RESEARCH ARTICLE

On a new species of the genus *Uncibilocularies* Southwell, 1925, from (Cestoda: Onchobothridae) Ratnagiri, (MS) West coast of India

Pawar LB, Patil DN, Shewale SS and Kendale SS

Department of Zoology, S.G. Patil Arts, Commerce and Science College, Sakri, Dist. Dhule, MS, India

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ABSTRACT

One new cestode species *U. latkanai* from *Trygonzugei* at Ratnagiri (M.S.) West Coast of India is described. *Uncibilocularies latkanai* differs from all the known species of the Genus in having scolex triangular, tapering at both the ends and bothridia are present. Mature segments are elongated in shape and five to six times longer than broad. Testes 47-50, genital pores submarginal, vitellaria granular like strip. Cirrus pouch alternate.

Keywords: Uncibilocularies, Trygonzugei, U. latkanai, parasite, host.

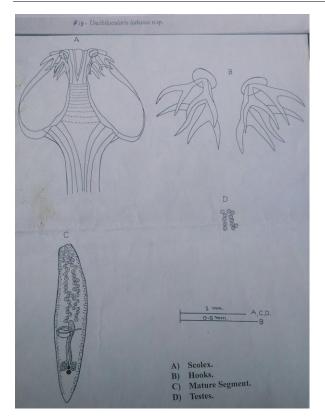
INTRODUCTION

Uncibilocularies was established by Southwell (1925) as its type species U. trygonis in Trygonwalga and T.sephen. He again reported in 1927 U. mandleyi in Hemigaleus balfouri Subhapradha (1959) reported U. indica from Chiloscyl liumgriseum in India. Deshmukh and Shinde (1975) reported U. aurangabadensis from Stromateus sp. In India, Shinde and Chincholikar (1975) described U. ratnagiriensis and U. southwelli from Trygon species in India. Later on Deshmukh (1977) reported three new sp. U. thapari from T. sephen, U. shindei from T. zugei and U. somnathi from pteroplatamicrura at veraval, Jadhav and Shinde (1981) describedU. veravalensis, Jadhav, Shinde and Phad addedU. bombayensis from T. sephen. Later on Jadhavetal (1989) described two new species of the same genus. U. indianaand U. shashtri from marine fishes; West coast of India. Fifteen marine fishes Trygonzugei were dissected at marine Biological Laboratory Ratnagiri, out of which nine fishes were infected and 12 cestodes were recovered.

DESCRIPTION

The scolex is almost triangular tapering at both the ends with four sessile bothridia. Scolex.1.69-1.72 x 1.31-1.87 mm in size.Bothridia larger measures 1.417-1.533 x 0.36-0.62 mm in size. Loculi and accessory suckers are absent. Each bothridia anteriorly bears a pair of bifurcated hooks, inner hook measures $0.34-0.35 \times 0.034-0.039$ in size. Outer hook measures $0.39-0.40 \times 0.034 \times 0.043$ in size. Each hook has prongs and one

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handle. Each prong measures 0.252×0.024 mm in size. The outer prong measures $0.214-0.218 \times 0.024-0.039$ mm in size. The outer pair of hooks measures $0.219-0.296 \times 0.024-0.034$ in size. Neck long 0.155-0.175 in length and 0.218-0.277 in breadth.

Mature segments longer than broad measures 2.306 x 2.431 in length and 0.236-0.476 in breadth. Testes oval to round in shape 47-50 in number lies in anterior half of the segment. Cirrus pouch is middle of the segment measures 0.519 x 0.113 in size submarginal cirrus long without spines measures 0.147 x 0.011 in size.vas deferens is thin and straight measures 0.159 x 0.005 in size and is opposite to the genital pore. Vagina 0.47-0.51 x 0.022mm in size. Receptaculum seminis measures 0.193 x 0.034 in size. Vagina and cirrus pouch opens through oval common genital pore 0.193 x 0.204 in size. Vagina ends in shell gland measures 0.079 x 0.068 in size. Ovary bilobed finger like with 3-4 aciniootype lies in between two ovaries measures 0.170 x 0.170 in diameter. Vitellaria granular uterus longer and broader 0.056-0.090 in size.

Host: TrygonzugeiLocation: Spiral ValveLocality : BhagvatiRatnagiri (M.S.) India.

DISCUSSION

The present worm under discussion is having scolex triangular absence of the accessory suckers, absence of tubercle, presence of neck, mature segments are enlongated tapering at both ends. Testes are 47-50 in number. Genital pore sub-marginal alternate ovary bilobed, vitellaria granular.

The present parasite differs from *U. trygonis* in the shape of scolex almost triangular as against square, Testes 47-50 as against 30-40.

From *U. indica* number of testes 47-50 as against 56-60, genital pore anterior to one third as against middle.

From *U. aurangabadensis*scolex almost triangular as against quadrangular presence of neck as against absence of neck.

From *U. ratnagirensis*scolex triangular as against square. Testes 47-50 as against 144.

From *U. southwelli* shape of scolex triangular as against rounded. Testes 47-50 as against 220-230.

From *U. thapariscolex* almost triangular as against rounded. 47-50 as against 25-28.

From *U. shindeiscolex* rounded, Testes 40-45, position of genital pore middle.

From *U. somnathiscolex* quadrangular.

From *U. veravalensis*scolex round to oval.Testes 75-80, cirrus spinose.

From *U. bombayensis*scolex circular common genital pore marginal.

From *U. indiana*scolex oval. Tubercle on inner prong as against absent.

From *U. shashtris*colex broad narrow anteriorly and broad posteriorly. Testes 55-60. Cirrus pouchspinose, vagina posterior to cirrus pouch. Uterus coiled.

CONCLUSION

Because of the varied characters, it is regarded as a new species*U.latkanai*from *T. zugei*at Ratnagiri. Nomenclature is done with the specific name of authors mother Late LatkanbaiBabulalPawar, who inspired and help me for education.

REFERENCES

- Deshmukh RA and Shinde GB (1975) On a new species of the genus *Uncibilloculariessouthwelli*, 1925 form marine fish from West Coast of India. *Marathwada University J. Sci.* 14: 333-337
- Deshmukh RA (1979) On three new species of *Uncibillocularis southwelli*, 1925 (Cestoda: onchobothridae) from marine fishes with a key to the species of the genus. *Proc Nat. Acad. Sci. India*, 49(B) IV.
- Jadhav BV and Shinde GB (1981): Uncibilocularis veravalensisn. sp. (Cestoda:Onchobothridae) from Indian marine fish from West Coast of India. Indian Journal parasitology 5:113-115.
- Jadhav BV, Shinde GB and Phad AN (1982) On a new species *Uncibilocularis* southwell (1925) (cestoda:tetraphyllidae) from T.sephen at Bombay. *Helminthologia*, 21:17-20 (1984).
- Shinde GB and Chincholikar LN (1975) On a new species of *Uncibilocularis*Southwell 1925 from marine fish (Trygon) from Ratnagiri, *Maharashtra Uni. J. Sci.* 14:349-345.

- Shinde GB and Chincholikar LN (1976) On a new cestode*Uncibilocularis Southwelli* (Cestoda: Onchobothrida) from marine fish at Ratnagiri, India, *Marathwada Uni. J. of Science*,15:263-267.
- Southwell T (1925) A monograph on Tetraphyliidea with notes on related cestode. Man. Live P. Sch-I Med. 2:368.
- Subhapradha CK (1955) Cestode parasites of fishes of Madras coast. *Indian Journal of Helminth*. 7:41-132
- Jadhav BV, Shinde GB, Muralidhar A and Mohekar AD (1989) Two new species of the Genus Uncibilocularis Southwell (1925) from (Cestoda- Onchobothidae) India. *Indian J. of Helminthology* Vol. XXXXI No. 1 march 1989 PP.41:14-20.
- James P Bernot, Janine N Caira and Maria Pickering. (2015) The Dismantling of *Calliobothrium* (Cestoda: Tetraphyllidea) With Erection of *Symcallio* n. gen. and Description of Two New Species. *Journal of Parasitology*, 101:2, 167-1.

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