# Studies on the cestode genus silurotaenia, Nybein, 1942 from mystus seenghala (Ham. and Buch.) with description of a new species

DHANRAJ BALBHIM BHURE, D.M. PATHAN, SANJAY SHAMRAO NANWARE AND R.M. DHONDGE

Received: Aug., 2010; Accepted: Nov., 2010

See end of the article for authors' affiliations

#### DHANRAJ BALBHIM BHURE

Research and Post Graduate Department of Zoology Yeshwant Mahavidyalaya, NANDED (M.S.) INDIA draj\_bhure@yahoo.co.in

#### **ABSTRACT**

The present communication deals with the taxonomic observation of piscian tapeworm *Silurotaenia raoii* Sp.Nov. collected from intestine of a *Mystus seenghala* (Ham. and Buch.) at Osmanabad district of (M.S.) India. The worm comes closer to all the known species of this genus in general topography of organ but differs due to scolex pear shaped, suckers four arranged in two groups, rostellum medium, oval, bearing numerous rostellar hooks, neck absent, mature proglottids broader than long, testes 125-130 in numbers, pre-ovarian in position, cirrus pouch oval, ovary distinctly bilobed, vagina lies posterior to the cirrus pouch, genital pores oval in shape, marginal and irregularely alternate and vitellaria granular.

Key words: Mystus seenghala, Silurotaenia, Taxonomic observation.

The genus Silurotaenia was erected by Nybin, 1942 as S. siluri from Siluris glanis. Shinde, Deshmukh and Chincholikar, 1975 described S. nybelin from Pseudeutropius taakree. In 1984 Shinde et al. (1984) added four new species to this genus i.e. S. macroni, S. seenghala from Macrones seenghala and S. barbusi, S. ticto from Barbus ticto. In 1989, Deshmukh and Shinde added S. behairvnathi, new species to this genus. Later on, Jadhav et al. (1991) added one more new species to this genus, i.e. S. shastri from M. seenghala. In 2002, Wankhede and Jadhav reported S. godavari from Sparata seenghala.

## MATERIALS AND METHODS

Eighty five specimens of cestode parasites were collected from the intestine of freshwater fish Mystus seenghala (Ham. and Buch.) at Osmanabad districts of Maharastra, India during the period of Feb., 2005 to Jan., 2007. These cestodes are preserved in hot 4% formalin and four specimens are stained with Harris haematoxylin and Borax carmine, passed through various alcoholic grades, cleared in xylene, mounted in D.P.X. and drawings are made with the aid of Camera lucida and all measurements are recorded in millimeters unless otherwise mentioned.

Bhure, Dhanraj Balbhim, Pathan, D.M., Nanware, Sanjay Shamrao and Dhondge, R.M. (2010). Studies on the cestode genus silurotaenia, Nybelin, 1942 from mystus seenghala (Ham. and Buch.) with description of a new species. *Asian J. Animal Sci.*, **5**(2): 205-208

### RESULTS AND DISCUSSION

The results are summarized below according to the objective of the study:

Description (Based on four specimens, Fig. 1 and 2):

All cestodes are long, consisting of scolex, immature, mature and gravid proglottids and measures 42-47 mm in length and 1-4 mm in width. Scolex well developed, distinct longer than broad, pear shaped and measures 0.279 (0.242-0.315) in length and 0.266 (0.233-0.300) in breadth. Scolex bears pair of suckers, arranged in two pairs, overlapping with each other, oval to rounded and measures 0.080 (0.072-0.087) in length and 0.065 (0.053-0.077) in breadth. Rosetellum medium, oval, present at the anterior extremity of the scolex and measures 0.126 (0.087-0.165) in length and 0.213 (0.179-0.247) in breadth. Rostellum is surrounded by number of hooks, which are arranged in circle, 'V' shaped, and measures 0.019(0.014-0.024) in length and 0.009(0.004-0.014) in breadth. Neck is absent.

Mature proglottids are broader than long and measures 0.958 (0.883-1.03) in length and 1.759 (1.723-1.80) in breadth. Testes small, rounded, evenly distributed all over the proglottid, 125-130 in numbers, pre-ovarian and measures 0.0024 (0.014-0.033) in length and 0.021 (0.014-0.029) in breadth. Cirrus pouch oval, transversely placed and measures 0.269 (0.252-0.286) in length and 0.106 (0.087-0.126) in breadth. Cirrus thin tube, within the cirrus pouch and measures 0.237 (0.223-0.252) in length and 0.012 (0.009-0.014) in breadth. Vas deferens thin, tubular, slightly curved, runs obliquely up to testicular field and measures 0.131 (0.121-0.140) in length and 0.012