 1996, has been recorded from fish. During a survey on trematode fauna of fresh water fishes of Bareilly, Uttar Pradesh, India, the authors collected a new trematode species from the gills of Mystus vittatus (Bloch.) obtained from Kailash river at Bareilly. In all 120 fishes were examined, out of 47 were found infected with this species.

MATERIALS AND METHODS

Collection and maintenance of host

Live specimens of Mystus Vittatus were collected from river Kailash, Barilly and were transported alive to the laboratory in large sized containers. They were maintained in aquaria under proper aeration and fed on commercial pellets till sacrificed.

Light microscopy studies

An identification of the collected trematode monogentic will be done by making their permanent preprations & by the techniques proposed by Agarwal & Verma (1972), The Trematode collect from gills were fixed in alcohal- formal acetic acid, routinely stain in Borax Carmine & mounted in DPX according to Gupta etal 2016. Drawings were made with the aid of a cameral lucida and measurements with a measuring ocular micrometer.

Received Date: 08.02.2024
Publication Date: 29.02.20204

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RESULT

Yogendrotrema multiclampii n.sp. (Fig. ABC)

DESCRIPTION

Body elongated gradually tapering at anterior end, broader posteiorly and becomes narrower to form haptor. Anterior suckers oval, muscular and aseptate. Haptor bears an equal number of clamps on the two sides and thus it is typical microcotylid type. 30 pairs of clamps are present, Prepharynx absent. Pharynx globular and muscular. Oesophagus short, tubular and divides into two intestinal caeca reaching upto the origin of haptor. Each intestinal caecum gives numerous blind branches on the outer margin throughout its length except posterior part which is without diverticulae. In the living specimens it is observed that the intestinal caeca are filled with the host blood and in the fixed material the intestinal wall shows the presence of heavily pigmentation due to partly digested haemoglobin. Tests having 25-30 follicles, oval or subspherical located in the post-equatorial region of the main body. Vas deferens long and reach to opens in the genital atrium. Genital atrium armed with 8-9 radially arranged spines. Each spine has a broad base and pointed tip. Ovary median, pre-equatorial and convoluted. Vaginal pore absent. Vitelline follicles extend from oesophageal region upto the end of untestinal caeca. The follicles of the two lateral sides are coextensive with intestinal caeca. Eggs, oval, yellow and operculated without polar filament.

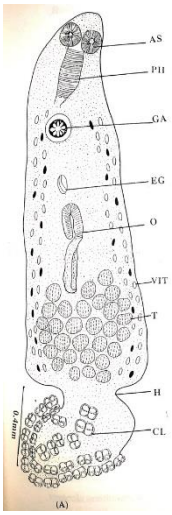
MEASUREMENTS (All measurements are in m.m.)

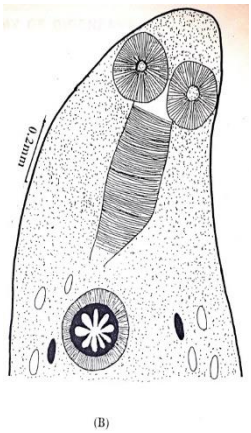
Body, 3.01-3.04 width; 0.63-0.69; haptor, 0.51-0.57x0.42-0.45; clamps, 0.095-0.15x0.109-0.16; anterior sucker, 0.137-0.164x0.178-0.219; pharynx, 0.21-0.39x0.16-0.41; tests, 0.109-0.123x0.123-0.137; gential artrium, 0.19-0.20x0.20-0.21; spines, 0.015; ovary, 0.095-0.58x0.109-0.60; egg, 0.09-0.13x0.10-0.15.

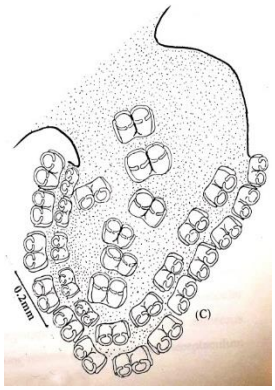
DISCUSSION

The genus ***Yogendrotrema*** was ereected by Kumar and Agarwal (1983) with the type species ***Y. rajghatai*** from the gills of fresh water fish **Mugil corsula** from river Ganges at Varanasi. Later on Tripathi (1991) added **Y. vittatusi** collected from the gill filaments of **Mystus vittatus** (B1.)

The present form differs from **Y. rajghatai** Kumar and Agarwal 1983 and **Y. vittatusi** Tripathi, 1991 in having 30-35 pairs of clamps, 8-9 spines at genital atrium and in the extension of vitelline follicles.







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Key to the species of the genus Yogendrotrema Kumar and Agarwal, 1983

22 pairs of clamps of Haptor, testes with 13-15 follicles.
.....
Y. rajghatai Kumar and Agarwal, 1983.
25 pairs of clamps of Haptor, testes with 22-25 follicles.
.....
Y. vittatusi Tripathi, 1991
30 pairs of clamps of Haptor, testes with 25-30 follicles.
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Y. multiclampii Sp. nov.

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