

# A REPORT OF NEW SPECIES OF THE GENUS PHYLLOBOTHRIUM FOLIATUM (EUCESTODA : PHYLLOBOTHRIDAE) FROM TRYGON SEPHEN AT RATNAGIRI M.S. INDIA .

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## ABSTRACT

The present form deals with redescription of species of the genus *Phyllobothrium foliatum* Linton, 1890 which is having some additional characters, such as testes 75-85 (83) , preovarian in 2-4 rows , shape and size of ovary distinctly bilobed , medium in size , transversely placed , near posterior margin of the segment , shape and structure of vitellaria (granular, thin strips).

Keywords: *Phyllobothrium* , *trygon sephen* , *spiral valve*, *Ratnagiri M.S.India*

## INTRODUCTION

The genus *Phyllobothrium* was erected by Benedon 1849, with its type species *Phyllobothrium foliatum* from *Rajabinuculata* from California . The present communications deals with description of a species of genus *Phyllobothrium foliatum* from *Trygon sephen* Cuvier, 1871.

## MATERIAL AND METHODS

Twenty one Specimens of cestode parasites were collected from spiral valve of *Trygon sephen*. All were flattened, preserved in 4% formalin, stained with Harris haematoxyline, were passed through various alcoholic grades , whole mount slides were prepared for further anatomical studies. Drawings were

made with the help of camera Lucida. All measurements are in millimeters

### **DESCRIPTION**

Scolex distinctly marked off from strobila, large in size, almost quadrangular in shape with irregular margin, with four bothridia and measures 0.413-0.485 in length and 0.417-0.582 in breadth. Each bothridium is medium in size, oval in shape, sessile, having an accessory sucker and measures 0.364-0.476 in length and 0.150-0.194 in breadth. The accessory suckers are medium in size, oval in shape, one in each bothridium and measure 0.043-0.058 in length and 0.034-0.053 in breadth. The neck is short, wide, narrow anteriorly, broad posteriorly and measures 0.165-0.184 in length 0.170-0.194 in breadth. The mature segments are longer than broad, almost two times longer than broad, slightly concave and convex lateral margins, without projections at the anterior and posterior corners of the segments, slightly unequal in length and measure 0.597-0.733 in length and 0.267-0.320 in breadth. The testes are small and medium in size oval in shape, in 2-4 rows, 75-85 (83). Preovarian, roughly in two lateral fields up to the cirrus pouch region and in a single field anterior to it, almost evenly distributed, in the central medulla, from the anterior margin of the segments to the ovary, bounded laterally by longitudinal, excretory canals and measures 0.015-0.029 in length and 0.019-0.039 in breadth. The cirrus pouch is medium in size, oval in shape, slightly oblique in placed, situated at 1/3<sup>rd</sup> from the anterior margin of the segments, extends medially beyond the middle of the segments, open marginally and measures 0.189 in length and 0.039-0.072 in breadth. The cirrus is a thin tube, long, slightly coiled, contained within the cirrus pouch and measures 0.184 in length, 0.010-0.019 in breadth. Vas deference is thin, short, extends transversely and measures 0.019 in length and 0.005-0.010 in breadth. The ovary is distinctly bilobed, medium in size, transversely placed near the posterior margin of the proglottids, extends laterally up to the quarcular region of the segments and measures 0.228-0.238 in length and 0.019-0.089 in breadth. The vagina is wide tube, long, anterior to cirrus pouch, start from the genital pore, extends transversely, obliquely up to the middle of the segments, turns posteriorly, runs middle of the segments posteriorly reaches and opens into the ootype and measures 0.626 in length and 0.019-0.039 in breadth. The ootype is medium in size, oval in shape, preovarian in concavity of the ovarian lobes, situated near the posterior margin of the segments and measures 0.034-0.043 in length 0.043 in breadth. The genital pores are medium in size, oval in shape, marginal in position, unilateral, situated almost at 1/3<sup>rd</sup> from the anterior margin of the segments and measure 0.043 in length and 0.024-0.029 in breadth. The longitudinal excretory canal are thin and measures 0.015 in width. The vitellaria are granular, thin strips on each lateral sides, in cortucular region and from anterior to the posterior margin of the proglottids.

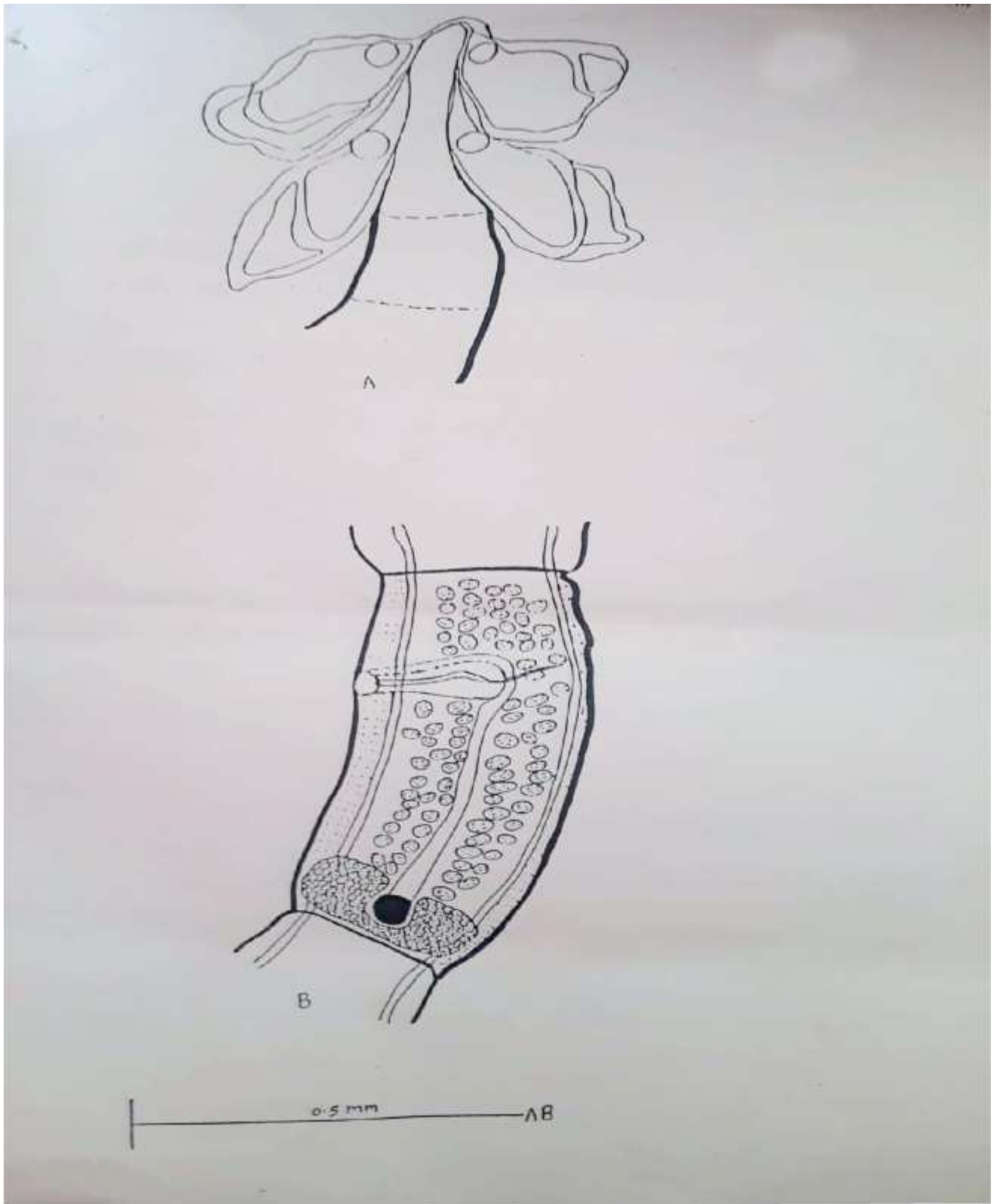
Type species — *Phyllobothrium foliatum* Linton, 1890

Host – *Trygon sephen* Cuvier, 1871

Habitat - Spiral valve.

Locality - Ratnagiri, M.S. (West coast of India), India. Date of

collection – 7 April, 1991



## DISCUSSION AND RESULT

After going through the literature , the worm under discussion turned out to be *Phyllobothrium foliatum* , Linon 1890. However , it differs from it , in some characters which are as follows . The worm under discussion , differs from it , in the no. of testes 75-85 (83) , preovarian in 2-4 rows , as against numerous (125) from anterior margin up to the genital pore . The present worm differs form it in shape and size of the ovary (distinctly bilobed, medium in size , transversely placed , near the posterior margin of the segments as against bilobed , distinct ). Present from, differs from the same, in shape and structure of vitallaria (granular , thin strips as against follicular in 2-3 rows ). Linton 1890 reported *Phyllobothrium foliatum* from *Rhynchobatus djeddensis*, pearl banks, Ceylon; from *Trygon sephen* Currier, 1871 at Ratnagiri, M.S.India . Itis a new host record.

## ACKNOWLEDGEMENT

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## REFERENCES

1. Van Beneden , P.J. 1849. Notice surune nouvean genred helminth cestode .I.brd.16:182-193
2. Maire Weir Kay .1942. A newspecies of Phyllobothrium van Beneden from Raja binoculata (Ginaral) . Trans .Am.Micro.Soc.61:261-263
3. Cuvier, G 1871. Le regne animal distributed apris son org. ,4-vol, Paris
4. Linton , E.1890. Notes on entozon of marine fishes of New Englas II. Ann. Rep.U.S.Comm.fish and fisheries for 1987. Washington. 15:719-899
5. Subhapradha , C.K. 1955 . Cestode parasite of fishes of madras coast . Ind. J.Helmingh. 7(2):41-132
6. Muller and Henle. 1906. Cestode parasite of marine fishes (carchrios acutus) East coast of India . India , M.S. 42(3) :457-464.
7. D.D.Khamkar 2012 A report of the Species Of The Genus Phyllobothrium radioductum (Eucestoda : Phyllobothridae) From Trygon Sephen At Ratnagiri M.S. India . Journal of experimental sciences 2012 , 3(5) :42-45