

## REDESCRIPTION ON *MONEIZIA DEVRAOI* (HUMBE, ET AL, 2013) (CESTODA: ANAPLOCEPHALIDEA) IN THE INTESTINE OF GOAT FROM AURANGABAD (M.S.), INDIA

Dr. Satish Saraf\*

Department Of Zoology, Pratishan Mahavidhyalaya Paithan, Dist. Aurangabad. \* Corresponding Author

**ABSTRACT**

*Moniezia (B) devraoi* (Humbe, et al, 2013) cestode parasite of *Capra hircus*, Linnaeus, 1758 (Family: Bovidae) is redescribed from Aurangabad district (M.S.), India. The Present worm resemble with *Moniezia (B) devraoi* (Humbe, et al, 2013) in having in having morphological characters Scolex large, globular, mature segment broader than long, testes small oval to round, 180-200 in number, cirruch pouch oval, ovary large, oval shaped, vitelline gland post ovarian.

**KEYWORDS :** Anaplocephalidea, Aurangabad, *Capra Hircus*, *Moniezia***INTRODUCTION**

The genus *Moniezia* was established by Blanchard, 1891. Skrjabin and Schulz (1937) divided this genus in to three subgenera as follows:

- 1) Inter proglottidal glands grouped in rosettes-----  
--*Moniezia*.
- 2) Inter proglottidal glands arranged lineally-----  
--*Blancharia*.  
(Some time absent)
- 3) Inter proglottidal glands absent-----  
*Baerizia*.

The present worm agrees in all characters with subgenus *Blancharizia*. Skrjabin and Schulz, 1937 includes having two species *M. (B.) benedeni* (Moniez, 1879), Skrjabin and Schulz, 1937 and *M. (B.) pallida*, Monnig, 1926. In India Shinde et al, 1985 added two species of the genus i.e. *M. (B.) aurangabadensis* and *M. (B.) bharalae* from *Ovis bharal* in Aurangabad district, (M.S.), India. Later on Patil, et al, 1997 described *M. (B.) warnanagarensis* from *Capra hircus* (L.). In 1999 Nanware, et al. erected *M.(B.) kalawati* and Kalse, et al. erected *M.(B.) murhari* from *Capra hircus* (L.). In 2004, Pawar et al. added *M. (B.) Shindei* and Tat and Jadhav B. V. added *M.(B.) hircusae* from *Capra hircus* (L.). Pokle, et al. added *M.(B.) caprai* from *Capra hircus* (L.). Borde, et al., 2007 erected new species i.e. *M. (B.) rajalaensis* from *Capra hircus* (L.). *M. (B.) caprae* is added by Nanware S. S. 2010. Padwal, et al. 2011 added *M. (B.) govindae* from *Capra hircus* (L.). Later Humbe, et al. erected four more species i.e. *M (B.) babai*, 2011, *M (B.) ovisae*, 2011, *M (B.) osmanabadensis*, 2012 and *M (B.) devraoi*, 2013. Later on Barote, et al. added two more species i.e. *M (B.) shegaonesis*, 2013 and *M (B.) shivajiraovae*, 2014. Recently Ravi Solunke, 2015 erected *M (B.) sureshi* and Amol Thosar, et al., 2015 erected *M (B.) jadhavii* from *Capra hircus* (L.).

The present communication, deals with the redescription on, *Moniezia (B) devraoi* (Humbe, et al, 2013) Collected from the *Capra hircus* (L.) at Aurangabad district (M.S.) India, in the month of May, 2019.

**MATERIAL AND METHODS**

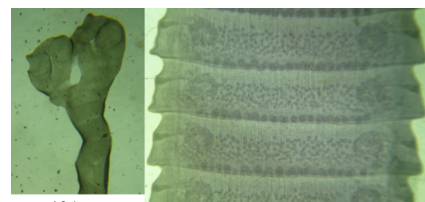
For the taxonomical study of Cestode parasites, the intestine of Goat were dissected longitudinally and parasites kept in normal saline (0.9%) solution. Then cestodes were collected, flattened and preserved in 4% formalin. These cestodes stained with Harris haematoxylin or Acetocarmine or Borax-carmine washed in distilled water, dehydrated in ascending grades of alcohol, cleared in xylene, mounted in D.P.X. and identification is made with the help of Systema Helminthum and taxonomic keys.

**DESCRIPTION**

Five specimens of the Cestode parasites were collected from

the intestine of *Capra hircus* (L.) at Paithan, District Aurangabad (M.S.) India. These cestodes were preserved in 4% formalin and stained with Acetocarmine or Harris Haematoxylin, passed through various alcoholic grades, cleared in xylene, mounted in D.P.X.

The Cestodes are long consisting scolex, neck and proglottids. Proglottids are immature, mature and gravid. The scolex is large in size, globular in shape. The Suckers are small, oval to rounded in shape, four in numbers, arranged in two groups, anterior half of scolex. The neck is long. Mature proglottids are broader than long, nearly four to five time broader than long, each proglottids with a double set of reproductive organs. The testes are small, oval to rounded in shape, 180-200 in numbers, distributed in the posterior half of the segment. The vas-deference is thin, long tube. The Cirrus pouch is small, oval in shape, situated in middle margin of the segment. The Cirrus is thin, curved, inside the cirrus pouch. The Ovary large, compact, oval in shaped, two in numbers in each side of the segment. The Ootype is small, oval in shape, pre-ovarian. The Vagina posterior to cirrus pouch, long coiled tube reaches to the Ootype. The Genital pores small, oval in shape, marginal, middle in position. The Vitelline gland small, oval in shape, compact, post-ovarian. The Interproglottidal glands present in between two proglottids, large, oval to rounded, arranged two rows, present in between longitudinal excretory canals, 40-45 in numbers. The longitudinal excretory canals are thin, present on both the sides of segments along the body lengths.

Fig. *Moniezia devraoi*, Humbe, et al. 2013**RESULTS AND DISCUSSION**

The genus *Moniezia* was established Blanchard, 1891 and as its type of species *Moniezia (B) devraoi* erected Humbe, et al, 2013 in *Capra hircus* (L.). Later on many species were added to this genus.

The cestode under discussion comes closer to *Moniezia (B) devraoi*, Humbe, et al, 2013 in having all the essential morphological characters i.e. scolex large in size, neck long, broad, mature segment broader than long, testes rounded to oval, ovary oval shaped. But differs from some characters as follows.

The testes 180-200 Vs 160-180 in numbers. As the characters are minor, hence it is redescribed here as *Moniezia (B) devraoi*

erected Humbe, et al, 2013.

## REFERENCES

1. Blanchard, R. (1891). Sur. Les helminths des primates anthropoidsmem. Soc. Zool. France, 4: 186-196.
2. Borde, S.N., Patil, PS and Naphade, S.T. (2007). A new tape worm from the host *Capra hircus* at Rajala (M.S). Nat. J. Sci., 4 (3) (126-128).
3. Humbe Atul, S. N. Borde and Swati Jadhav, (2013). A New Mammalian Tapeworm *Moniezia devraoi* From *Capra hircus* at Amravati (M.S.) India. Weekly Science Research Journal.1(10).1-5.
4. Humbe, et al. (2011). On a new species of *Moniezia babai*, Blanchard, 1891 (Cestoda: Anaplocephalidae) from *Capra hircus* (L.) from Buldhana district (M.S.) India. International multidisciplinary Research Journal. 1(8): 01-03.
5. Humbe, et. al. (2011). Occurrence of a new mammalian tapeworm *Moniezia ovisae*. International multidisciplinary Research Journal. 1(12): 01-03.
6. Kalse A.T and G.B. Shinde, (1999). On *Moniezia* (*Blanchariezia*) *murhari*, n. sp. (Cestoda : Anoplocephalidae Fuhrmann, 1907) from *Capra hircus* (L.) in (M.S.) India. Rivista Di Parasitologia, Vol XVI (LX) N.1 APRILE 1999
7. Padwal Nitin and M. N. Kadam, (2011). Report of a new mammalian tapeworm *Moniezia govindae*. Rec Res Sci Tech 3 (2011) 30-33.
8. Shinde G.B. Jadhav B.V and S.S. Kadam, (1985). Two new species of the genus *Moniezia* Blanchard 1891 Rivista Di Parasitologia, Vol.II (XLVI) APRILE 1985
9. Thosar Amol, et al., (2015). Morphological and molecular studies of *Moniezia* Sp. (Cestoda: Anoplocephalidea) a parasite of the domestic goat *Capra hircus* (L.) in Aurangabad district (M.S.), India. International Journal of Applied Research, 5(8): 10-13.
10. Wardle, R. A., (1974). Advances in the Zoology of tapeworms, 1950-1970, Univ. of Minnesota Press Minneapolis, 1-274.
11. Yamaguti, S., (1959). Systema Helminthum, Vol. II, The Cestodes of vertebrates, Interscience Pub. INC, New York London, 1-860.