

**A NEW PROTOCEPHALUS SANGAMESHWARIENSIS N.SP.
(PROTOCEPHALIDAE : LARUE, 1911) CESTODE PARASITE FROM
MASTACEMBELLUS ARMATUS AT RATNAGIRI**

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The present communication deals with a new species of the genus *Proteocephalus*, Weinland, 1958 *Protocephalus sangameshwariensis* n. sp. It is differentiated from the earlier known species of the genus with the characters like anteriorly conical scolex, five suckers, large neck, testes 140-144 in number, W-shaped ovary, vagina thin tube, short receptaculum seminis, rounded ootype, marginal genital pore and granular vitellaria.

Key words : *Proteocephalus*, cestode, scolex, mature segments, Ratnagiri,

INTRODUCTION

The genus *Proteocephalus* was established by Weinland 1958 as a type species *Proteocephalus filicollis* (Rud, 1802) from *Gasterosteus aculeatus*, *G. pungitius* from Europe. Later on Ralph V. Bangham, 1925 added two new species to this genus, *P. fulvialis* from *Micropterus dolomieu* and *P. osburni* from small mouth bass. Verma (1928) described one new species of this genus *P. vitellaris* from *Bagarius yarrelli*. MacLulich (1943) added one more new species to this genus, *Proteocephalus parallacticus* from *Cirstivomer namaycush* at Canada.

MATERIALS AND METHODS

The present study deals survey of cestode parasites from fresh water fishes like *Mastacembellus armatus* from Bav Shastri & Narangi at Sangameshwar, Dist. Ratnagiri during January 2010 to December 2010 and brought in labrotery. The worms were flattened, preserved in 4% formalin, stained with Harris hematoxyline, passed through various alcoholic grades, cleared in xylol, mounted in D.P.X. All drawing were drawn to scale with the aid of camera lucida and whole mount slides were prepared for anatomical and morphological studies. All measurements are in millimeters.

DESCRIPTION

The present worm were thin, long measures 35 in length and 0.8 in breadth (Fig. 1). The scolex is large in size, anteriorly conical and broad at the posterior, measures 0.573 (0.570 - 0.577) in length and 0.327 (0.303 - 0.351) in breadth. The scolex bears five suckers, out of these, fifth sucker towards anterior side measures 0.204 (0.184 - 0.224) in length and 0.074 (0.048 - 0.10) in breadth, where as remaining four are scattered, oval measures 0.201 (0.184 - 0.218) in length and 0.072 (0.048 - 0.097) in breadth. The cirrus pouch is medium in size, oval in shape, placed in the middle of the segment, measures 0.215 (0.189 - 0.242) in length and 0.98 (0.037 - 0.159) in breadth. The cirrus is thin, curved, measures 0.181 (0.174 - 0.189) in length, 0.075 (0.037 - 0.113) in breadth. The

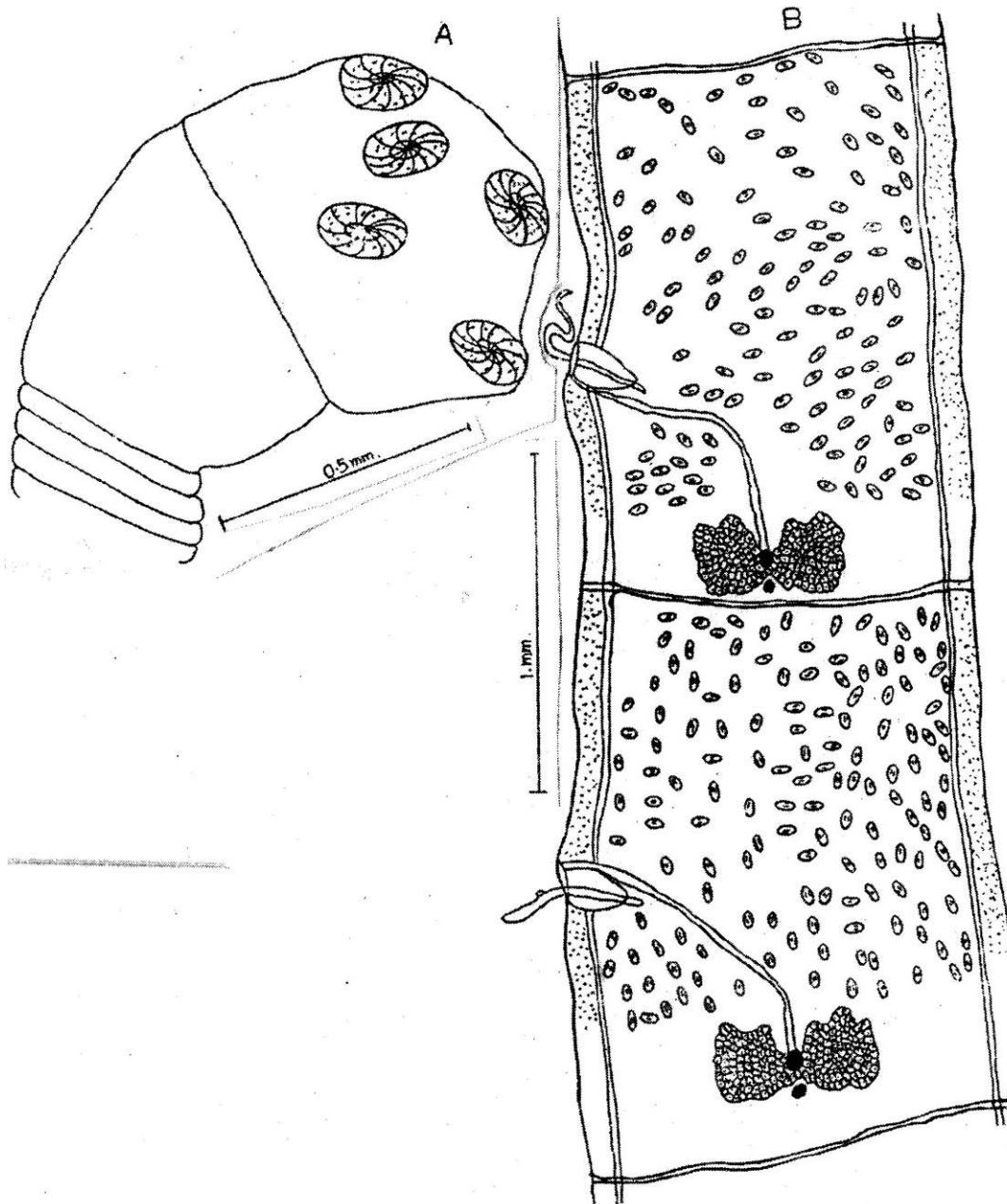


Fig. 1 : *Proteocephalus sangameshwariensis* n.sp. A. Scolex; B. Mature segment.

vas deference is short, thin posteriorly directed measures 0.029 (0.022 - 0.037) in length and 0.014 (0.007 - 0.022) in breadth. Ovary is bilobed "W" shaped, medium in size, situated near the posterior margin of the segment, measures 0.693 (0.666 - 0.720) in length and 0.412 (0.393 - 0.431) in breadth. The vagina is a thin tube, start from the genital pore, anterior to the cirrus pouch, swollen proximally, thin distally measures 0.681 (0.651 - 0.712) in length and 0.014 (0.007 - 0.022) in breadth, form receptaculum

seminis, which is short, opens in to oocyte, measures 0.352 (0.341 - 0.363) in length and 0.014 (0.007 - 0.022) in breadth, ootype is rounded, measures 0.037 in diameter. The genital pore is marginal, measures 0.090 (0.083 - 0.098) in length and 0.011 (0.007 - 0.015) in breadth. Vitellaria are granular.

RESULTS AND DISCUSSION

The present worm has anteriorly conical and posteriorly broad scolex, measures 0.573 (0.570 - 0.577) in length and 0.327 (0.303 - 0.351) in breadth. It differs from *P. fulvialilis* (Ralph V. Bangham, 1925), number of testes 73 - 98, vitellaria follicular; from *P. osburni* (Ralph V. Bangham, 1925), scolex small, number of testes 50 - 60, ductus ejaculatorius are coiled in cirrus pouch; from *P. vitellaris* (Verma, 1928), mature segment broader than long, testes 257 in numbers, cirrus pouch convoluted tube like structure; from *P. parallacticus*, (MacLulich, 1943), testes 42 - 92 in numbers, ovary bilobed, vitellaria follicular. It differs (*P. longicollis*), unsegmented body, without genital organ 984µm long and 243µm width, suckers four, developed apical organ. The above differentiating characters are valid enough to accommodate these worms as a new species *Proteocephalus sangameshwariensis* n.sp. is named after the known river Narangi, Bav and Shastri river from Sangameshwar where the author has collected the worms.

Type species : *Proteocephalus sangameshwariensis* n.sp. (Protocephalidae, Lartue, 1911)

Host : *Mastacembellus armatus*

Habitat : Intestine

Locality : Sangameshwar, Dist. Ratnagiri, M.S.

Period of collection : January 2010 to December 2010

ACKNOWLEDGEMENT

The authors are grateful to the Principal, Art, Commerce & Science College, Sonai Tal. Newasa, Dist. Ahmednagar, M.S., India for providing the research facilities.

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(Manuscript Received : July 2013)