



A NEW SPECIES OF THE GENUS *SPIRONOURA* LEIDY, 1856 (*NEMATODA: KATHLANIIDAE*) FROM FRESH WATER FISH *MASTACEMBELLUS ARAMATUS*.

Khadap R.M.

Department of Zoology, Nutan Mahavidyalaya Sailu, Dist.Parbhani-431503, Maharashtra, India.

Email: rmkhadap@gmail.com

ABSTRACT

A new species of nematode *Spironoura shindae* n.sp. was erected from fresh water fish *Mastacembelis armatus*. It is collected from Sailu. (Dhudna Dam). We have describe this new species *Spironoura shindae* n.sp in the genus (*Spironoura* Leidy, 1856). It differ from other species the presence of five pairs pre cloacal papillae and 25-30 caudal muscles with the absence of caudal sucker.

KEY WORDS: *Nematode Parasites, Spironoura shindae* n.sp, *Mastacembellus aramatus*.

INTRODUCTION

The genus *Spironoura* erected by Leidy in 1856, with its type of species *S. gracilis* as the type species and referred to the family *Kathlaniida*. Latter on Linstow, 1907 reported as a new species of nematode. Skriabin et.al, 1951 add few species. The present worm closer to *S. leptcephala*, Baylis and Daubney, 1922. The present worm also close to *S. khalili*, Arya S.N., 1993. in the absence of caudal sucker.

MATERIALS AND METHODS

The male and female nematodes described in this paper collected from the intestine of freshwater fish *Mastacembelus armatus* obtained from the various dams, lakes, river streams etc. The nematode were fixed in hot 70% alcohol. The worm were later preserved in fresh 70% alcohol to which 10% glycerine was added. The specimen were cleared in Lactophenol. The worms were mounted in glycerine. All drawings were made with the aid of camera lucida and all measurements are expressed in millimeters.

DESCRIPTION

The body is thin and cylindrical small to medium sized. Terminal mouth has triadate opening with three bilobed flaps off lip, one dorsal and two sub ventral. Cephalic papillae are prominent. The buccal cavity is vestibule is surrounded by a ring of thickened cuticle. Oesophagus measures about 1.50 to 1.80 mm long and 0.12 to to 0.13 mm in width. Excretory pore at 1.23 to 1.25 mm in length from anterior end

Male

The body is 13.98 to 14.30 mm long & 0.32 to 0.42 mm wide. Spicule are unequal, dissimilar, left spicule is long 0.85 to 0.87 mm in length and right spicule is spicule short 0.75 to 0.79 mm in length. Caudal Papillae is 14 pairs, five pair pre-coacal, 2 pairs ad-coacal, 7 pairs are post-coacal. Caudal sucker absent. Oblique pre-coacal muscles band 25 to 30 in number and well developed. Tail is about 0.40 to 0.42 mm in length.

Female:

The body is 14.40 mm long and 0.38 mm wide. Vulva post-equatorial at 7.3 to 11.7 from anterior end. Vagina ante-erod and muscular. Eggs spherical, thick walled measures about 0.06-0.09 * 0.05-0.089 in diameter. Tail is long measure about 1.35 to 1.64 mm in length and tapering.

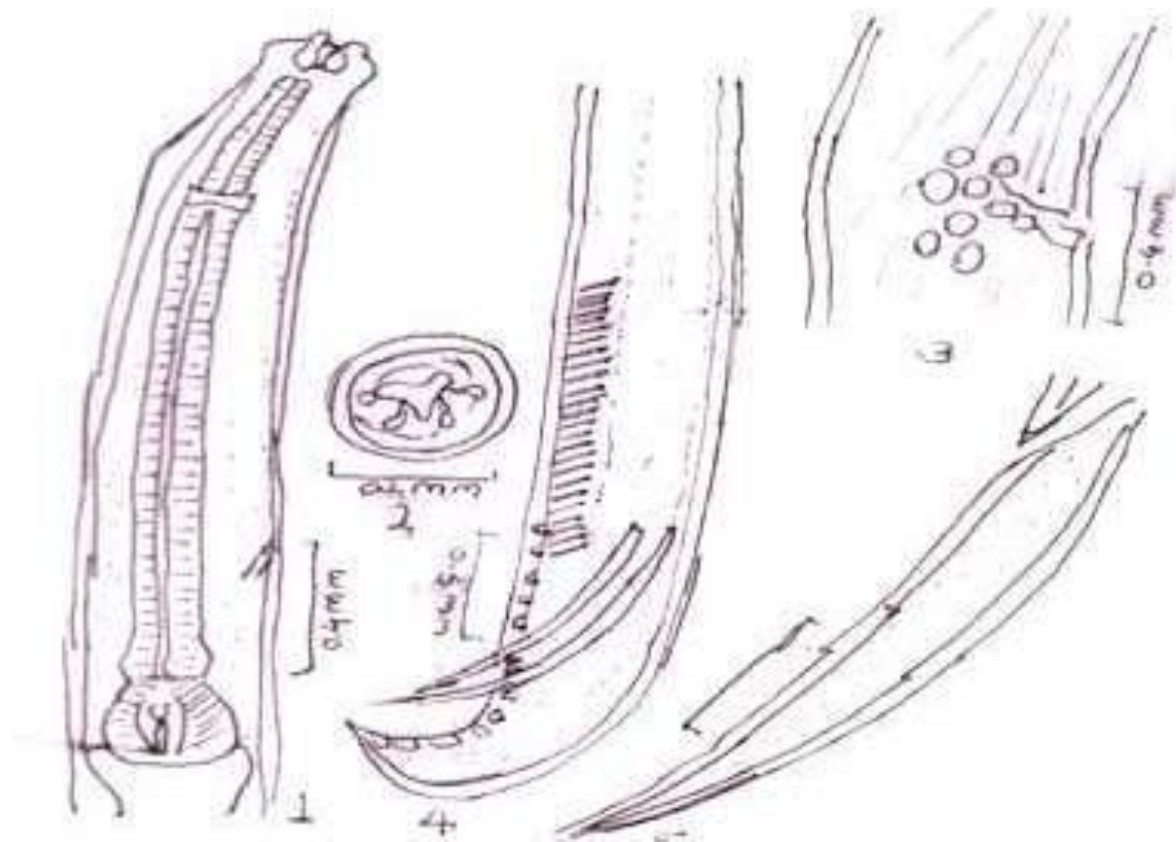
Host : *Mastacembelus armatus* (Lacep)

Habitat : Intestine

Locality : Sailu, (M.S.) India.

DISCUSSION:

The genus *Spironoura* was erected by Leidy, 1856 with its type of species *S. gracilis* as the type of species referred to the family kathlanidae. Linstow, 1907 reported a new species of nematode piscicola on the basis some specimens recovered from a fish *Distichodus* sp. From the canecorons Skrjanin and ozgova 1951 considered as a new species. The present form comes closer to *S. teptocephala* Baylis and Daubney, 1922. The present form differ from *S. Khandari* and *S. khalili* in body size, shape of spicule and number of caudal papillae. It is differ from *S. leptocephaia* in having gubernaculum and number of caudal papillae. The form under discussion in having unequal spicule, number of caudal papillae, oblique muscle bands. are also differ from the latters. Accordingly the present specimens are considered as a new species, *Hepatinema jadhavae* n.sp. named in honor of Prof. Dr. G.B. Shinde for his outstanding contributions to Helminthology.



Spironoura shindae n.sp

Figure 1. Anterior end, male 2. Eggs, face view. 3. Vulvar region 4. Posterior end, Male 5. . Posterior end, Female.

ACKNOWLEDGEMENTS

The authors are thankful to the Principal Nutan Mahavidyalaya, Sailu, Dist.Parbhani-431503, Maharashtra, India, for providing laboratory facilities.



REFERENCES

- Alli S.M. (1956).** Studies on the nematode parasites of fishes and bird found in Hyderabad. *Indian J. Helminth.* 8: 1-83.
- Agrawal V. (1965).** Some new nematode parasites from fresh water fishes of Lucknow. *Indian J. Helminth.* 17:1-17.
- Arya S.N.(1993).** A new species of the genus *Spironoura* leidy,1856 from a fish *Mastacembelus armatus*. *Riv. di Parassitol.* 10(34): 147-150.
- Baylus H.A. and Daubney (1922).** Report on the parasitic Nematode in the collection of the Zoological Survey of India. *Mem. Ind. Mus.* 7:263-347.
- Khalili L.F.(1962).** On two new nematode form freshwater fish in the sudan of the genus *Spironoura* Leidy,1956 and the relation of *Spironoura* to the genus *Velariocephalus* Singh. *J. Helm.* 36 (1/2) pp 51-58.
- Skriabin K.I., Schikhonalova N.P. and Mozogovoi A.A. (1951).** Descriptive catalogue of parasitic nematodes . V.2 Moscow
- Yamaguti S. (1961).** Systema Helminthum Vol. III Part I and II Nematodes of Vertebrates Inter Science Publishers Inc. New York PP. 1-1261.