Eucestoda
Proteocephalidea
Proteocephalidae
Proteocephalus

Wardle, McLeod and Radinovsky, 1974.
Mola, 1928.
La Rue, 1911.
Weinland, 1858.

Proteocephalus parallacticus MacLulich, 1943.

DESCRIPTION

Eight specimens of the cestode parasite, were collected from the intestine of a frog, Rana tigrina at Buldhana, Tq. Buldhana, Dist. Buldhana, M.S. India in the month of July, 2005.

The worms were long, with scolex, numerous immature and mature segments, worms were stained with Harris Haematoxyline, passed through graded alcohol, cleared in xylene, mounted in D.P.X. and whole mount slides were prepared, for further anatomical studies.

The scolex is medium in size, oval in shape, longer than broad, broad anteriorly, narrow posteriorly, distinctly marked off from the strobila, with five suckers and measures 0.270 to 0.401 in length and 0.215 to 0.312 in breadth. The four suckers are large in size, oval in shape, highly muscular, four suckers almost in a line,
slightly overlapping on each other and forming two pairs, one pair in each half of the scolex, whereas the fifth suckers is present at the apex, which is small in size, oval in shape, with thin musculature, known as apical sucker and measures 0.101 to 0.102 in length and 0.073 to 0.104 in breadth.

The neck is medium in length, wide, narrow anteriorly, broad posteriorly and measures 0.351 to 0.502 in length and 0.229 to 0.480 in breadth.

The mature segments are medium in size, rectangular in shape, longer than broad, with straight lateral margins and measures 0.412 to 0.504 in length and 0.304 to 0.349 in breadth. The testes are small in size, round in shape, 50 in number, mostly preovarian, few postovarian situated in the central medulla, unevenly distributed, bounded laterally by the longitudinal excretory canals and measure 0.004 to 0.017 in diameter. The cirrus pouch is medium in size, oval in shape, broad in the middle, tapering at both the ends, situated at 1/6th from the anterior margin of the segments, crosses and enlarges, beyond the longitudinal excretory canals, transversely curved, contained within the cirrus pouch and measures 0.063 in length and
0.010 to 0.035 in breadth. The cirrus is medium in width, slightly curved, within the cirrus pouch and measures 0.042 in length and 0.006 in breadth. The vas deferens is medium in width, a much curved tube, anteriorly directed and measures 0.085 in length and 0.006 in breadth.

The ovary is medium in size, indistinctly bilobed, near the posterior margin of the segments, transversely placed, almost compact, lobes are unequal in size and shape, poral lobe big and wide, while aporal lobe small and narrow and measures 0.28 to 0.105 in length and 0.028 to 0.140 in breadth.

The vagina is a thin tube, situated posterior the cirrus pouch, elongated, extends up to the centre of segments, then turns posteriorly reaches and opens into the oootype and measures 0.510 in length and 0.006 in breadth. Ootype is medium in size, oval in shape, postovarian and measures 0.014 in length and 0.018 in breadth. The genital pores are medium in size, oval in shape, marginal, irregularly alternate, situated at 1/6th from the anterior margin of the segments and measure 0.025 in length and 0.006 in breadth.

The vitellaria are granular, in the corticular in lateral fields of the segments, except gravide segment from the anterior to
PLATE. - III

Proteocephalus parallacticus, MacLulich, 1943.

A : Scolex.

B : Mature segment.
the posterior margin of the same, smaller in size, in 3 to 4 rows on each lateral side and measure 0.006 in diameter.

DISCUSSION

The genus *Proteocephalus* was established by Weinland, 1958 as a type species *P. filicollis*, (Rud.1802) from *Gasterosteus aculeatus*, *G. pungitus* from Europe. Later on many species were added to this genus, by different workers in the world. After going through the literature, the cestode under discussion, turned out to be the species, of the genus *proteocephalus*, Weinland, 1958 and comes closer to *P. parallacticus* MacLulich 1943 but it differs from the same, in few characters, known as additional characters, which are as follows:-

1) **The present cestode, differs from *P. parallacticus*, MacLulich, 1943 in the number of testes (50 vs 42-92).**

2) **The present worm, differs from *P. parallacticus*, MacLulich, 1943 in the position of the genital pores at (1/6th from the anterior margin of the segments vs slightly posterior to the equatorial line).**
As the above characters are minor it is redescribed here as *Proteocephalus parallacticus*, MacLulich, 1943.

MacLulich in 1943 reported his worms from *Cristivomer namaycush* whereas the present worms are being reported from a frog, *Rana tigrina*, at, Buldhana, Tq. Buldhana Dist. Buldhana, M.S. India.

<table>
<thead>
<tr>
<th>Type Species</th>
<th><em>Proteocephalus parallacticus</em>, MacLulich 1943.</th>
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<tbody>
<tr>
<td>Host</td>
<td><em>Rana tigrina</em></td>
</tr>
<tr>
<td>Habitat</td>
<td>Intestine</td>
</tr>
<tr>
<td>Locality</td>
<td>Buldhana, Dist.Buldhana, M.S., India.</td>
</tr>
<tr>
<td>Date of Collection</td>
<td>20th July 2005.</td>
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</tbody>
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