



## A New Cestode *Carpobothrium bomayyensis* n.sp. (Cestoda - Phyllobothridae) from *Carcharias acutus* at Bombay (M.S.)

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### ABSTRACT

The present form deals with description of new species of genus *Carpobothrium bomayyensis* n.sp. differs from *Carpobothrium megaphallam subhadratha*, 1955 and *Carpobothrium subhadrathi* Deshmukh and Shinde, 1978 in many characters as in the size of the worms, presence or absence of loculi on the margin of flaps, number of testes, presence or absence of receptaculum seminis, position of uterus and position of ootype.

**Key words:** - Marine, Cestode, *Carpobothrium*.

### INTRODUCTION

The genus *Carpobothrium* was established by Shipley et.al Hornell 1906 with its type species *Carpobothrium chilloscyllii* from *Chilloscyllium chilloscyllii* from *chilloscyllium indicum* in Ceylon. Later on two more species are added to this genus by various workers in the world. The present form deals with description of new species *Carpobothrium bomayyensis* n.sp.

### MATERIAL AND METHODS

Fifteen cestodes were collected from spiral valve of *Carcharias acutus*. All were flattened, preserved and fixed in 4% formalin, stained with Harri's haematoxyline, were passed through various alcoholic grades and whole mount slides were prepared for anatomical studies. Drawings were made with the help of camera lucida. All measurements are in millimeters.

### DESCRIPTION (Fig.A,B)

The Scolex big, almost quadrangular, distinctly marked off from strobila, narrow anteriorly, broad posteriorly, 3.749-5.534 x 4.641-6.158; bothria 4, ending in flat area, with penduncle; penduncle short, wide, bothridia big, oval, elongated, 3.570-5.534 x 1.607-2.142; two flaps arises from distal extremity of each bothridium; each flap with entire margin; each bothridium hollow, opens by slit like opening, surrounded by flaps, with muscular pads, 1.607-7.231 x 0.357-0.535; muscular pads originates from flaps, 0.982 - 1.214 x 0.089-0.357; neck wide, curved, 'S' shaped in appearance, 2.410 - 3.481 x 0.624 - 1.107; mature segments broader than long, posterior segments longer than broad, 0.681 - 0.758 x 1.023 - 1.137; testes numerous, medium, somewhat rounded, 190-200 (198), pre-ovarian, some are overlapping the ovary, almost in two lateral fields, upto anterior end of uterus, 5-7 rows on each lateral side, in single field, evenly distributed, in central medulla, 0.015; cirrus pouch large, oval, transversely and obliquely placed, opens marginally, 0.341-0.379 x 0.045-0.068; cirrus wide, coiled, contained within the cirrus pouch, 0.364 x 0.008-0.015; vas deferens thick, wide, runs towards anterior margin of the segments, coiled, extends anteriorly, 0.644 x 0.015-0.038; ovary distinctly bilobed, near the posterior margin of the segments, extends laterally upto the subcortical region of the segment, 0.910 x 0.060-0.174; ovarian lobes large, oval, compact, 0.060-0.174; vagina thin, long tube, starts from genital pore, placed anterior to the cirrus pouch, extends transversely, upto middle of segments, takes a posterior turn, runs in the middle of the segments, reaches and opens into ootype, 0.796 x 0.015-0.053; ootype medium, oval, situated on isthmus, 0.076 x 0.053-0.068; uterus saccular, extends upto anterior margin of segments, 0.530 x 0.091-0.152; genital atrium large, oval, cylindrical, elongated, obliquely placed, posterior to middle of segments, 0.152 - 0.205 x 0.060-0.76; genital pores small, oval, marginal, obliquely placed, posterior to middle of segments, irregularly alternate, 0.030 x 0.015, vitellaria granular, marginal, medium strips, through out proglottids and longitudinal excretory canals of medium width and 0.023-0.038 in size [1-4].

Type species - *Carpobothrium bomayyensis* n.sp, Host - *Carcharias acutus* Muller & Henle, 1906, Habitat - Spiral valve. Locality - Bombay, M.S. (West coast of India) India. Date of collection - 17th Dec., 1990.

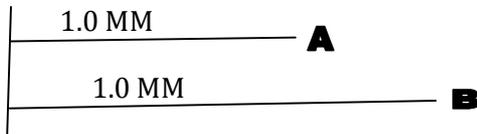
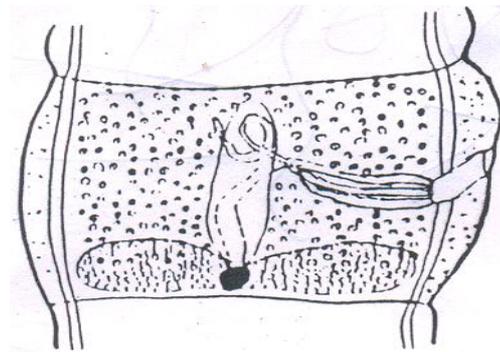
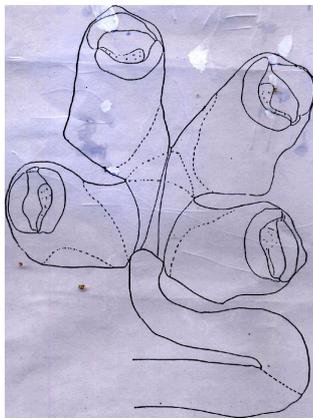
### DISCUSSION AND RESULT

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The worm under discussion differs in vital characters from its type species *C. chilloscylli* in length of worm (6x1.137 as against 10x0.40); loculi on margin of flaps (Absent as against present), in number of testes (190-200) (198) as against 100-150), in receptaculum seminis (Absent as against present); in position of uterus (saccular, almost upto anterior margin of segments as against extended anterior to cirrus pouch) also it differs from *C. megaphallum* subhadrada, 1955, in size (6x1.137 as against 12x0.30); in bothrial flaps (in double as against single); in the number of testes (190-200 (198), in 5-6 rows, on each lateral side, about 50, do not extend posterior to cirrus pouch) in shape and position of uterus (saccular, extends almost upto anterior margin of segment as against not extends anterior to cirrus pouch); in position of ootype (placed in between limbs of ovary as against below the ovary); further differs from *C. subhadradi* Deshmukh and Shinde, 1978 in number of testes (190-200 (198), 5-6 rows on each lateral side as against 85, do not extends posterior to cirrus pouch), in position of uterus (extends almost upto anterior margin of the segments as against extends little anterior to cirrus pouch) and in position of ootype (between the limbs of ovary as against below the ovary).

Scolex thick, muscular, mature segments are broader than long, testes small, round 170-185 in number, cirrus pouch cylindrical, ovary in distinctly, by lobed, compact transversely placed, the vagina anterior to the cirrus pouch, vitellaria granular and wide strip [5-7].

As the above noted distinct characters are valid enough to erect a new species of the genus, hence the name *Carpobothrium bombayensis* n.sp. Is proposed after the locality.



### ACKNOWLEDGEMENT

Authors are thankful to Prof. & Head, Dept. of Zoology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, for Providing the laboratory facilities and encouragement during entire work.

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