



On a new species of genus *Diplopylidium* beddard, 1913, (Cestoda: Dipylididae) from *Canis familiaris*.

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ABSTRACT

The present communication deals with a new species genus *Diplopylidium* Beddard, 1913 collected from dog, *Canis familiaris* at, Wagdhari, Ta. Gangakhed Dist. Parbhani, M.S. (India). It differs from all the known species in scolex globular or dome, mature segment longer than broad, double set of reproductive organs, testes 130 in number, cirrus pouch medium, cirrus thin, vas deferens long, ovary bilobed, vagina thin, receptaculum seminis oval, ootype round, genital pore small, oval, vitelline gland medium, with round accini, excretory canals thin.

Keywords: *Diplopylidium*, *Canis familiaris*, *Cestoda*, Wagdhari, India.

INTRODUCTION

The genus *Diplopylidium* was erected by Beddard, 1913 from *Genatta dongolona* as the type species *Diplopylidium genettae* et.sp.nov. Later on following species are added to this genus. *D. acanthotretum*, *D. fabulosum* Meggitt, *D. fortunatum* Meggitt, *D. nolleri skrjabini*, *D. Monoophorum*, *D. quinqueocoronatum*, *D. skrjabini*, *D. trinchessii*, *D. trisciale*, and *D. zschokkei*.

MATERIAL AND METHODS

Two specimens, of cestode parasites were collected from intestine of dog, *Canis familiaris*. The collected worms washed in water, specimens preserved in 4% formalin, stained with Harris Haematoxylin, cleared in xylol and mounted in D.P.X. Drawings were made with the help of Camera lucida. All measurements are in millimeter (mm).

Description (fig. A): Scolex medium, globular or dome, with four suckers, armed rostellum 0.267 to 0.345 mm in length and 0.097 to 0.374mm in width; rostellum medium, oval, 13 rows 0.087 to 0.092mm in length and 0.102 to 0.121mm in width; suckers four, oval, arranged in two pairs, overlapping 0.155 to 0.160mm in length and 0.112 to 0.136 mm in breadth. **Rostellar hooks** (fig.B and C) 110 hooks, 13 rows, large and

small, large 0.043 to 0.052mm in length and 0.001 to 0.006mm breadth, small 0.009 to 0.010mm in length and 0.001mm in breadth.

Mature proglottids (fig. D), large, longer than broad, with double set, acraspedote and measure 2.714 to 2.839 mm in length and 0.625 to 0.738 mm in breadth; testes medium, oval, 113 in number and measure 0.454 to 0.102 mm in length and 0.034 to 0.090 mm in breadth. Cirrus pouch medium, oval, posterior half of segment and measure 0.113 to 0.181 mm in length and 0.011 to 0.056 mm in breadth; cirrus thin, coiled and measure 0.136 to 0.170 in length and 0.011mm in breadth. Vas deferens long coiled and measure 0.919 to 0.965mm in length and 0.011 mm in breadth. Ovary medium, bilobed, U shaped, curved, round acini and measures 0.602 to 0.613 in length and 0.045 to 0.102 mm in breadth. Vagina thin, posterior to cirrus pouch, coiled and measures 0.476 to 0.488mm in length and 0.011mm to 0.022mm in breadth. Receptaculum seminis small, round, post ovarian and measures 0.068 to 0.079mm in length and 0.011 to 0.022mm in breadth. Ootype small, round, post ovarian and measure 0.011 mm in diameter. Vitelline gland medium, oval shaped post ovarian with round acini and measures 0.170 to 0.181mm in length and 0.124 to 0.159mm in breadth. Genital pores small, oval, posterior segment and measure 0.022mm in length and 0.011 mm in breadth.

Type species - *Diplopylidium wagdhariensis* n.sp
Host - *Canis familiaris*.
Habitat - Intestine
Locality - At. Wagdhari, Ta. Gangakhed, Dist. Parbhani (M.S.) India.

RESULTS AND DISCUSSION

The genus *Diplopylidium* was erected by Beddard, 1913. Later on following species are added to this genus: *D. acanthotretum*, *D. nolleri*, *D. trinchessii*, *D. fabulosum*, *D. triseriale*, and *D. quinquecoronatum*

The worm differs from all other known species *Diplopylidium wagdhariensis* n.sp. Are many distinct different characters which are shown and compared with other species of the genus:

The present worm differs from *D. acanthotretum* which is having breadth 0.004 in diameter, the rostellum with 3-5 circles of hooks, 18-24 hooks per circle, neck as wide as holdfast, testes 30-60 in number, cirrus pouch 0.160 to 0.310. Egg capsule 0.057 to 0.083

The present worm differs from *D. nolleri* which is having rostellum with 3-4 circles of hooks. The neck narrow than holdfast, testes 12-16 in number, Genital aperture in first, fifth or seventh of segment margin, ovary not mentioned.

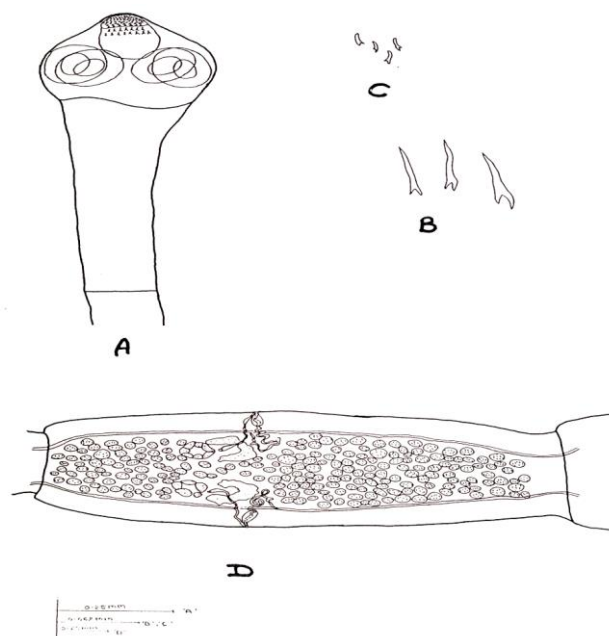


Fig. 1: A: Scolex, B: Large hooks, C: Small hooks, D: Mature segment.

The present worm differs from *D. genettae* which is rostellum with 2 crowns of hooks, 34 hooks per circle, the neck is not mentioned, testes numerous, genital aperture in first fourth of segment margin, ovarian lobes spherical.

The present worm differs from *D. trinchessii* which is having rostellum with 78-85 hooks in 4 circles, the neck short, testes 41 in number, genital aperture in first, third, fourth, fifth of segment margin, the ovary not mentioned.

The present worm differs from *D. fabulosum* which is having rostellum with 4 circles of hooks. The neck is not mentioned, testes 36-39 in number, genital aperture in fourth of segment margin and the ovary not mentioned.

The present worm differs from *D. quinquecoronatum* which is having rostellum with 5 circles rarely 4 circles of hooks. The neck not mentioned testes 48-64 in number, 0.046 in diameter. Genital aperture in first, fourth or fifth of segment. The cirrus pouch 150 by 50µ and ovary not mentioned.

CONCLUSION

Depending on these different and distinct characters of the worm, considered as a new species *D. waghariensis* n.sp. Is proposed, after the locality.

Conflict of Interest

The author declares that there is no conflict of interest.

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