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Original Research Paper

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REDESCRIPTION ON DIPHYLLOBOTHRIUM STEMMACEPHALUM, COBBOLD, 1858 (CESTODA: DIPHYLLOBOTHRIIDAE) IN THE INTESTINE OF A TITVI FROM LATUR DISTRICT (M.S.), INDIA

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ABSTRACT *Diphyllobothrium stemmacephalum,* (Cobbold, 1858) cestode parasite of a Titvi, *Red wattled lapwing* at Nanand, Tq. Nilanga, Dist. Latur, M.S., India. The Present worm resemble with *Diphyllobothrium stemmacephalum,* (Cobbold, 1858) in having morphological characters i.e. rostellar hooks, mature segment broader than long, craspedate, cirrus pouch medium, ootype oval in shape, vitelline gland medium, irregular in shape. But the same differ due to shape of scolex, number of testies, and structure of ovary, hence it is redescribed.

KEYWORDS : *Diphyllobothrium stemmacephalum,* Latur, Titvi.

INTRODUCTION

The genus *Diphyllobothrium* by Cobbold, 1858 as a type species, *D. stemmacephalum* in *Dilphinus phocaena* and in *Dhiphinus dussumieri*, in Pacific. *Diphyllobothrium* is a endoparasite, and this tapeworm belonging to the class Cestoda. This is avian gastrointestinal parasite of family Diphyllobothriidae (Cestoda: Pseudophyllidea), and are the most important species in terms of prevalence and pathogenicity among wild and domestic birds.

The present communication deals with the redescription on *Diphyllobothrium stemmacephalum,* (Cobbold, 1858) found in the intestine of the dead bird, Titvi, *Red wattled lapwing* at Nanand, Tq. Nilanga, Dist. Latur, M.S., India.

DESCRIPTION

Seven specimens, of the cestode parasites, were collected, from the intestine of a dead bird Titvi, Red wattled lapwing at Nanand, Tq. Nilanga, Dist. Latur, M.S. , India; in the month of September, 2018. All these worms were flattened, preserved in 4% formalian stained in Harris haematoxylin, passed through various alcoholic grades, cleared in xylol, mounted in DPX and whole mount slides were prepared, for further anatomical studies.

The scolex is medium in size, cylindrical in shape, narrow anteriorly and posteriorly, broad at the middle, elongated and measures 0.830 to 0.941 in length and 0.175 to 0.296 in breadth. The scolex bears an unarmed rostellum, which is medium in size, oval in shape, transversely elongated and measures 0.116 to 0.175 in length and 0.097 to 0.209 in breadth. The scolex is with two bothria, which are large in size, long, sac like, spindle shaped in appearance, extending almost upto the posterior margin of the scolex, overlapping on each other and measures 0.655 to 0.669 in length and 0.024 to 0.141 in breadth. The neck is short, with curved lateral margin, longer than broad and measures 0.306 to 0.311 in length and 0.170 to 0.184 in breadth.

The mature segments are thin, broader than long, about five and half times broader than long, with short, blunt projections at the posterior corners of the segments, craspedote and measure 0.288 to 0.333 in length and 1.357 to 1.439 in width.

The testes are small to medium in size, oval in shape, un evenly distributed, in two lateral fields, 30-35(34) in number, 12 in poral half, 22 in aporal half of the segments and measure 0.023 to 0.053 in length and 0.023 to 0.045 in breadth. The cirrus pouch is distinct, medium in size, oval in shape, slightly obliquely placed and measures 0.121 to 0.159 in length and 0.038 to 0.106 in width. The cirrus is medium in size, thin, slightly coiled, contained within the cirrus pouch and measures 0.212 in length and 0.008 in breadth. The vas deference is medium in size, slightly coiled, extends obliquely and measures 0.485 in length and 0.008 in breadth.

The ovary is large in size, indistinctly bilobed, with 6 to 8, short separate, finger like, blunt acini, placed in the centre of the segments, in the central medulla, all the lobes are of unequal size and shape and measures 0.174 to 0.409 in length and 0.830 to 0.107 in breadth. The vagina is medium in size, long, posterior to the cirrus pouch, obliquely placed, slightly curved, extends anteriorly for a short distance, then turns, posteriorly, reaches and opens into the ootype and measures 0.796 in length and 0.008 in width. The ootype is medium in size, oval in shape, placed ventral to the ovary central, in poral half and measures 0.030to 0.045 in length and 0.030 in width.

The vitelline gland is medium in size, irregular in shape, post ovarian, with2 to4, short, blunt acini, placed near the posterior margins of the segments and measures 0.023 to 0.083 in length and 0.015 to 0.060 in breadth. The genital pores are medium in size, oval in shape, placed just posterior to the middle of the segments and measure 0.030 in length and 0.023 in width. The longitudinal excretory canals are narrow and measure 0.015 in width.

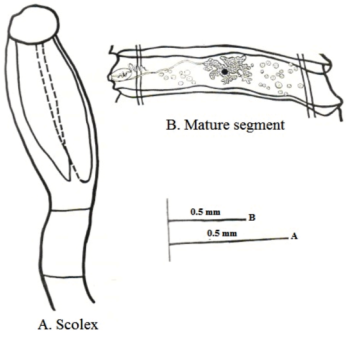

Fig. *Diphyllobothrium stemacephalum,* Cobbold, 1858.

DISCUSSION

The genus *Diphyllobothrium* was erected by Cobbold, 1858 as a type species, *D. stemmacephalum* in *Dilphinus phocaena* and in *Dhiphinus dussumieri*, in Pacific.

After going through the literature, the worn under discussion, turned out to be the species of the genus *Diphyllobothrium* and comes closer to *Diphyllobothrium stemmacephalum*, Cobbold, 1858.

The present worm, resembles it, in many characters, but differs from the same in few characters, which are as follows :

1. The worm under discussion, differs from *Diphyllobothrium stemmacephalum*, Cobbold, 1858 in the shape and size of the scolex (Medium, cylindrical and spindle shaped as against broadly oval to Tanceolate or funnel shaped).
2. The worm under discussion, differs from *Diphyllobothrium*

stemmacephalum, Cobbold, 1858 in the shape, size of the testes (Small to medium, oval, 30-35 (34) in number, central as against lateral, in one layer but may be continuous across median line anteriorly and posteriorly).

3. The present from, differs from the same in the structure of the ovary (Large, indistionly bilobed; central as against two winged, posterior).

As the above the characters are minor, it is redescribed here, *Diphyllobothrium stemmacephalum*, Cobbold; 1858. Cobbold reported his worms, from *Dilphinus phocaena*, firth of forth and in *Dolphinus dussumieri* from Pacific, where as the present worms, are being reported from *Red wattled lapwing* at Nanand Tq. Nilanga, Dist. Latur, M.S., India.

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