RESEARCH ARTICLE

Systematic study of Cestode parasite Moniezia (Blanchariezia) Caprae n. sp. of *Capra hircus* from Kasgi Tq. Omerga Dist. Osmanabad, (MS) India

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ABSTRACT

The new species of the genus moniezia, Blanchard 1891 collected from intestine of *Capra hircus* at kasgi Tq. Omerga Dist. Osmanabad, M.S india. It differs from all the know species of genus with charactes, scolex small, triangular, auteriorly broad, posteriorly narrow, four suckers towards anterior, oval, long neck, matureproglotttids broader than long, double set of reproductive organs testes 40 to 50 oval, cirrus thin, coiled, protruded within pouch, cirrus pouch near anterior margin of segment, medium cylindrical, curved, thin long vas deferens, ovary bilobed, medium, middle in the segment, vagina thin tube, posterior to cirrus pouch, ootype small, oval, genital pore bilateral, small and oval.

Key words: Tape worm, *Moniezia caprae* n. sp, and *Capra hircus*.

INTRODUCTION

The genus Moniezia was eatablished by Blanchard 1891. Skrjabin and Schulz (1937) divided this genus into three sub-genera as follows:

1. Tnterproglottid glands groped in rosettes Moniezia
2. Inter proglottid glands arranged lineally (sometimes absent) .....Blanchariezia
3. Tnterproglottid glands absent ....Bariezia

The present worm agrees in all the characters with subgenus Blanchariezia Skrjabin and Schulz (1937) having two species as M.(B.) Bendeni (Moniez1879), Skarj. et Schulz 1937 and M. (B.) Pallida Moning, 1926. Later on two more two new species were added by Shinde et al., from the host Ovis bharal at Aurangabad, Maharashtra state, India. The present communication deals with the description of a species Moniezia (B.) caprae n. sp. Collected from goat *Capra hircus* at Kasgi, Tq. Omerga, Dist. Osmanabad, Maharashtra state, India.

DESCRIPTION

Numerous specimens, of the cestode parasites, were collected from the intestine of a goat, *Capra hircus*, at kasgi, Dist. Osmanabad, Maharashtra state, India.

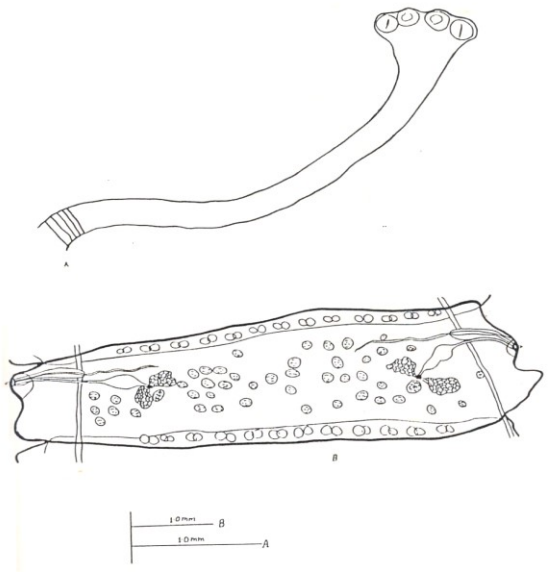

Fig . 1

The scolex is small in size, distinctly marked off from the strobillia, simple, almost triangular, broad anterior, narrow posterior and measures 1.022 to 0.902 in length and 1.249 to 0.510 in width. It bears four suckers, which are medium in size, oval in shape, placed in a row, towards anterior end of it and measure 0.270to 0.247 in length and 0.303 to 0.281 in width. The rostellum is absent. The neck is long, almost of the same width throughout and measure 4.848 to 4.486 in length and 0.476 to 0.341 in width.

The mature proglottids are broader than long, almost four time broader than long, with concave and convex lateral margins, with double set of reproductive organs, having projections at the posterior corners of the segment and measure1.874 to 1.339 in length and 6.366 to 5.473 in width. Testes are medium in size, oval in shape, scattered all over segment, bounded laterally by longitudinal excretory canals, in simple field, in the central medulla, unevenly distributed, occupy the whole segment, 40 to 50(45) in number and measure 0.142 in length and 0.089 in width. The cirrus pouch is situated near the anterior margin of the segment, medium in size, cylindrical in shape, curved, extends slightly beyond the longitudinal excretory canals, transversely elongated and measures 0.714 to n0.679 in length and 0.142 to 0.035 in width. The cirrus is a thin tube, slightly coiled, slightly protruded, contained within the cirrus pouch and measure 0.357 in length and 0.035 in width. The vas deference is thin, long, slightly wavy and measure 0.856 in length and 0.035 in width.

The ovary is distinctly bilobed, medium in size, obliquely placed, situated either in the middle or slightly posterior to the middle of the segments, almost at 1/4th from the lateral margin of the same, lobes nearly equal in size, with irregular margins and measures 0.928 to 0.839 in length and 0.267 to 0.089 in width.

The vigina on each side is a thin tube, posterior to the cirrus pouch, runs obliquely and transversely for a long distance, enlarges and from the receptaculum seminis, then become narrow, reaches and opens in to the ootype and measure 1.071 in length and 0.035 in width. The receptaculum seminis is medium in size, oval in shape, obliquely placed and measure 0.624 to 0.570 in length and 0.213 to 0.142 in width. The ootype is small in size, oval in shape, ventral to the isthmus and measure 0.0535 in length and 0.0714 in width. The genital atrium is large in size, oval in shape, marginal, situated in the anterior half of the segments and measures 0.267 in length and 0.340 in width. The genital pores are bilateral, small in size, oval in shape, marginal, in the anterior half of the segments and measures 0.035 in length and 0.089 in width.

The excretory canals are thin and measures 0.089 in width. The vitelline gland is medium in size, oval in shape, postovarian, compact, obliquely placed and measure 0.195 in length and 0.107 in width. They are absent near the lateral margins, in each segment, on each side. The inter proglottidal glands are present in the intestinal region, which are 12 to 13 in number, oval in shape, arranged in pairs and measures 0.142 to 0.107 in length and 0.107 to 0.089 in width

RESULTS AND DISCUSSIONS

The genus Moniezia has been erected by Blanchard, 1891 as type species *Moniezia expansa* (Rudolphi, 1805) Yamaguti, 1942 from Ovis aries, Bos indicus, Capra capreolus etc. Later on many species are added to this genus. After going through the literature, the worm under discussion comes under the subgenus, Balanchariezia skrjabin and Schulz, 1937. The present worm, agree in the all the characterswith subgenus Blanchariezia Skrjabin and Schulz (1937) having two species as M. (B.) pallida monning, 1926. Later on two more new species were added by Shinde et al., from the host Ovis bharal at Aurangabad, Maharashtra state, India. The present worm agree in all the characters of

genus moniezia and subgenus Blanachariezia, having two species as M. (B.) pallida, Mooning, 1926, M. (B.) benedieni (Moniez, 1879), Skrj. et Schulz, 1937. Later on two more new species were added to this genus by Shinde et, al., from the host Ovis bharal at Aurangabad as M. (B.) aurangabadensis and M. (B.) bharalae.

The present worm comes closer to the following species:

1. M. (B.) benedeni (Moniez, 1979) Skrj. et Schulz, 1937.
2. M. (B.) aurangabadensis, Shinde et. Al., 1985
3. M. (B.) bharalae, Shinde et. Al., 1985

The worm difference from above species, in having the scolex small in size, simple; suckers four in number, medium in size, oval in shape: neck long, mature segment broader than long, with double set of reproductive organs; testes medium in size, oval in shape, bounded by longitudinal excretory canals, in a single field, unevenly distributed, 40-50 (45) in number; cirrus pouch medium in size, cylindrical in shape; cirrus is thin, within the cirrus pouch; ovary bilobed, medium in size, lobes unequal, with irregular margins; vagina posterior to the cirrus pouch, from receptaculum seminis, opens in to ootype, receptaculum seminis medium in size, oval in shape; ootype small, oval; genital atrium large, oval, marginal; genital pores are bilateral, small, oval; vitelline gland medium, oval postovarian, compact and the interproglottidal glands present in the intersegmental region, 12-13 in number, oval, arranged in paris, host *Capra hircus* (Goat).

The present tapeworm, difference from M. (B.) bendeni, which is having mature segments broader than long, posterior segments fleshy; testes 500 in number, arranged in the from of two triangles in two fields; ovary compact, with acini, presentat at centre of the segment on each side; interprporoglottid glands varying in size, narrow, short, and in a transverse row; cirrus pouch wide, short, oval, do not touch longitudinal excretory canal; host horse. The worm under discussion, difers from M. (B.) aurangabadensis, wich is having scolex simple; segments broader than long; testes 1100-1200 in number, distributed fully, from anterior to posterior of the segments; ovary bilobed, each lobe with acini; inter proglottid glands 12-15 in number, in a row; seminal vesicle oval and large; cirrus pouch small, round; cylindrical vitelline gland small, round; vagina posterior to cirrus pouch and host Ovis bharal (sheep).

The present cestode, differs from the M. (B.) bharlae which is having, scolex not available, mature segments broder than long, testes 190-220 in number, distributed in ½ to ¾ of segment; ovary compact, bilobed; interproglottid glands in two rows, at the posterior margin of segments and 38-44 in number; seminal vesicle enolgated and fusiform; cirrus pouch, small, oval, obliquely placed; vitelline gland absent, vagina posterior to cirrus pouch and host Ovis bharal (Sheep). By observing these distinct characters, the author has no other way, than to erect a new species, to accommodate these worm and hence the name Moniezia (Blanchariezia) caprae n. sp. Is proposed, after the gneric name of the host.

Type species -Moniezia (blanchariezia) caprae n.sp.
Host - *Capra hircus*.
Habitat -Intestine.
Locality- Kasgi, Tq. Omerga, dist. Osmanabad, Maharashtra state, India.

Conflicts of interest: The authors stated that no conflicts of interest.

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