



Short Communication

Moghcia rouriensis (Cestodeparasite) N.SP from passer domesticus at Rahuri Dist. Ahmednagar, MS, India

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Abstract

Survey of cestode parasites from sparrow species like *Passer domesticus* (Linnaeus) at al from Rahuri Dist Ahmednagar from during January 2015 to December 2015 The present parasite is having scolex large, squarish, broad anteriorly and narrow posteriorly. The suckers are large four in number, rounded to oval. The scolex is foiled by neck, broad interiorly and narrow posteriorly, followed by indistinct segmentation. Estes are five, cirrus pouch regularly alternate, small, elongated, sub marginally placed. Cirrus straight form vas deference reaches up to the middle of segments. Vagina thin tube runs transversely posterior to cirrus pouch. Seminal receptacle is thin tube opens into ootype. Ovary median, oval located almost towards middle of the segments. The parasite is named after locality Rahuri Dist. Ahmednagar, where the parasite and host found abundant.

Keywords: Suckers, scolex, vagina, vasdeference, cirrus pouch.

Introduction

The genus *Moghlesia* was erected by Neyra in 1944. Moghe (1933) synonymied it as *Baeria* with the type species *M. orbiutria*, from *orbiuterina*, from the intestine of *Turdoides somervillei* in India since from twelve species were reported till to this date. The genus *moghlesia* is the sole representative of family *Thysanosomidae* from the bird workers Gaikwad, P.M. and Shinde (1981) On a new species of *Moghlesia*, Lopez-Neyra, 1944¹, Gupta N.K. and Grewal S.S., 1970 A new cestode *Raillietina* (R.) *Indiayana*. n.sp. from Indian spotted². Gupta S.P. and Kumar P., 1976 Studies on some nematode parasites of birds Dove R.³.

Diniel R. and E.ic P. Hoberg, 1993 identify some Platyhelminths inhibiting white throated sparrow, *Zonotrichi albicollis*⁴. Josez, 1962 describe different helminth parasites from sparrow⁵ Yamaguti S. 1935 publish his work on cestode in a book, *Studies on helminth fauna of Japan part I Cestode of Birds*⁶ Tubangui M.A. and Masilugan V.A. (1937) Tapeworm parasites of Philippine Birds⁷, Waghmare S.B. and Chavan R.J., 2010 added Some qualitative studies of Carbohydrate metabolites in Cestode parasites of *Galus gallus domesticus*⁸ Cheng ganghuang, 2013 publish a Book *The studies on Cestode parasites in China*⁹ Basir A. Sheikh and Ahmad F., 2016.

Morphology and prevalence of some helminth parasites were studied in *Gallus domestics* from Gurez valley of Jammu and Kashmir¹⁰.

Materials and methods

The present study deals survey of cestode parasites from sparrow species like *Passer domesticus* (Linnaeus) at al from Rahuri Dist Ahmednagar from during January 2015 to December 2015 and brought in to laboratory. The worms were flattened for morphological study then they were preserved in 4% formalin for dehydration and stained with Harris haematoxyline stain. The specimens were passed through various alcoholic grades, cleared in xylin mounted in D.P.X. All drawing was drawn to scale with the aid of camera lucida and wholmount slides were prepared for anatomical and morphological studies. All measurements are in millimeter.

Description: The intestine of sparrows (*Passer domesticus*) were dissected and collection of one hundred of the cestodes from Rahuri Dist Ahmednagar takes place. Out of these five specimens have been taken for taxonomical studies. The worms were large, narrow, white in colour having scolex, neck, 20 immature, 25 mature and 15 gravid segments. The scolex is large, squarish, broad arterially, flat posteriorly and some what narrow, measures 1.10 (0.907-1.295) in length and 0.905 (0.776-1.034) in width. The scolex are large, four in number rounded to oval, overlapping to each other, measures 0.483 (0.409-0.557) in length and 0.242 (0.194-0.294) in width The scolex followed by long neck broad anteriorly and narrow posteriorly followed by segmentation, measures 0.566(0.563-0.5680) in length and 0.735(0.691 -0.762) in width. The mature segments are fifteen times broader, measures 0.181(0.136-0.227) in length and 2.169 (2.166-2.219) in width. The testes are oval in shape, five in number and measures 0.060 (0.553-

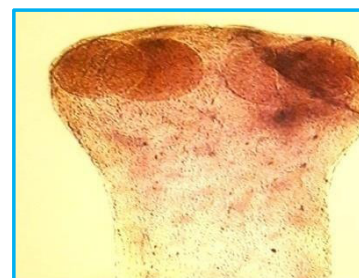
0.068) in length and 0.083 (0.076-0.0911) in width. The cirrus pouch regularly alternate, small, sub marginal, measures 0.193(0.182-0.205) in length and 0.049 (0.030-0.008) in width. The cirrus is straight, measures 0.079 (0.076-0.083) in length and 0.008 in width, reaching upto middle of the segments. The vagina is thin tube runs transversely posterior to cirrus pouch. Germinal pores are small, oval and measures 0.056 (0.053-0.060) in length and 0.022 (0.015-0.030) in width. Seminal vesicles is thin tube opens into ootype, measures 0.614(0.606-0.621) in length and 0.012(0.008-0.015) in width. The ovary is medium, oval in shape located middle of the segments, measures 0.061(0.038-0.083) in length and 0.341(0.326-0.356) in width. The ootype is small and measures 0.008 in length and 0.012 (0.008-0.015) in width. The longitudinal excretory canal measures 0.201(0.197- 0.205) in length and 0.161(0.152-0.167) in width.

Results and discussion

The genus *Moghesia* was erected by Lopes in 1944 as a type species *Mogheia orbiteriua* from the intestine *turdoidessomervitiei* in India. The present parasite is having scolex large, squarish, broad anteriorly and narrow posteriorly. The suckers are large four in number, rounded to oval. The scolex is foiled by neck, broad anteriorly and narrow posterior followed by indistinct segmentation. Testes are five, pouch regularly alternate, small, elongated, sub marginally placed cirrus straight form vas deference reaches up to the middle of segments. Vagina thin tube runs transversly posterior to cirrus pouch. Seminal receptacle is thin tube opens into ootype. Ovary median, oval located almost towards middle of the segments.

The newly identified species differ from other species in different characters which are: i. The present tapeworm differs from *M. orbiutrina* having testes nine, rounded, cirrus pouch hardly reaching upto the longitudinal excretory canal, ii. It differs from *M. megapanuterina* having scolex large, globular, testes 17-28 in number, follicular to oblong encircling ovary, cirrus pouch short and elliptical, ovary compact receptacle seminis postiorventral to ovary. iii. The present cestode differ from *M. bayamegaparuterina* having the scolex almost round, testes four to six in number. ovary roughly oval, vagina posterior to ovary, iv. The present worm differs from *M. asturi* in not having the scolex almost round, testes 16-18 in number locted lateral side of ovary. v. The present parasite differs from *M. capsuchi* is not having the testes 10-13 in number on aboral side of the ovary, vagina dorsal to excretory canal. vi. The present worm differs from *M. govindi* in which the scolex small quadrangular, testes five in number, round in shape, cirrus pouch small, cylindrical, elongated upto 1/3rd from the anterior margin, ovary compact, rounded with a cap of uterus. vii. It differ from *M. caudatusae*, having scolex globular, testes 31, ovary compact, cirrus pouch small, oval and obliquely placed. viii. The present cestode differs from *M. turdoides*, sonune at al.1990 in having scolex quadrangular, testes ten in number, ovary single mass, cirrus pouch elongated. The gravid segment

broader. ix. The present worm differs from *M. passeri*, scolex large, massive, quadrangular, testes seven in number, ovary situated in the portal half near posterior margin of the segments.



(A) Scolex



(B) Mature Segment

Figure-1: *Mogheia rahuriensis* n. sp.

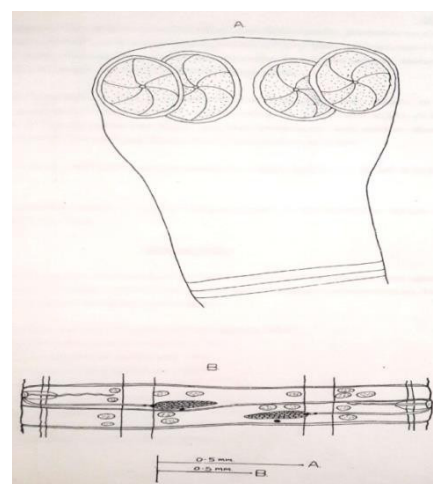


Figure-2: Camera Lucida Sketch-A. Scolex B. Mature segment.



Figure-3: Host Sparrow (*Passer domesticus*).

The above differentiating characters are valid enough to accommodate these worms as a new species *Magheia rohuriensis* n. sp named after locality where the parasites are collected.

Conclusion

The present Cestode Parasite is newly identifies in the intestine of passer domestics. In higher infection it cause the ill effect on health of host or death of host.

Acknowledgment

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