

## STUDIES ON A NEW SPECIES OF GENUS *SENGA* DOLLFUS, 1934 (CESTODA : PTYCHOBOTHRIDAE) FROM INTESTINE OF *MYSTUS SEENGHALA* SYKES, 1839

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**ABSTRACT :** *Senga banshelkinesis*, a new cestode species from the intestine of freshwater fish *M.seenghala* has been described and compared with the other known species of the genus *Senga* in the lures of work by Dollfus (1934). It differs from all the known species of the genus in having triangular scolex, 37 rostellar hooks, Mature segment broader than long, testes 160 in numbers and follicular Vitellaria.

**Key words :** Cestodes, Freshwater fish, *Mystus seenghala*, Ptychobothridae, *Senga*.

### INTRODUCTION

Dollfus (1934) established genus *Senga* with *Senga besnardi* as its type species.

### MATERIAL AND METHODS

Live specimens of Freshwater fish *M.seenghala* were collected from Banshelki Dam dist. Latur (M.S.). A thorough examination of their alimentary canal and other body parts was made for screening of cestode parasites. The worms were obtained from gut of fish host, washed with water, stretched in lukewarm water and fixed in 4% formalin for 24 hours, subsequently washed in running tap water, dehydrated through a graded series of alcohols and stained in borax carmine, differentiated in acid alcohol, cleared in xylol and mounted in DPX, camera lucida sketches were made from permanent preparations. Measurements are recorded in millimeter.

#### *Senga banshelkinesis* Sp. Nov.

Scolex large, triangular, narrow anteriorly and broad posteriorly, 0.889-0.948 mm x 0.181-0.253 mm. Bothria paired, oval, sessile, 0.874-0.800 mm x 0.028-0.215 mm. Scolex bears an armed rostellum, which is medium, oval, with single circle of 37 hooks, 0.165-0.170 mm x 0.141-0.151 mm. Hooks, 0.061-0.063 mm x 0.001-0.008 mm. Neck present. Mature segments broader than long, 0.451-0.458 mm x 1.242-1.253 mm. Testes rounded, small, 160 in numbers, 0.05-0.07 mm x 0.11-0.12 mm. Cirrus pouch saclike, oval, 0.015-0.021 mm x 0.017-0.026 mm. Vas deference thin, short, slightly curved, 0.092-0.105 mm x 0.011-0.013 mm. Ovary large, bilobed, lies near posterior margin of segment, 0.591-0.612 mm x 0.021-0.051 mm. Isthmus, 0.191-0.246 mm. Vagina long, tubular, 1.0783 mm x 0.0872-0.0876 mm. Genital pore rounded, 0.0536-0.0546 mm. Uterus Saccular, vitellaria follicular, arranged in the two rows at each lateral margin of the proglottids.

**Genus :** *Senga* Dollfus, 1934

**Species :** *Senga banshelkinesis* Sp. Nov.

**Type host :** *Mystus seenghala*

**Habitat (site) :** Intestine

**Type locality :** Banshelki lake Tq. Udgir dist. Latur (M.S.)

Dollfus (1934) erected the genus *Senga* with *S.besnardi* as its type species. Subsequently, genus *Senga* includes following species viz. *S.ophiocephalina* Tseng (1933), *S.pcyonoma* Woodland (1924), *S.lucknowensis* Johri (1956), *S.malayana* Fernando and Furtado (1964), *S.parva* Fernando and Furtado (1964), *S.filiformis* Fernando and Furtado (1964), *S.pahangensis* Furtado and Chawhan (1971), *S.vishakapattanensis* Ramadevi and Rao (1973), *S.taunsaensis* Ali and Khan (1976), *S.punctati* Gupta and Sinha (1980), *S.mastacembali* Gupta and Sinha (1980), *S.khami* Shinde and Deshmukh (1980); *S.aurangabadensis* Jadhav and Shinde (1980), *S.godavari* Shinde and Jadhav (1980), *S.paithanensis* Kadam et al. (1981), *S.raoi* Majid and Shinde (1984), *S.jagannathe* Majid and Shinde (1984), *S.indica* Gupta and Parmar (1985), *S.gangesii* Gariola and Malhotra (1986), *S.pathankotensis* Duggal and Bedi (1989), *S.gachuae* Jadhav et al. (1991), *S.maharashtrii* Jadhav et al. (1991), *S.chauhani* Hasnain (1992), *S.jhasiensis* Mathur et al. (1994), *S.mohekarae* Tat and Jadhav (1997), *S.chiangmaiensis* Wangswad et al. (1998), *S.armatusae* Hiware, 1999; *S.tappi* Patil and Jadhav (2003), *S.sharpiloi* Polyakova and Kirin (2005), *S.ayodhensis* Pande et al. (2006), *S.baughui* Pandè et al. (2006), *S.jadhavae* Bhure et al. (2007), *S.chandkapurensis* Khadap et al. (2007), *S.tictoi* Srivastava et al. (2007), *S.nathsagarensis* Kankale (2008), *S.kaigaonensis* Wankhede and Reddy (2009), *S.panzaraensis* Mangnale and Kalse (2009), *S.madhavae* Bhure et al. (2010), *S.satarensis* Bhure and Nanware (2011), *S.mangalbaiae* Bhure and Nanware (2011), *S.rupchandensis* Pardeshi and Hiware (2011), *S.rostellarae* Dhole et al. (2011), *S.chandrashekhari* Dhole et al. (2011), *S.govindii* Jadhav et al. (2012), *S.silcharensis* Puinyabati et al. (2013),

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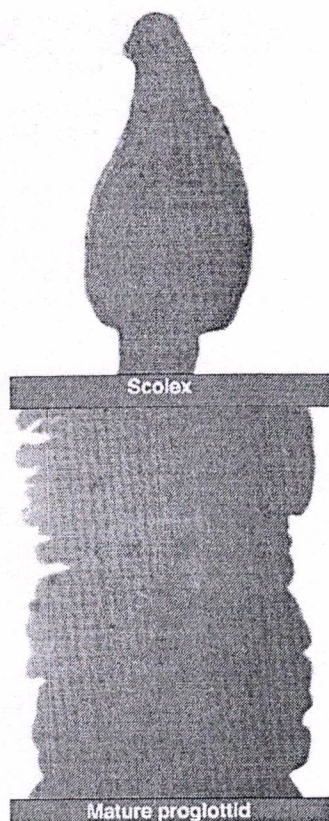


Fig. 1 Microphotoplate of *Senga banshelkinsis* Sp. Nov.

*S. microrostellata* Bhure *et al.* (2014), *S. nandedensis* Fartade and Fartade (2014), *S. rostellata* Deshmukh *et al.* (2016) and *S. triangulata* Nanware *et al.* (2016).

The present form comes closer to all the known species of the genus *Senga* in general topography of organ but differs in having triangular scolex, bears an armed oval rostellum with single circle of 37 hooks, neck present, Mature segment broader than long, testes rounded, 160 in numbers, Cirrus pouch saclike, Vas deference thin, short, slightly curved, va-

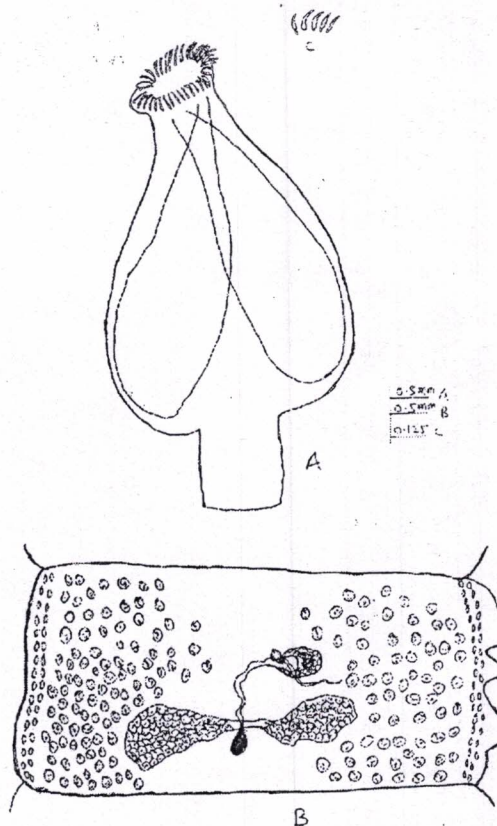


Fig. 2 Camera lucida diagram of *S. banshelkinsis* Sp. Nov. (A. Scolex, B. Mature segment, C. Hooks).

gina tubular, Uterus Saccular and follicular Vitellaria.

It further differs from *S. visakhapatnamensis*, *S. punctati*, *S. mastacembali*, *S. aurangabadensis*, *S. indica*, *S. ayodhensis*, *S. tictoii*, *S. madhavae*, *S. sataransensis*, *S. mangalbaiae*, *S. silcharensis*, *S. microrostellata*, *S. triangulate* in absence of neck. From *S. raoi*, *S. jagannathae*, *S. chandkapurensis*, *S. madhavae* having granular Vitellaria from *S. ayodhensis*, *S. mangalbaiae* in conical scolex. It is, therefore, regarded as a new species and is named after type locality of fish host.

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