

A New Species of the Genus *Tylocephalum* *Ratnagiriensis* from A Marine Fish *Trygon Zugei*

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Abstract: *The present paper deals with the new species of the cestode from the genus Tylocephalum LINTON, 1980 viz, Tylocephalum Ratnagiriensis n.s.p. collected from Ratnagiri, west coast of India from marine fish Trygon Zugei (Muller & Henle, 1841) The present species differ from all other known species at the genus in having scolex globular or oval, Neck Present, Testes 39-40, ovary 'U' shaped, Vitellaria granular (2 or 3 rows).*

Keyword: Marine Fish, Castode, Trygon and Ratnagiriensis n.sp.

1. Introduction

The genus *Tylocephalum* was erected by Linton, 1890 with its type species *T. Pingue* from Rhinoptera, quadriloba t Ceylon and *T. Diema* from Myliobatis Meculata at Ceylon Linton (1961) reported *T. Marsupium* from Actobatis narinari, Yamaguti (1934) recoreded *T. Squatinae* from Squatinae japonica at Japan Toyama Bay of Japan. Southwell (1925) described *T. yorkei* from Aetobatis narinari at Puri, Orissa India Subhpradha (1955) described *T. Elongatum* and *T. Minimum* from Rhynchobatus djeddensis in India. Chinchobates (1976) added one new species to this genus i.e. *T. Madhukari* from Trygon Sp. at Ratnagiri. Jadhav & Shinde (1981) described *T. Singhli* from Trygon Zugei at Bombay. In 1983 Jadhav erected a new species from Aetobatis narinari collected from Arabian Sea. Shinde & Jadhav (1989) described *T. Hanumanthraevae*.

2. Material & Methods

The worms were collected from Ratnagiri (west coast of India) from marine fish Trygon Zugei fixed in 4% formaline, stained with Harris haematoxyline, dehydrated, cleared in xylene, mounted in D.P.X. Drawings were made with the aid of camera lucida. Identification carried out with the help of system Helminthum vol. II Yamaguti, all measurements are in millimeters.

3. Description

The parasite based on fifteen specimens is collected from the spiral valve of intestine of Trygon Zugei (Muller & Henle, 1841) at Ratnagiri. The scolex is globular or oval in shape it measure 0.4611 (0.3883-0.5339) in length and 0.1552 (0.4368-0.8737) in breadth. The scolex is divided into two regions anterior & posterior. Anterior region is some what conical, placed at anterior side it consist of Muscular pads. The anterior side measure 0.279 (0.1941-0.3640) in length & 0.3883 (0.2427-0.53394) in breadth. The posterior region is semicircular or oval in shape which is located on behind the other on both the corners. The anterior region is overlapping the posterior region it measure 0.2548 (0.1941-0.3155) in length & 0.67953 (0.50967-0.8494) in breadth.

Anterior region or posterior region it consist of 4 single accessory sucker, which are rounded in shape & small in size it measure 0.1648 (0.1456-0.1941) in length or 0.738 (0.04854-0.09223) in breadth. Scolex is followed by short neck cylindrical in shape, measure 0.339 (0.4854-0.5824) in length & 0.7523 (0.3640-0.3883) in breadth. The mature segment are long or elongated in shape which measure 0.3484 (0.27270.4242) in length & 0.492 (.3787-0.6060) in breadth. Testes are preovarian, medium in size, oval in shape 39-40 in number measure 0.2461 (0.2272-0.2651) in length, 0.227 (0.03787-0.7575) in breadth. The cirrus pouch is oval, Bilateral or alternate in arrangement placed middle of the segment it measurement 0.3976 (0.3787-0.4166) in length & 0.492 (0.7575-0.01515) in breadth. The cirrus is thin & straight contain within the cirrus pouch measure 0.3219 (0.3030-0.3409) in length & 0.1131 (0.07575-0.1515) in breadth. Vas deferens which is short & curved measure 0.265 (0.01515-0.0378) in length & 0.1136 (0.007575-0.1515) in breadth. The genital pore is oval in shape, placed in marginally or Bilateral or alternate in arrangement it measure 0.174(0.1515-1893) in length & 0.3024 thin tube, runs posteriorly to the cirrus pouch, start from the genital pore measure 0.3598 (0.3030-0.4166) in length & 0.159 (0.01515-0.3030) in breadth. Extend transversely up to centre of the segment, takes a turn, runs posteriorly & forms receptaculum seminis measure 0.0983 (1.0605-1.1362) in length & 0.189 (0.015150.2271) in breadth. & open into the ootype ovary is situated near the posterior region of the segment ovary is bilobed, 'U' shaped measure 0.3030(0.2651-0.3409) in length & in breadth. The ovary it consists of small, rounded ovarian are granular or arrange in 2 to 3 rows.

4. Discussion

The present parasite differs from *T. Pingue* (presence of Neck Vs. Absence of Neck), no. of Testes (39-40Vs20-27), shape of the ovary ('U' Vs Transverse) shape of vitellaria (granular Vs, follicular) differs from *T. Aetiobatidis* shape of the Scolex no. of testes (39-40 Vs 7-12) shape of ovary ('U' Vs massive) differs from *T. dierma* shape of the scolex (Globular Vs. Variable), no. of Testes (39-40 Vs 50), shape of the ovary ('U' Vs Bilobed), shape of vitellaria (granular Vs. follicular) differs from *T. Marsupium* (Presence of Neck Vs. absence of Neck) no. of Testes (39-40 Vs 30-32), shape of ovary ('U' vs lobed) differs from *T. varkei* shape of the

scolax (Globular Vs. Cushion shape) no. of Testes (39-40 Vs. 30-36) shape of ovary ('U' Vs. small & bilobed) shape of vitellaria (granular Vs. follicular) differs from T. Minutum (Presence of Neck Vs. Absence of Neck) no. of Testes (39-40 Vs 33) shape of Vitellaria (granular Vs. follicular) differs from T. Squatinae, shape of the scolex (Globular Vs. Subglobular) no. of Testes (39-40 Vs. 40-45) shape of ovary ('U' V s. Elongated) shape of vitellaria (granular Vs. follicular) differs from T. Elangatum (Presence of Neck Vs. Absence of Neck) no. of Testes (39-40 Vs. 40) shape of ovary ('U' vs. Bilobed) shape of vitellaria (granular Vs. follicular) differs shape vs from T. Madhukari, shape of the scolex (Globular V s. Subglobular) no. of Testes (39-40 V s. 16) shape of ovary ('U' shaped bean shape) differs from T. Singhii no. of Testes (39-40 Vs. 76-80) shape of ovary ('U' shape of vitellaria (granular Vs. follicular) differs from T. bombayensis Rounded) no. of Testes (39-40 Vs. 31-38) shape of ovary ('U' shape Vs. Cylindrical) differs from T. Aurangabadensis. Shape of the scolex (Globular Vs. Quadrangular) no. of Testes (39-40 Vs. 16) shape of vitellaria (granular Vs. follicular) differs from T. Hanumanthrae

shape of scolex (Globular Vs. Quadrangular), (Presence of Neck Vs. Absence of Neck) no. of Testes (39-40 Vs. 30-35) shape of ovary ('U' shape Vs. 'H' shape) differs from T. Mehdii, no. of Testes (39-40 vs. 43-47) differs from T. Gaijanane, shape of the Scolex (Globular Vs. Quadrangular) Neck (Presence of Neck Vs. Absence of Neck) no. of Testes (39-40 Vs. 55-60) shape of ovary ('U' shape Vs. Bilobed) differs from T. Alibagensis. Shape of scolex (Globular Vs Squarish) (Presence of Neck Vs. Absence of Neck) no. of Testes (39-40 Vs. 64). The present worm Tylocephalum Ratnagiriensis n. sp. the name is proposed to the locality Ratnagiri.

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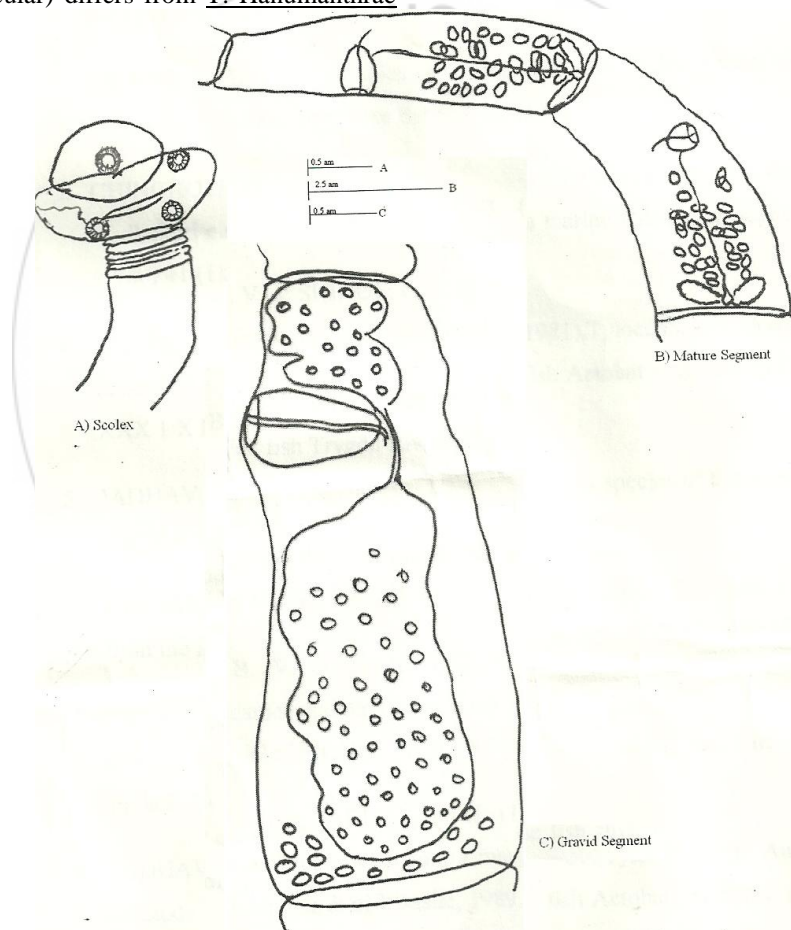


Figure 1- Tylocephalum Ratnagiriensis

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