



## A New Species *Tylocephalum Yeshwantraoaei* from *Trygon Sephen* [Cuvier, 1871] at *Mirya*, Ratnagiri M.S. India

R. M. Khadap<sup>a</sup> and R.R. Dandwate<sup>b</sup>

Dept. of Zoology, Nutan College, Sailu, Dist: Parbhani – 431503 (M.S.) INDIA

Dept. of Zoology, Arts, Commerce & Science College, Sonai, Dist: Ahmednagar, (M.S.) INDIA

[\*E-mail: d\_rajendra2006@rediffmail.com]

### Abstract:

A new species of cestode *Tylocephalum yeshwantraoae* was created from the marine fish *Trygon sephen*, collected from Bancot ( West cost of India) and describe this new species in the genus *tylocephalum*. In the present investigation the different characters of the *T. yeshwantraoae* differerent from other species. The character such as body measurement, scolex globular (some what rounded divided into two regions anterior is some what convivial posterior semicircular), neck elongated, testes 20-30 in number, cirrus pouch middle of the segment ovary "V" shaped, shell glands post ovarian , vitellaria follicular & their locality.

**Keywords**— *Tylocephalum*, cestode parasite, V shaped ovary, Ratnagiri, Maharashtra

### 1. Introduction

The genus *Tylocephalum* was erected by Liton 1889 to accommodate a cestode recovered from *Rhinoptera quadrilobe* at woods hole with its type species *T. pingue* Liton in 1890. (Yamaguti . 1959) reported *T. pingue*( Yamaguti . 1959) from *Rhinoptera quadrilobe*. Later on Yamaguti (1934) reported *T.squatinae* from *Squatina japonica*. Chincholikar and Shinde (1977) added *T.Madlhukari* from the same host.Later on Jadhav and Shinde (1981) reported *T.singhil* from the host *Trygon zugi*. Later on Jadhav

(1988) added one species *T.Bombayensis* in the same host .Jadhav (1998) is also added one species *T.aurangabadensis* in the same host. Follicular aetobais narinari. Wankhed and Jadhav (2003) added one species *T.gajanane* in the same host.

### 2. Methodology

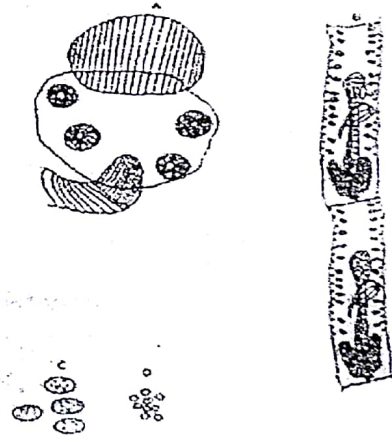
The marine water fish *Trygon sephen* ( Yamaguti , 1959) were collected from *Mirya* Ratnagiri ,west cost of India, they were collected and observed under microscope flattened fixed

in 4% formalin stained with Harris's haematoxyline dehydrated & mounted in D.P.X. Drawing were made with the help of aid of camera Lucida. All measurements were done in millimeters.

Twenty cestodes parasite were collected from the spiral valve of *Trygon sephen* (Cuvier 1871) at Mirya Ratnagiri. The worm measure 50 in length and 1.0 in breadth consists of 65 segment. Out of twenty cestode parasites three were preserved 4% formalin for the systematic study four parasites along with infected intestine preserved in Bouin's fluid to see his to chemical changes which is compare with the non infected intestine where as the remaining parasites were used for biochemical aspects. The scolex is divide into two region anterior and posterior region anterior region is what conical placed to anterior side with some muscular pads anterior regions measures 0.809-816 in length and 0.243-0.564 in breadth. The posterior region is somewhat semicircular in shape with four suckers which are located one behind the other on both the corners. In measures 1.214-1.068 in length and 0.267-0.767 in breath. The suckers are oval in shape with 0.486 in diameter. The scolex is followed by elongated neck. measure about 0.243-0.330 in length and 0.486-0.195 in breadth. Neck is followed by immature and mature segments. Mature segments are too much longer than broad measures 1.478-1.516 in length and 0.341-0.379 in breadth. Testes are medium, oval 20-30 in number placed cortically arranged in a single line pre-ovarian reaching towards anterior side of the segment measures 0.160 in diameter. The cirrus pouch is situated in the middle of the segment. placed sub-marginally small in size oval in shape measures 0.273-0.304 in length and 0.038-0.114 in breadth. Cirrus is broad without sponges tapering anterior side measures 0.197-0.205 in length and 0.016-0.046 in breadth forms vas deference which is long curve measures 0.129-0.152 in length and 0.016-0.023 in breadth.

Ovary "V" shaped with 10-12 acini's on each side occupying maximum portion of segment. measures 0.569-0.607 in length and 0.190-0.288 in breadth. Vagina is long narrow tube anterior to the cirrus pouch star from common genital pore takes a turn interiorly and forms receptaculum semen's, opens into ootype which rounded Vagina measures 0.379-0.402 in length and 0.008-0.016 in breadth receptaculum semen's measures 0.379-0.417 in length and 0.0076-0.023 in breadth. Uterus start from ootype which reaches in the middle of the segment narrow towards posterior and broad towards anterior filled with minute numerous eggs in the center measures 0.910-0.948 in length and 0.069-0.137 in breadth Vagina and cirrus pouch opens through a common pore know as genital pore which is sub marginal placed unilaterally measures 0.379-0.402 in length and 0.008 -0.016 in breadth. The shell gland is placed post ovarian. The vitellaria are follicular cortically placed arranged in single row except the cirrus pouch region.

### 3. Results and Discussion



a) Scolex  
b) Mature segment  
c) Sucker  
d) Egg

The tapeworm under discussion is having scolex globular and some what founded and divided into two regions anterior so some what conical posterior semicircular, neck elongated, testes, 20-30 in number .cirrus pouch middle of the segment ovary "V" shaped shell glands post ovarian vitellaria follicular The present worm differs from *T. pingue*, Linton 1890 which is having the scolex globular absence of neck , testes 20-27 in number and ovary like transverse band ,It is also differs from *T. artobatis* Shipley et.al. And Hornell 1905, which is having scolex circular at the anterior part and swollen at the base neck absent segments 50-70 in number testes 7-12 in number and ovary massive. It differ from *T. squatinae* Yamaguti 1934 which is having the scolex sub globular long neck testes 40-50 in number cirrus pouch oval ovary with elongated acini and follicular vitellaria in 2-3 rows. It is also differs from *T. madhukari*, Chincholikar 1976 which is having the scolex divide in two regions anterior region composed of subglobular plate neck absent segment 16 in number testes 10 in number cirrus pouch saccular ovary compact granular and bean shaped and granular vitellaria. It is differ from *T. singhi* Jadhav and Shinde 1981 in shape of scolex globular neck short testes 76-80 in number pre ovarian genital pore regularly and vagina sub marginal. It is also differ from *T. bonnahensis* Jadhav 1982 in the having shape of scolex rounded segmentation square testes 31-38 in number ovary transverse band and vitellaria granular. It is also differ from *T. laurangabadensis* Jadhav 1988 in the shape of scolex quadrangular absence of neck testes 20-25 in number genital unilateral and submarginal. The present tapeworm differ from *T. hunumantravi* Shinde et.al.1989 in having quadrangular scolex neck absent testes 30-35 in number ovary bilobed H shaped vitellaria granular It is also differ from *T. gajanae* Wankhede and Jadhav 2003 in the presence of quadrangular scolex neck absent testes 55-60 in

number ovary bilobed with elongated acini vitellaria granular.

Type species:

*Tylocephalum yeshwantraoae* n.sp.

Host: *Trygon sephen* (Cuvier,1871)

Habitat: Intestine.

Locality: Mirya ,Ratnagiri M.S.India.

#### 4. Conclusion .

By differentiating the above character there is now way to the author erect a new species and to accommodate the worms and hence the name *Tylocephalum yeshwantraoae* n.sp. is name in honor the Hon . Yashwantrao Chavan which is the first Chief Minister of Maharashtra..His vision for the development Maharashtra state, the industrial and agricultural sectors across all the regions of the state. He sought to realize this vision through the co-operative movement .Legislation regarding democratic decentralized bodies and the Agricultural Land Ceiling Act were passed during his tenure as Chief Minister.

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