



**Prevalence of gastro-intestinal tapeworm *Raillietina*
found in *Gallus domesticus*.**

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ABSTRACT:

Thirty three specimens, of the Cestode parasites, were collected from the intestine of a hen, *Gallus domesticus*. All the worms were long, with thin musculature and light brown in colour. On closer observation they turned out, to be the species of the genus *Raillietina Fuhrmann*, 1920.

The Scolex is small in size, quadrangular in shape, distinctly marked off from the strobila and measures 0.225 to 0.250 in length and 0.282 to 0.311 in breadth. It bears an armed rostellum and four armed suckers. The rostellum is large in size, oval in shape, transversely elongated, situated in anterior half of it and measures 0.096 - 0.099 in length and 0.191 in breadth. It is armed with double circle hooks, which are single pronged, straight, pin like and 185-200 in

numbers.

KEYWORDS: Gallus domesticus, Rostellum, Postovarion, Scolex, Proglottides, Aproal, Vatelline gland, Isthmus.

MATERIAL AND METHOD:

Thirty three specimens, of the Cestode parasites, were collected from the intestine of a hen, at Bamrood, India. The parasites were stained with Harris Haematoxylin and prepared whole mount slides, for anatomical studies. It is armed with double circle hooks, which are single pronged, straight, pin like and 185-200 in numbers. The suckers are medium in size, oval in shape, arranged in two pairs, One pair in each half of it and situated in the anterior corners of the same, placed in the anterior half the Scolex and measure 0.242 to 0.247 in length and 0.046

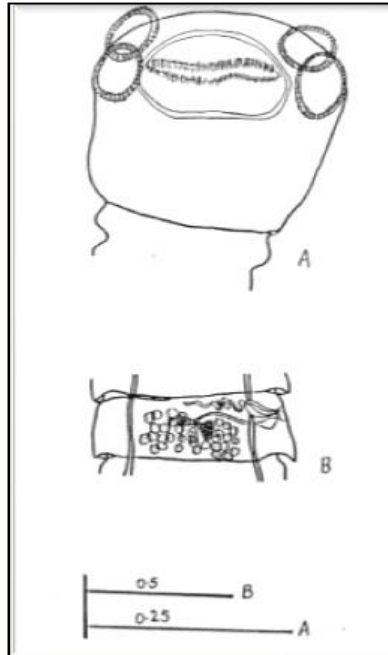
to 0.061 in breadth. The sucker margins are armed with minute hooks which are four, in a transverse row. The neck is absent. The mature segments are small in size, broader than long, almost more than three times broader than long, with convex lateral margins, narrow anteriorly, broad posteriorly and projections at the posterior corners of the segments, overlapping on the succeeding segments (Craspetode type of arrangement) and measure 0.191 - 0.215 in length and 0.630 to 0.690 in breadth. The testes are medium in size, oval in shape, arranged in a single group, surrounding the female gonads, more Postovarion, few lateral to ovary, in the central medulla, bounded laterally to the longitudinal excretory and measure

0.024 - 0.029 in width. The cirrus pouch is small in size, cylindrical in shape, curved; anteriorly directed, situated just anteriorly to the middle of segments and measures 0.140 to 0.145 in lengths 0.029 to 0.038 in breadth. The cirrus pouch is wide, curved, and measures 0.116 to 0.121 in length and 0.009 to 0.019 in width. The vas deferens is of medium width, coiled, near the anterior margin of the segment, extends medially beyond the middle of the and measures 0.523 in length and 0.004 - 0.009 in width The ovary is distinctly bilobed, small in size, obliquely placed; compact, with uneven centre of the segments and measures 0.149 in length and 0.033 to 0.057 in breadth. The aproal lobe is narrow and long, anteriorly directed, where as the poral lobe is short and wide

and posteriorly directed. The vagina is thin tube, starts from genital pore, runs obliquely for a short distance, enlarges and forms the receptaculum seminis, turns to anterior side, runs obliquely almost up to 1/3 region of the segments, takes a posterior turn, runs obliquely reaches and opens into ootype and measures 0.339 in length and 0.004 to 0.009 in width.

The receptaculum seminis is medium in size, oval in shape, broad proximally; narrow distally, outside the longitudinal excretory canals and measures 0.067 in length and 0.033 in width. The ootype is small in size, round in shape, ventral to the isthmus and measures 0.019 in diameter.

The genital pore are medium in size, oval in shape, marginal almost at 1/3rd from the anterior margin of the segments, regularly alternate and measure 0.004 in length and 0.004 in breadth. The longitudinal excretory canals are narrow and measure 0.009 – 0.014 in width. The Vitelline gland is small in size, almost rectangular in shape, Postovarian, antero-posteriorly placed, with irregular margin, situated just posterior to the middle of segment and measures 0.043 in length and 0.024 in breadth.



Raillietina (R.) friedergeri

Fig A- Scolex

Fig B- Mature segment

DISCUSSION:

After going through the literature, the Cestode under discussion turned out to be the species, of the genus *Raillietina* and comes closer to *R. (R.) friedergeri* Linstow, 1878 but it differs from the same, in few characters, which are as follows.

1. The spines, on the sucker margin in the present tapeworm, are minute, in four rows, whereas the same in *R. (R.) friedergeri* are in 4-5 rows and small.
2. The present tapeworm, the testes are 32 in number, whereas the same in *R. (R.) friedergeri* they are 25-32 in number.
3. In the present tapeworm, the cirrus pouch is small in size, cylindrical in shape, were as, it small in *R. (R.) friedergeri*.

CONCLUSION:

The distinct characters, as noted above, justify the recognition of the Present Cestode. As the above

characters are minor, it is re-described here as *R. (R.) friedergeri* Linstow, 1878.

Linstow reported his worms, from *Pavo nigripennis* (peacock) in Berhampur, Bengli; whereas the present worms, are being reported From *Gallus domesticus* at Bambrood, Taluka. Bhadgaon, Dist .Jalgaon, M. S., India.

Type of species: *R. (R.) friedergeri* Linstow, 1878

Host: *Gallus domesticus*

Habitat: Intestine of *Gallus domesticus*.

Locality: Bambrood, Dist. Jalgaon, M.S., India.

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