



ON A NEW NEMATODE, *CAPILLARIA STRIATA* N.SP. FROM FRESH WATER FISH *CHANNA STRIATUS* (BLOCH)

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Abstract:

Capillaria striata n.sp. was described from the intestine of a fresh water fish, *Channa striatus* (Bloch). It was distinguished from other congeneric species by spiny spicular sheath, mainly length of spicules (1.3-1.4) its surface covered by small spines and valvular lips not elevated.

Keywords:

Nematodes, fish parasite , biodiversity, Chhattisgarh, India

Introduction:

The aim of present study was to provide a current survey of the species of nematode parasites found in fishes of Chhattisgarh namely Bilaspur region. During a survey of nematode parasites, several male and female specimens of the genus *Capillaria* Zeder, 1800, were recovered from the intestine of the fresh-water fish, *Channa striatus* (Bloch), collected from the river Kharang crossing Village, Mohra (Bilaspur C.G.) of the several fishes dissected only eight fishes harboured with nematode parasites. A detailed study of those worms revealed that they do not confirm to any known species of the genus and appear to constitute a new species

Material and Method:

The host *Channa striatus* was obtained from river Kharang crossing the village Mohra, Distt. Bilaspur (C.G.). Fishes were examined thoroughly for nematode parasites. Out of 37 fishes examined, only 8 were infected, in these 3 males & 6 females were observed. Nematodes were fixed in hot 70% alcohol and were preserved in 10% glycerol. Two clearing media, glycerol & creosote were used in order to examine properly. All measurements are in millimetres.





Description:

Male is smaller than female. Body long, mouth aperture small, oval surrounded by 6 minute cephalic papillae arranged in circlet. Oesophagus relatively long. divided into two parts, shorter anterior muscular oesophagus and a longer posterior glandular oe

Result and Discussion:

The present form when compared to known forms the following facts are observed : The new form *Capillaria striata* n.sp. differs from all the known species. *Capillaria carioca* de Freitas and lent, 1935; Moravec F. 1987; *Capillaria catenata* van Cleave and Mueller, 1932, and *Capillaria petruschewski* (Schulzman, 1948); and *Capillaria gracile* (Bellingham, 1844) Nikolaeva and Naidenova, 1964; *Capillaria kabatai*. Inglis and Coles, 1963; *Capillaria cyprinodonticola* Huffman D.G, Bullock W.L. 1973; in the presence of well sclerotized spicules and absence of vulvar appendages. The present new form also differs from the following known forms in the following characters :-

- 1) Size of spicules and spicules length.
- 2) Vulva position,
- 3) Position of excretory pore ,
- 4) Structure of tail. The present species shows resemblences to *Capillaria cichlasomae*; *Capillaria schmidtii* but differs in the position of spicules, length of body etc.

Conclusion:

In the light of above discussion it is therefore, concluded that the present form is new to the genus *Capillaria* Zeder, 1800 and a new species *Capillaria striata* is erected.





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Reference:

HUFFMAN D.G., BULLOCK W.L. 1973 *Capillaria cyprinodanticola* sp. n, (Nematoda : Trichinellida) from the liver of Cyprinodontiform fishes of the Florida Keys. J. Parasitol. 59 : 260-263.

MORAVEC F. 1987: Revision of Capillariid nematodes (Subfamily-Capillariinae) parasitic in fishes studie CSAV No. 3, Academia, Parague, 141 pp.

MORAVEC F., T. Scholz & E. Mendoza Franco 1993 :
Capillaria

(Hepatocapillaria) *cichlasomae* sp.n., (Nematoda : Trichinellida) from the livers of the cichlid fish *cichlasoma urophthalmus* from Yucatan, Mexico.

Table (Comparison of *Capillaria striata* n.sp. with some known forms)
All measurements are taken in mm otherwise stated .

Male			
Characters	<i>C.cichlasomae</i>	<i>C.schmidtii</i>	<i>C.striata</i> n.sp.
Length	1.83	8.40-10.12	10.9-11.2
Thickness	0.030	0.07-0.08	2.1-2.3
Oesophagus M	0.138	0.270-0.287	1.7 - 1.9
G		5.83 - 7.41	1.9 - 2.2
Nerv ring	0.050	0.09-0.12	1.2-1.4
Spicules	0.068	0.08-0.092	1.3-1.4
Papillae	-	-	-
Tail	0.008	0.010-0.012	1.7-1.9
Female			
Length	4.54	11.02-15.43	14.2-14.7
Thickness	0.050	0.10-0.13	2.7-3.1
Oesophagus M	0.195	0.310-0.324	1.9-2.3
G		6.52-9.38	2.4- 2.7
Nerv ring	0.075	0.11-0.12	1.4-1.7
Distt. of Value	0.098	0.024-0.084	2.00-2.1
Tail	0.008	0.015-0.018	1.2-1.5

