



## REDESCRIPTION ON *RAILLIETINA (RAILLIETINA) MICROSCOLECINS* (FUHRMANN, 1908) (CESTODA: DAVAINIENAE) IN THE INTESTINE OF PIED CRESTED CUCKOO FROM AURANGABAD (M.S.), INDIA

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### ABSTRACT

*Raillietina (Raillietina) microscolecins* (Fuhrmann, 1908) cestode parasite of *Clamator jacobinus* (pied crested cuckoo) is redescribed from Aurangabad, Maharashtra, India. The present worm resembles with *Raillietina (Raillietina) microscolecins* (Fuhrmann, 1908) in having in having morphological characters i.e. scolex small, globular, almost round shape, neck long, mature proglottids broader than long, testes are medullary, almost round in shape. But the same differ due to number of hooks on rostellum, rows of spines, on the sucker margins and shape of ovary, hence it is redescribed.

**KEYWORDS :** Aurangabad, *Clamator jacobinus*, *Raillietina (Raillietina) microscolecins*.

### INTRODUCTION

The genus *Raillietina* was named in 1920 in honour of a French veterinarian and helminthologist, Louis-Joseph Alcide Railliet. *Raillietina (Raillietina) microscolecins* is an endoparasite, and this tapeworm belonging to the class Cestoda. This is an avian gastrointestinal parasite of family *Davainiidae* (Cestoda: Cyclophyllidae), and are the most important species in terms of prevalence and pathogenicity among wild and domestic birds. The genus *Raillietina* is responsible for 'nodular tapeworm disease.'

The present communication deals with the redescription on *Raillietina (Raillietina) microscolecins* (Fuhrmann, 1908) found in the intestine of the pied crested cuckoo at Aurangabad, Maharashtra, India.

### DESCRIPTION

Sixteen cestode parasites were collected from the intestine of the pied crested cuckoo at Aurangabad, Maharashtra, India, in the month of November, 1986. The worms are thin, medium in size, with scolex, numerous immature and mature segments.

The scolex is well marked off from the strobila, small in size, globular, almost round in shape, with armed rostellum and armed four suckers and measures 0.064 to 0.069 in length and 0.037 to 0.079 in width. The rostellum is medium in size, semi-circular in shape, with a single circle and 60 to 80 hooks at the anterior extremity. The hooks are bifurcated posteriorly. The rostellum measures 0.002 to 0.012 in length and 0.042 in breadth. The suckers are large in size, oval in shape, muscular, arranged antero-posteriorly, in a transverse line to the scolex. The spines on the sucker margins are arranged in 4 rows in a transverse line and measure 0.037 in length and 0.022 in width.

The neck is long, wide and measures 1.115 in length and 0.048 in width.

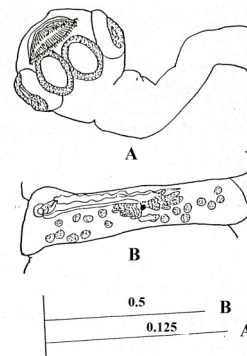
The mature segments are broader than long, almost five times broader than long, with a single set of genitalia and measure 0.145 to 0.191 in length and 0.630 to 0.726 in width. The testes are medullary, almost round in shape, variable in size, 18 in number, distributed posterior to the ovary into two groups, but few lateral to the ovarian lobes and measure 0.024 to 0.038 in diameter. The cirrus pouch is small in size, oval in shape, placed obliquely, at the anterior 1/3<sup>rd</sup> of the lateral margin of the segment and measures 0.048 in length and 0.014 to 0.029 in width. The cirrus is contained within the cirrus pouch, which is thin, curved tube and measures 0.062 in length and 0.004 in width. The vas deferens is a long, wide tube, runs parallel to the anterior margin of the segment and measures 0.388 in length and 0.004 to 0.024 in width.

The ovary is small in size, bilobed, in the middle of the segment, slightly aporal in position. Each lobe consisting of 4-6 short, blunt, round acini, slightly obliquely situated and measures 0.169 to 0.215 in length and 0.048 to 0.072 in width. The vagina is a thin, straight tube posterior to the cirrus pouch, starts from the genital pore, runs parallel to the vas deferens, turns posteriorly, enlarges to form receptaculum seminis, reaches and open into the ootype and measures 0.339 in length 0.004 in width. The receptaculum seminis is small in size, oval in shape and measures 0.009 in length and 0.024 in width. The ootype is small in

size, round in shape, postero-ventral to the ovary and measures 0.009 in diameter.

The vitelline gland is small in size, irregular in shape, post-ovarian in position, placed in between the two lobes of the ovary and measures 0.044 in length and 0.004 to 0.024 in width.

The genital atrium is of medium size, round in shape, in the anterior half of the segment and measures 0.048 in diameter. The genital pores are small, round, sub-marginal and unilateral, which measure 0.024 in diameter.



**Fig. *Raillietina microscolecina*, Fuhrmann, 1908**

### DISCUSSION

On closer observation these worms turned out to be *Raillietina (Raillietina) microscolecina* Fuhrmann, 1908, from *Electus rosatus* in Molucca Island, Burma in having 18-20 testes in each segment and many other characters, but differs from the same in few characters. The additional characters are as follows:

1. The present worm differs from *Raillietina (Raillietina) microscolecina*, Fuhrmann, 1908 in the number of hooks on rostellum (60-80 Vs. 160).
2. The present tapeworm differs from it in the rows of spines, on the sucker margins (4 rows Vs. 7 rows).
3. The present form differs from the in the shape of ovary (Bilobed with 4-6 blunt acini Vs. single mass).

As the characters are minor, it is redescribed here as *Raillietina (Raillietina) microscolecina*, Fuhrmann, 1908 which are reported from *Electus rosatus*, where as the present worms are being reported from *Clamator jacobinus* at Aurangabad, Maharashtra India. It is a new host record.

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