

# Cestoda: A New Cestode *Circumoncobothrium thapari* (A N.SP. *Pseudophylidea carus*, 1863) from *Ophiocephalus stratus*, (M.S.), India

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## Keywords

*Circumoncobothrium thapari*  
*Ophiocephalus*  
Cestoda

## Abstract

The present paper deals with the study of new species of genus *Circumoncobothrium thapari* n. sp. It differs from all known species of the genus in many characters as in shape of scolex, shape and size of bothria, size, number and position of testes and ovary, size, shape and position of ootype and vitelline gland.

## 1. Introduction

The genus *circumoncobothrium* was erected by Shinde (1968) as *C. ophiocephali* from *ophiocephalus*. Later on 15 species are added to this genus by various researchers in the world. The present communication deals with description of a new species as *C. thapari* n.sp.

## 2. Material and Methods

Eight specimens of the cestode parasites were collected from the intestine of *Ophiocephalus stratus* at Lohara Dist Osmanabad (M.S.), India. All cestode were flattened, preserved in 4% formalin, passed through various alcoholic grades and stained with Harries hematoxylin. Drawings were made with the help of camera Lucida. All the measurements were in millimeters.

## Description

The scolex is large, triangular, with shallow bothria extends upto posterior region of scolex and measures 1.175-1.326 in length and 0.356-1.137 in breadth. The bothria are large in size, oval, sac like, non overlapping right bothrium is slightly longer than left and measures 1.222-2.615 in length and 0.076-0.280 in breadth. The rostellum is armed, rostellar hooks are 52 in number, and single hook pronged measuring 0.016-0.036 in length and 0.002-0.005 in breadth. The mature proglottids are medium in size, broader than long, with slight projection at anterior and posterior corners of the

segments and measures 0.155-0.184 in length and 1.442-1.573 in breadth.

The testes are 95 in number, medium in size, oval in shape, evenly distributed; few are pre ovarian, slightly elongated bounded laterally by the longitudinal excretory canals and measures 0.039-0.112 in length and 0.015-0.053 in breadth. The cirrus pouch is medium and small, oval in shape, opens at middle of lateral margins, anteriorly directed, slightly narrows proximally and measures 0.039-0.049 in length and 0.015-0.024 in breadth. The cirrus is thin, curved contained within cirrus pouch and measures 0.049- in length and 0.010 in breadth. The vas deference is thin, short, and directed, slightly curved, extends towards anterior margin and measures 0.039-0.049 in length and 0.010 in breadth. The ovary is medium in size, lobed, posteriorly situated, compact and measures 1.277-1.321 in length and 0.049-0.079 in breadth. The vagina is thin tube; posterior to cirrus, runs posteriorly opens into ootype and measures 0.072-0.083 in length and 0.010 in breadth.

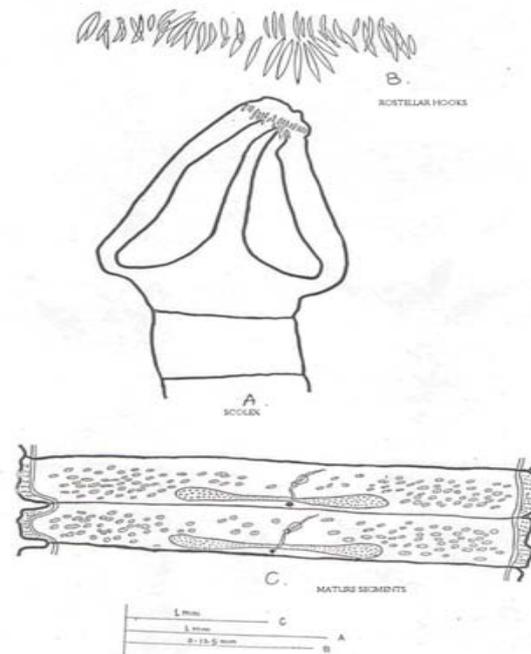
The ootype is small, round, situated posteriorly, post ovarian and measures 0.049-0.053 in length and 0.019-0.024 in breadth, the vilellaria are follicular, small, oval, 2-3 rows on each side.

**Type Species** – *Circumoncobothrium thapari* n.sp.

**Host** – *Ophiocephalus stratus*.

**Habitat** – Small intestine.

**Locality** – At. Lohara Dist. Osmanabad. (M.S.)India



### 3. Results and Discussion

The worm under discussion, is having the scolex large, triangular, two shallow bothria extending upto posterior region of scolex, rostellar hooks 52 in number, number arranged in four quadrants, each quadrant having long hook, mature segment almost 7-9 times greater than long, testes (95) in number, medium, preovarian, ovary medium, bilobed situated in posterial half, ootype small , round, vitellaria follicular and small.

The present cestode differs from *Circumoncobothrium ophiocephali* which is having the distinct scolex, hooks 80 in number, rod shaped, tests rounded, ovary a single conical mass, vitellaria in 14-15 rows on each side (Shinde, 1968). The present worm, differs from *C. shindei* which is having the restellar hooks 49 in number, rod shaped, mature segments broader than long, tests evenly distributed 260-6275 (273) in number and vitellaria granular (Chincholkar and Shinde, 1976). It is differs from *C. baimaii* having scolex pear shaped, testes 88-100 in numbers, ovary compact, vitellaria granular (Wangsawad and Jadhav, 1998). The present worm differs from *C. armatus* having restellar hooks 23, scolex broader at the base, testes 90-100 (95) in number, ovary single, and ovary vitellaria small oval (Pawar et al. 2003). It is also differ from *C. vitellariensis* in having scolex triangular, rostellar hooks 48 in number, hooks rounded at base pointed at apex, mature segments 3-4 times broader than long, testes 250-260 in number (Supugude, 2005). It is differ from *C. cirrhinae* in having scolex cylindrical, barrel snapped, rostellar hooks 56 in number, mature segments slightly longer than broad, testes 300-305 in number, ovary

multi lobed with 7-8 acini, vitellaria granular (Kharade et al., 2007).

All above characters are enough to erect a new species to accommodate these worms and hence the name *C. thapari* proposed in the honour of great scientist Thapar.

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