Studies on Cestode Genus *Circumoncobothrium yeldarensis* n. sp. from *Mastacembelus armatus* at Yeldari reservoir tal. Jintur Dist. Parbhani (M.S.) India.
Thakare B. G.

Department of Zoology, D. S. M. College, Jintur.-431509 Dist. Parbhani.

**ABSTRACT**

The present worm under discussion differ from the scolex having long, conical, bluntly rounded 6.248x0.893x1.607; the testes are oval in shape and about 500-600 number scattered in 3-4 rows central medulla, 0.321x0.178 ovary bilobed, butterfly shaped, the vagina straight, curved tube; seminal vesicles are small, oval, ootype; vitellaria are small in size, corticular in region, pre-ovarian position, 4-5 rows in on each side of the proglotides.

Key word: *Circumoncobothrium yeldarensis*, Yeldari reservoir *M. aramatus*.

**I. INTRODUCTION**

Eleven specimens of the cestode parasites were collected from the intestine of the fresh water fish *Mastacembelus armatus* (Lacepede, 1800) at Yeldari Reservoir Tq. Jintur Dist. Parbhani, M.S. India; in the month of August 2012. The cestode were flattened and preserved in 4% formalin and stained with Hari’s Haematoxylin, mounted D.P.X. and prepared whole mount slides for further anatomical studies. The drawings are made with the help of camera lucida. All the measurements are millimetres. The genus *Circumoncobothrium* was studied by Shinde et.al (1968) later on Deshmukh and Chincholikar added from the intestine of freshwater fish, *Ophiocephalus leucopunctatus*, as type species *Circumoncobothrium ophiocephali*. Later on various workers studied. Shah Shabbier Ahmed Yasin (2010) and Chavan, S. P. et.al (2009) reported a new species *Circumoncobothrium paithenensis* from fresh water fish *Mastacembelus armatus*. Then Menkudale et.al, (2010) added *Circumoncobothrium thapari* from fresh water fish *Ophiocephalus striatus*. Then Pardeshi et.al (2011) reported a new species *Circumoncobothrium jadhavae* from the fresh water fish *Mastacembelus armatus* and then Kadam and Dhoble (2011) added *Circumoncobothrium clariasi* from *Clarias batrachus*. Later on no species is added to this genus.

**II. MATERIALS AND METHODS**

For the taxonomical study of cestode parasites the intestine of fishes were collected from different localities of Yeldari reservoir Jintur, Parbhani District (M.S.) during two annual cycles for collection of cestode parasites for the seasonal variation in section:-A. The parasites were collected from infected intestine and recorded infected and non-infected hosts. The collected worms were washed in Distilled water to render them from intestinal contents. The cestode was preserved in 4% formalin, Harris Haematoxylin stain was used for cestode staining. The worms were passed through various alcoholic grades i.e. 30%, 50%,70%,90% and 100%, cleared in xylene and mounted in D.P.X and whole mount slides were prepared for anatomical studies in section-A.The identification done by systema Helminthum – Voll –II by Yamagutti (1958).
III. DESCRIPTION

Description based on the figure A&B, the scolex is medium in size, elongated, narrow at the apex, broader at the base, same what triangular in shape with rostellum two bothria and measure 5 two 7 in number. Rostellar hooks are 27 in number, single prolonged lancet shaped and measure 0.14-0.15 and 0.23 in width. The testes are oval in shaped, numerous 80-85 in number and scattered throughout the segment. Cirrus pouch small, oval, in centre made region of the proglotibes are ovarian and measure 0.028 in length. Cirrus is thin, Coiled curved, vas- deferens thin, curved, short and Measure 0.047 in length and 0.006 in width ovary compact, Signal mass, with numerous acini, position in just middle segment, not connected by is isthmus, situated one third region of the proglottid anterior and measure 0.047 in lent. The virginal is thin arises from genital pore and opens in to ootype and measures 0.17 in length and 0.005 in width genital pore small rounded centre of the segment and measure 0.014 in diameter. Vitellaria are marginal follicular, small in size and situated in between longitudinal excretory canal and measure 0.003 in width. The uterine sac is absent.

IV. RESULT AND DISCUSSION

After going through discussion the worm having about 80 testes 70—80 in number comes closer to Circunconcobothrium ophiocephali Shinde, et.al 1968.but differ from the same in Scolex distant majors 0.81×0.51; the number of hooks 80; large and smaller in large size major about 0.052–0.055 &0.0024—0.0048; Testes scattered throughout segment and major 0.20—0.30 in diameter. Ovary having conical mass ; irregular shaped lobbies with 2—3 well developed acini; situated near the posterior border ; vitellaria 14—15 rows on each side 0f the proglottid so reported from the Ophiocephalus leucopunctatus further it differ from Circunconcobothrium baimaii wongsawad and Jadhav 1993 ; scolex pear-shaped ,measures 0.075—1.05x1.25—1.45;and testes 80—100 number. Vitellaria granular; also differ from circumconcobothrium yamagutti,1990, in having scolex 2.35 x 0.455; numeral of rostellar hooks 86; the testes number 120—150; vitellaria granular; On the basis of many forms is required as new species and hence name is proposed circumconcobothrium Yeldarensis n.sp. The present worm under discussion, differs from in having scolex bluntly rounded, 6.248x0.893-1.607; testes number 460-480,oval, scattered in central medulla, 0.321×0.178; ovary bilobed,butterfly shaped vagina straight, curved tube; receptaculum seminis small, oval; ootyperound; vitellaria small in size , cortical in region, pre-ovarian in position,4-5 in rows on each side. The present cestode,differs which is having scolex long, conical, blunt, testes number 500-600, scattered in3-4 rows on each side. The present worm under discussion, differ.(described earlier) in having head spatulae, 0.178x0.142; testes 417-425, round; ovary large, butterfly shaped, 0.134x0.149; ootype medium in size, 0.065x0.029; vitellaria are granular and 1-3 rows on each lateral side of the proglotides.

Types of species -- Circumconcobothrium Yeldarensis n.sp
Host -- Mastacembelus armatus (Lacepede, 1800)
Habitat --- Intestine
Collection -- August 2012.
Infected Intestine of M. aramatus. Cestode in Petri Dish

V. ACKNOWLEDGEMENT

The author is thanks to U.G.C.—H.R.D. File No. 47-1884/11 (WRO) Govt. of India Regional office Pune, providing M. R. P. and Support to Finance Authority and encourage to Publish Research Paper and Principal, D. S. M. College, Jintur. Providing laboratory facilities during the work.

BIBLIOGRAPHY


