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REDESCRIPTION OF OOCHORISTICA AMERICANA HARWOOD, 1932 (EUCESTODA: LINSTOWIIDAE) FROM CALOTES VERSICOLOR AT MURUM (M.S. INDIA)

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ABSTRACT:

The present form Oochoristica americana, Harwood,1932 having many closely resembling characters except few known as additional characters as in the shape of scolex, number of testes, shape of cirrus pouch, structure of ovary and genital atrium.

KEYWORDS: Oochoristica americana, Calotes versicolar, suckers.

INTRODUCTION

The genus Oochoristica was erected by Luhe, 1898 as a type species Oochoristica tuberculata in Lacerta,Agma uromastix,in Europe. The present worm Oochoristica americana is here redescribed as O. Americana Harwood,1932.

MATERIAL AND METHODS

Nine specimens of the cestode parasites were collected from intestine of Calotes versicolor, All worms were long, flattened with musculature with scolex, numerous immature, mature and gravid segments. For the taxonomic study the host was carried out regularly in each annual cycle.The host was dissected in mid ventral line, various organs of the viscera i.e.stomach and intestine, intestine kept in separate

Peteridish containing normal saline. These organs teased with needles and observed under microscope. The worms were flattened and preserved in 4 % formaline, stained with Harris haematoxylene, passed through various alcoholic grades, cleared in xylol, mounted in D.P.X. whole mount slides were prepared for further anatomical studies and drawings were made with camera lucida and all measurements in millimeters.

DESCRIPTION

All the worms were long, with thin musculature. The scolex is indistinctly marked off from the strobila, flat, dome shaped in appearance, broad at the base, tapering at the apex, broader than long and measures 0.097- 0.272 in length and 0.340-0.557 in breadth. The scolex bears four suckers, which are medium in size oval in shape, muscular, arranged in two



pairs one pair in each lateral half of the other, where a other pair is separate and measures 0.388-0.447 in length and 0.116- 0.146 in breadth. The neck is short ,broader than long, narrow anteriorley, broad posteriorly with convex lateral margins. The mature segments are medium, larger than broad, rectangular in shape, one and half to two times longer than broad, without slightly projections, broad anteriorly and narrow posteriorly, with straight lateral margins and measures 0.737- 0.767 in length and 0.659-0.697 in breadth. The testes are small and medium in size, oval in shape, unevenly distributed, postovarian, situated in the posterior half of the segments, 35-40 in numbers, in a single field, crescent shaped, bounded laterally by longitudinal excretory canals and measures 0.121-0.227 in length and 0.023-0.076 in breadth. The cirrus pouch

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is medium in size, cylindrical in shape, obliquely placed, anteriorly directed, in the anterior half of the segments, extends upto longitudinal canals and measures 0.114-0.136 in length and 0.038-0.068 in breadth. The cirrus is thin, straight, slightly curved, contained within cirrus pouch. The vas deference is thin, long, coiled and measures 0.545 in length and 0.015 in breadth. The ovary is large in size, butterfly shaped, distinctly bilobed, obliquely placed, situated in the anterior half of the segments, poral lobe small, aporal lobe is large, each lobe with 10-12 short, blunt, round acini and measures 0.101- 0.197 in length and 0.303- 0.341 in breadth. The two lobes are connected with each other by a short isthmus. The vagina is thin tube, starts from the genital pore, runs transversely, for a short distance, parallel to the cirrus pouch and then takes turn posteriorly, runs obliquely, enlarges into seminal receptaculm and measures 0.341in length and 0.015- in breadth .The seminal receptacle is small in size, oval in shape, opens in ootype and measures 0.076 in length and 0.015-0.038 in breadth. The ootype is small in size, oval, postovarian, situated centrally of the segments and measures 0.250in length and 0.045-0.060 in breadth. The genital pore is medium, oval in shape, opens marginally, irregularly alternate, obliquely placed, situated in the anterior half of the segments, at one fourth from anterior margin of the same and measures 0.197 in length and 0.030-0.069 in breadth. The vitelline gland is large, triangular in shape, postovarian, situated in posterior half of the segments and measures 0.500 in length and 0.121-0.182 in breadth.

RESULT AND DISCUSSION

The genus Oochoristica was erected by Luhe, 1898 as a type species Oochoristica tuberculata in Lacerta, Agma, Uromastix, Varanus etc. in Europe, also in Coelopysis sp. in Morocco.

After going through the literature, the worm under discussion, turned out to be the species of the genus, Oochoristica and comes closer to Oochoristica americana Harwood, 1932, but differs from the same, in few characters, known as additional characters which are as follows.

- 1. The present worm differs from O.americana Harwood, 1932 in the size and position of cirrus pouch crossing the poral canal as against extends up to the longitudinal excretory canals.
- 2. The present tapeworm differs from 0.americana Harwood, 1932 in the width of the ovary 0.303-0.341 as against 0.350.
- 3. The present worm differs from 0. americana Harwood, 1932 in the presence of receptaculum seminis is oval as against absent.

As the above characters are minor it is redescribed as Oochoristica americana Harwood, 1932. The author has reported the worms from Calotes versicolor at Murum, Dist. Osmanabad, M.S. India.

REFERENCES

- **Baylis H.A. (1919)**: On two new cestodes of the genus Oochoristica from Lizards. Parasit. II : 405-414.
- Brooks, D.R. and Mayes, M.A. (1976) : Morphological variations in natural infection of Oochoristica bivitellobata Lowen, 1940 (Cestoda: Anoplocephalidae) Trans. Nebra Acad.sci. 3: 20-21.
- Bursey, Charles, R., Stephen, R.G. (1992) : Oochoristica iselandensis n.sp. (Cestoda : Linstowiidae) from Island night Lizard Xantusia,riversiona (Sauria xantusidae). Trans. Anim. soc. 111(4): 302-313.
- **Bursey, C.R. and Stephen, R,G.(1992**): Oochoristica bezyi n.sp. (Cestoda : Linstowiidae) from the desert night Lizards Xantusia vigilis.Trans. An. Mic.III: 36-43.
- Capoor, V.N. and Shrivastav, V.C. (1968): A note on observation in Oochoristica species. Proc.Mat.Acad.sci. India.sec. B. 38(3/4): 177-180.
- Kennedy, M.J., Killick, L.M. and Buton M. (1982): Oochoristica javaensis n.sp. (Eucestoda : Linstowiidae) from Gehyra mutilata and other Lizards from Java, Indonesia. Can.J.Zool. 60(10): 2459-2463.
- Medeman, K.J.L. (1991) : Oochoristica truncate infection of Agma aculeate and Agma planicepes (Reptilia: Agmidae) in the Namibia area. Madoqua 18(1): 55.

- Mishra, V.R. (1945): On a new species of genus Oochoristica from intestine of Calotes versicolor. Proc. Ind. Acad. Sci. sec. B. 22 : 1-5.
- Mishra, D.S., Capoor, V.N. and Singh, S.P. (1989) : On a new species of the genus Oochoristica from intestine of Calotes . Ind. J. Hel. Vol. 41 : 137-140.
- Nama, H.S. and Khichi, P.S. (1972) : On a new species of Oochoristica Luhe 1898 from Varanus monitor. Proc.Nat.Acad. of sci. India. 42 b (3): 240-244.
- Raina, M.K., Chisti, M.Z. and Khan A.R. (1973) : An abnormality in Oochoristica tuberculata ,Luhe 1898. J.of sci.Uni. of Kashmir.
- Shinde,G.B. and Mohekar,A.D.(1977): Redescription of Oochoristica sigmoides , Moghe, 1926(Cestoda: Cyclophyllidea) from Indian Lizars Calotes versicolor at Aurangabad, Mar. Uni. Nat.sci. vol. XVI-9: 191-193.
- Steelman, G.M. (1939): Oochoristica whitentoni n.sp. from a land Tortoice. J. Parasit.25: 479-482.