PLATE - IX

Moniezia (B.) manwatensis n.sp.

A. Scolex.
B. Mature segment.
short, blunt, round acini and measures 0.247 to 0.293 in length and 0.236 to 0.281 in breadth.

The interproglottid glands are present, in the intersegmental region, medium to large in size, oval in shape, 50 - 53 in number, in 1-3 rows, arranged lineally, with thick musculature, either single or paired, highly muscular and measure 0.090 to 0.204 in length and 0.0681 to 0.247 in breadth.

The longitudinal excretory canals are medium in width and measure 0.034 to 0.056 in breadth.

The gravid segments were not available.

**DISCUSSION**

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, *Blanchariezia* Skrjabin and Schultz, 1937.

The present worm, agrees in all the characters, with the subgenus *Blanchariezia* Skrjabin and Schultz, (1937) having four
species as *M. (B.) benedeni* (Moniez, 1979) Skrj. et Schulz, 1937 and *M. (B.) pallida* Monnig, 1926, later on two new species were added as *M. (B.) aurangabadensis* and *M. (B.) bharalae* by Shinde *et al.* from the host, *Ovis bharal* at Aurangabad, M.S., India.

The present worm comes closer to the following species:


The present worm having scolex simple, large, globular, suckers medium, oval, arranged in two pairs; neck short, broader than long; mature segments, each with a double genitalia, large, broader than long; testes medium to large, oval, 380 - 390 (385) in number, evenly distributed; cirrus pouch medium, oval, situated in the middle region of the segments; ovary large, horse shoe shaped, with irregular margin; ootype small, oval, situated in the concavity of the ovarian lobes; interproglottid glands medium to large, oval, 50 - 53 in number, in 1 to 3 rows; vitelline gland medium, squarish, postovarian and collected from the host goat, *Capra hircus*. 
(1) The present worm, differs from *M. (B.) benedeni* which is having the mature segments broader than long, posterior segments fleshy; testes 500 in number, arranged in the form of two triangles, in two fields; ovary compact, with acini, present at the centre of segment, on each side; interproglottid glands varying in size, narrow, short and in a transverse row; cirrus pouch wide, short, oval, do not touch the excretory canals and reported from the host, horse, *Ovis aries* and ox, *Bos indicus*.

(2) The worm under discussion, differs from *M. (B.) aurangabadensis* which is having the scolex simple, segments broader than long, testes 1100 - 1200 in number, distributed fully, from the anterior to the posterior margin of the segments; ovary bilobed, each lobe with acini, interproglottidal glands 12 - 15 in number, in a row; seminal vesicle oval and large; cirrus pouch small, cylindrical; vitelline gland small, round; vagina posterior to the cirrus pouch and reported from the host *Ovis bharal* at Aurangabad, M.S., India.

(3) The present cestode, differs from *M. (B.) bharalae* which is having the scolex not available; mature segments broader than long, testes 190 - 200 in number, distributed in 1/2 to 3/4th of the segment; ovary compact, bilobed, interproglottidal glands in two rows, at posterior margin of the segments and 38-44 innumber; seminal vesicle elongated and fusiform; cirrus pouch
small, oval, obliquely placed; vitelline gland absent, the
g vagina posterior to the cirrus pouch and reported from the host,
*Ovis bharal* at Aurangabad, M.S., India.

Additional differentiating characters, with all the
species, are given in the comparative chart at the end.

The above noted characters, are valid enough, to
accommodate these cestodes, into a new species and hence the
name *Moniezia* (B.) *manwatensis* n.sp. is proposed after the
locality.

Type species

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<th>Moniezia (Blanchariezia)</th>
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<td><em>manwatensis</em> n.sp.</td>
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Host

| Capra hircus |

Habitat

| Intestine. |

Locality

*At* Manwat, Tq. Pathri, Dist. Parbhani, M.S., India.

Date of collection

5th September, 1996.

Anoplocephalidea Wardle, McLeod and Radinovsky, 1974.

Anoplocephalidae Cholodkovsky, 1902.

Moniezia Blanchard, 1891.

**Moniezia (Blanchariezia) bharalae**

**DESCRIPTION**

Ten specimens, of the cestode parasites, were collected, from the intestine of a sheep, *Ovis bharal* at Warangaphata, Tq. Kalamnuri, Bist. Parbhani, M.S., India; in the month of September, 1996.

The worms were long, with thick musculature, white in colour, with scolex, numerous immature and mature proglottids.

These worms were flattened, preserved in 4% formalin, stained with Harris Haematoxylin, passed through various alcoholic grades, cleared in xylol, mounted in DPX and prepared wholemount slides, for further anatomical studies.

The scolex is simple, large in size, almost globular in shape, distinctly marked off from the strobila, broad anteriorly, narrow posteriorly, with a pointed projection at the anterior tip and measures 1.022 to 1.101 in length and 0.692 to 1.158 in breadth.
The scolex bears four suckers, which are medium in size, oval in shape, arranged in two pairs, one pair in each half of the scolex, slightly obliquely arranged overlapping on each other, two slightly touching to the anterolateral margin of the scolex and measure 0.397 to 0.420 in length and 0.281 to 0.341 in breadth.

The neck is very long longer than broad and measures 4.623 in length and 0.544 to 0.681 in breadth.

The mature proglottids are large in size, squarish in shape, broader than long, nearly 3 times broader than long, with concave or convex lateral margins, craspedote i.e. the anterior and posterior margins just overlapping on each other, each segment with a double set of reproductive organs, with short, blunt, round, projections at the posterior corners of the segments and measure 2.641 to 3.016 in length and 6.854 to 7.604 in breadth.

The testes are small to medium in size, oval in shape, 125-130 (129) in number, in a single field, unevenly scattered, throughout the segment, in the central medulla, bounded laterally by the longitudinal excretory canals and measure 0.053 to 0.195 in length and 0.035 to 0.142 in breadth.

The cirrus pouch on each side, is small in size, oval in shape, situated in the middle of the segments, in the projected region of it, slightly obliquely arranged, not
extending up to the longitudinal excretory canals and measures 0.125 to 0.303 in length and 0.017 in breadth.

The cirrus is thin, just projected or not outside the cirrus pouch and measures 0.125 to 0.303 in length and 0.017 in breadth.

The vas deferens is thin, very long, coiled anteriorly, near the ovary and near the longitudinal excretory canals and measures 3.677 to 4.355 in length and 0.017 to 0.035 in breadth.

The ovary is medium in size, a single mass, situated in the middle of the segments, on each side, in side the longitudinal excretory canals, with a cavity of uterus on its inner side, forming an paruterine organ, hence the segment is a transitional and reaching to the gravid stage, it has blunt, rounded posterior margins and measures 0.700 to 0.893 in length and 0.178 to 0.231 in breadth.

The vagina is medium, posterior to the cirrus pouch, starts from the genital pore, runs transversely, straight, uneven in length, reaches and opens into the ootype and measures 0.749 to 1.071 in length and 0.017 in breadth.

The genital pores are medium in size, oval in shape, situated just anterior to the middle of the segments, marginal, bilateral and measure 0.160 to 0.178 in length and 0.053 to 0.071 in breadth.