



# New Species *Stielsia Parbhaniensis* n. sp. (Eucestoda Thysandsomidae) From *Capra- hircus* L. Parbhani (M.S.) India.

Thakare BG

Department of Zoology, D.S.M. College, Jintur, Parbhani, MS, India

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## ABSTRACT

The present investigation deal with taxonomical and anatomical observation of species *Stilesia* new Railliet, 1893 from *Capra hircus* L. Known species in many differentiating characters such as size of mature segments, nature of arrangement of testis, shape and position of vagina and number of poruterine organs.

**Keyword:** *Stielsia Parbhaniensis* n.sp. cestode parasite *Capra hircus* L.

## INTRODUCTION

The genus *stilesia* was erected by Railliet in 1893 from *ovis aries* in Europe Asia and Africa as *Stilesia globipunctatus*. Later on *S hepatica* added to this genus by Wilffugal, 1903 from sheep and goat in east Africa *stilesia vittata* repowered by Railliet in 1893. From camelus dromedaries from Africa and India, *Stilesia okapi* erected as a new species In 1836 from okapi in Africa, regarded by Baer in 1950 as variety of *S. globipunctata*. The Author agrees with Baer to regard *S. Leiperi* from *ovis bharal* at Parbhani then majid *et al* (1982).

## MATERIALS AND METHOD

Twenty seven cestode parasites were infected collected from the intestine of *Capra hircus* L all were flattened, few heavy infected intestines selected for flattened and preserved in 4% formalin, wash with the help of tap water for several times, stained with Harris haematoxyline, passed through various alcoholic grades, cleared in xylol, mounted in D.P.X. and prepared whole mount slides. Drawing are made with the help of Camera lucida.

## Description

About sixteen specimens of the cestode parasites were collected from the intestine of Goat *Capra- hircus* L., at Jintur Dist. Parbhani, all the cestode were long within musculature, scolex and immature, mature and gravid proglotids.

The scolex is fairly large in size, somewhat quadrangular in shape, broader anteriorly, narrows posterior and measures 0.805 to 1.1801 in length and 1.010 to 0.582 in breadth from the strobila.

It bears four suckers, which are large in size oval in shape arranged in two pairs attached to each other but overlaps touching lateral margins, of the scolex and measures 1.005 to 0.801 in length and 1.010 to 0.582 in breadth.

The neck is short, median with, and slightly broad anteriorly and measures 0.606 to 0.582 in length and 0.398 to 0.316 in breadth.

The mature segments are small in size, very thin, only one set of reproductive organs in each segments, broader than long, with distinct segmentation, convex lateral margin, with without projections and measures 0.291 to 0.267 in length and 1.576 to 1.67 in breadth. The testes are 8 to 10 in number, medium in size, rounded in shape in two lateral fields on lateral side of the segment, inside the two longitudinal canals and measures 0.034 to 0.024 in diameter.

Cirrus pouch is small in size, oval in shape, elongated, and transversally placed anteriorly directed extending up to longitudinal excretory canal and 0.024 to 0.019 in length and 0.291 in breadth. The cirrus pouch is thin coiled contained within the cirrus pouch and 0.121 to 0.010 in length and 0.049 to 0.034 in breadth. The vas deferens is thin, coiled small, runs transversally, anteriorly and measure 0.121 in length and 0.010 in breadth. The ovary is medium in size, somewhat oval in shape, placed laterally anterior of the segment, with irregular margin and 0.102 to 0.087 in length and 0.170 to 0.131 in breadth. The vagina is thin, coiled, and posterior to cirrus pouch and 0.383 to 0.379 in length and 0.010 in breadth. The ootype is small in size, round in shape, and measures 0.019 in diameter. Vitelline glands are absent. The genital pores are small in size, rounded in shape, regularly alternate situated just anterior to middle of the segment and 0.010 in diameter. The longitudinal excretory canals are narrow and measures 0.291 in breadth.

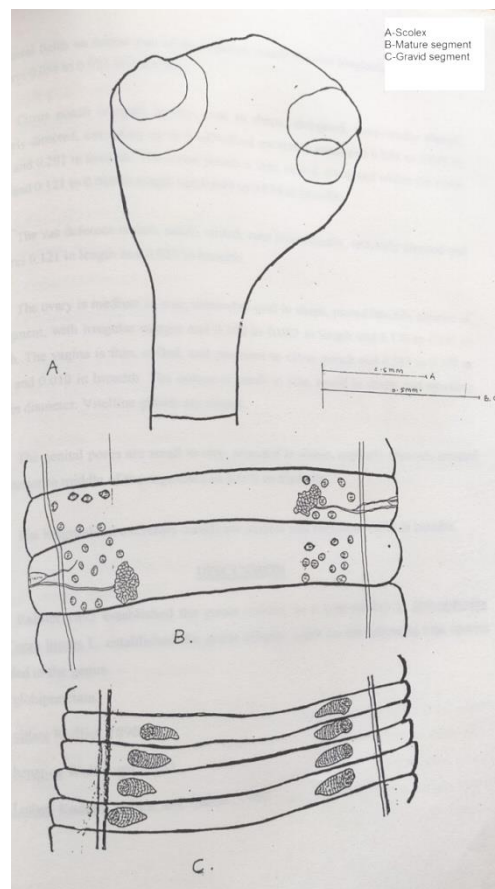
## RESULT AND DISCUSSION

Railliet 1893 established the genus *stilesia*, as a type species *S. globipunctata* from *Capra- hircus* L. established the genus *stilesia*. Later on the following nine species are added to the genus.

1. *S. globipunctata*.
2. *S. vittata* Railliet, 1896.

3. *S. hepatica* Wilffugal, 1903.
4. *S. jadhavae*, jadhav B.V., 1999
5. *S. Yavalensis* kalse etal, 1999
6. *S. Parbhaniensis* (described earlier)

The present cestode, is having mature segments, broader than long, testes round in shape 16 to 18 in numbers 8 to 10 on each lateral side cirrus pouch oval, elongated broad distally at the middle of the segments, vagina anterior the cirrus pouch, paruterine organs 2 in number, in each gravid segment, oval big, placed laterally in the center of segments ovary medium, rounded, in posterior region of the segments and found in *Capra- hircus* L.



**Figure: a. St. of Scolex b. Mature Segment c. Gravid Segment**

1. The present tape worm, differs from *S. globipunctata* which is having the mature segments; broader than long distinct segmentation, testes in two groups, 5 to 8 on each side, cirrus pouch small, pyriform ventral to vagina, Vasdeferens no closely between cirrus pouch and outer well of excretory vessel, somewhat globular, vagina dorsal to cirrus pouch, uterus globular immediately dorsal and close to ovary and paruterine organs develop from uterus.

2. The present form differs from *S. vitiate* which is having testes in two groups 5 to 8 on each side vas-deferens closely coiled, in between cirrus pouch and outer wall of excretory vessel, cirrus pouch cylindrical cirrus armed, ovary rounded situated between polar vessels, vagina posterior to cirrus pouch, cirrus near to anterior margin, two big paruterine organs, develop internal to excretory vessels and found in camelus dromedarius and camelus bactrianus.

3. The worm under discussion differs from *S. hepatica*, which is having, segment craspedote testes. In two groups 6 to 7 each side preovarian, an anterior half of the segment, vas deferens not closely coiled but extends up to the longitudinal excretory vessels, cirrus pouch almost, ovary small, compact, oval centers transverse, a small tube in the center and found in *Capra hircus* and *ovis aries*.

4. The worm under discussion differs *S. Leiperi* in having the testes in to groups , 5to6 on each side , poster lateral to ovary; vasdeferens not closely, coiled, cirrus, pouch cylindrical, vagina posterior to cirrus pouch cylindrical, vagina posterior to cirrus pouch uterus board, in anterior half of the segments , with two lateral such paruterine organs develops from uterus.

5. The cestode under discussion, differs from *S. caballeri* in having testes 1 to 10 on each side vas-deference forms a less dense bundle of convolutions, anterior to testes, Vagina open into the genital cloaca posterior to cirrus pouch, paruterine spherical, on post lateral surface and found in *Capra hircus* .

### Conflict of Interest

The author declares that there is no conflict of interest.

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