

A REPORT OF THE SPECIES OF THE GENUS NYBELINIA (CESTODA: TRYPANORHYNCHA) FROM A TRYGON SEPEHN, FROM PANJI, GOA STATE, INDIA.**KHAMKAR D.D.**

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(E-mail: dashrath.khamkar@rediffmail.com)**ABSTRACT**

This paper deals with redescription of a cestode from *Trygon sephen* in Panji, Goa state, India i.e. *Nybelinia pintneri*, Yamaguti, 1934 which is having some additional characters, such as the bothridia are large, oval, petal like, 6-7 hooks in a transverse line, testes, situated at central medulla, preovarian, postovarian and on lateral side of ovary, 188-192 (189) in number.

KEY WORDS: Cestode, Goa (West coast of India), *Nybelinia pintneri*, *Trygon sephen*, Spiral valve.**INTRODUCTION**

The genus *Nybelinia* is established by Poche (1926), it is a large, cosmopolitan genus with most species restricted to a specific geographic region of the world (Dollfus 1942, 1960), Yamaguti (1934) recorded this species from the stomach of *Prionace glauca* Muller and Henle, Pacific coast of Japan, were as then present worms, are being reported, from the intestine of *Trygon sephen* Cuvier, 1871 at Panji, Goa state, (West coast of India), India. The present research work, reported the species of the Genus *Nybelinia* (Cestoda: Trypanorhyncha) from a *Trygon sephen*, from Panji, Goa State, India.

MATERIAL AND METHODS

Ten Cestode parasites were collected from *Trygon sephen*. All were flattened, preserved in 4% formalin stained with Harris haematoxyline and were passed through various alcoholic grades, whole mount slides were prepared for anatomical studies drawings were made with the help of camera lucida. All measurements are in millimeters.

RESULTS**DESCRIPTION**

Ten specimens of the cestode parasites were collected from the intestine of a *Trygon sephen* Cuvier, 1871 at Panji, Goa state, (West coast of India), India, in the month of February, 1991. The scolex is distinctly marked off from the strobila, large in size, elongated, broad anteriorly, narrow posteriorly and measures 1.668 in length and 0.568-1.053 in breadth. The anterior half region of the scolex is overlapped by the four bothridia, which are large in size, oval in shape, elongated, petal like and measures 0.720 in length and 0.492-0.758 in breadth. The scolex is divided into three divisions, pars bothridialis, pars vaginalis and pars bulbosa. The pars bothridialis is large, helmet shaped, overlapping on almost anterior half region of the scolex, four tentacles protrude out through pars bothridialis and measures 0.379 in length and 0.030-0.053 in breadth. The tentacles are short, wide, stout, armed with hooks broader at the base and narrow at the tip and measure 0.530 in length and 0.030-0.053 in breadth. The hooks are curved, arranged in 6-7 in a transverse line and measures 0.016 in length and 0.003-0.010 in breadth.

The pars vaginalis starts immediately behind the tentacles, consists of four, long, thin tubes, reaching up to the parts bulbosa. The pars vaginalis is devoid of spines and measures 0.666-0.667 in length and 0.023-0.053 in breadth. The pars bulbosa is the posterior most region of the scolex, with 4 bulbs, which are oval, elongated, banana shaped in appearance and measures 0.417 to 0.462 in length and 0.076-0.114 in breadth. The neck is medium in length, narrow anteriorly, broad posteriorly, with thick musculature and measures 0.697-0.872 in length and 0.379-0.530 in breadth. The mature segments are broader than long, almost twice broader than long, with unequal length, with convex lateral margins and without projections at the anterior and posterior corners of the segments and measures 0.340-0.509 in length and 0.946-0.981 in breadth. The testes are medium in size, oval in shape, occupying the whole intravascular medulla, in the central medulla, evenly distributed, in a single field, bounded laterally by longitudinal excretory canals, preovarian postovarian and on lateral sides of ovary, numerous, 188-192 (189) in number, from the anterior to the posterior margin of the segments and measure 0.024-0.043 in length and 0.019-0.053 in breadth.

The cirrus pouch is large in size, spindle shaped in appearance, extends obliquely to the anterior margin of the segments, situated in the anterior half of the segments, open submarginally and measures 0.306 in length and 0.010-0.015 in breadth. The cirrus is a thin tube straight slightly curved or coiled, unarmed and measures 0.306 in length and 0.010-0.015 in breadth. The vas deferens is a thin tube, short, extends anteriorly, up to anterior margin of the segments, straight and measures 0.136 in length and 0.005-0.010 in breadth. The ovary is medium in size, oval, in shape transversely elongated, mostly aporal in position, broad placed just posterior to the middle of segments with numerous

short, blunt, round acini and measures 0.325 in length and 0.067 to 0.107 in breadth. The vagina is a thin tube, starts from the genital pore, lie posterior to the cirrus pouch extends transversely and obliquely upto the distal end of the cirrus pouch, turns posteriorly runs obliquely, reaches and opens into the ootype and measures 0.487 in length and 0.010-0.024 in breadth the ootype is medium in size, oval in shape, placed posteroventral to the ovar and measures 0.043 in length and 0.029-0.034 in breadth.

The genital pores are small in size, round in shape, irregularly alternate, sub-marginal, placed in the subcortical region of the segments and measure 0.029 in diameter. The vitellaria are follicular, follicles small in size, oval in shape, wide strips, cortical and subcortical in position, 4-5 rows on each side and extend, from the anterior to the posterior margin of the segment. The excretory canals are wide and measure 0.015-0.024 in width. The uterus is saccular, long, oval in shape, extends from the ootype to the anterior end of the segments and measures 0.267 in length and 0.024-0.058 in breadth.

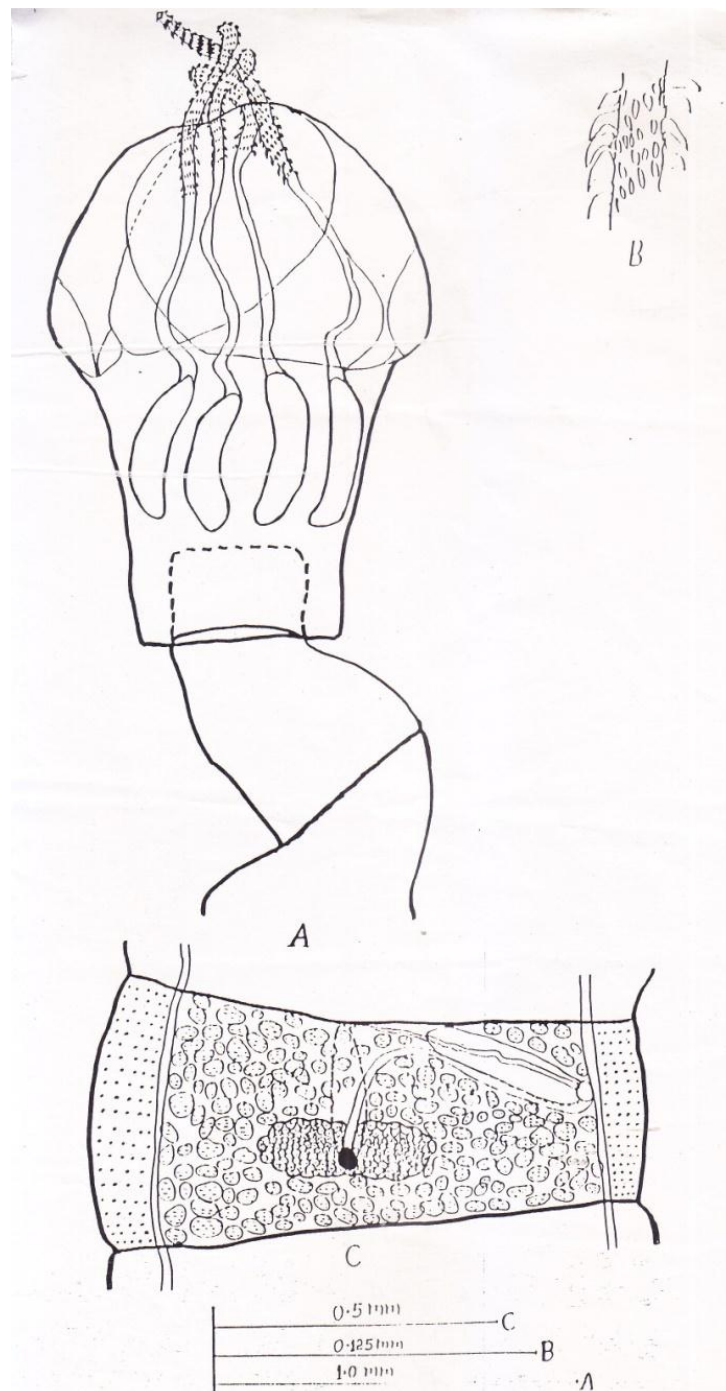


Figure 1. *Nybelinia pintneri* Yamaguti, 1934 (A: Scolex, B: Tentacles, C: Mature segments).

Type Species : *Nybelinia pintneri*, Yamaguti, 1934.
Host : *Trygon sephen* Cuvier, 1817.
Habitat : Intestine.
Locality : Panji, Goa state (West coast of India), India.
Date of Collection : 15th February 1991.

DISCUSSION

On close examination, these worms turned out to be *Nybelinia pontneri* Yamaguti, 1934. The present worms are having some additional characters, which are as follows.

In the worm under discussion, the bothridia are large, oval, petal like, as against small, short and bean shaped. It differs in having 6-7 hooks in a transverse line, as against 5-6 rows of hooks, in a single circle, on the proboscides. It differs in having testes, situated at central medulla, preovarian, postovarian and on lateral side of ovary, 188-192 (189) in number as against 100-120 in two to three layers. As the above noted characters are minor it is redescribed here as *Nybelinia pintneri* Yamaguti, 1934.

Yamaguti (1934) recorded his species from the stomach of *Prionace glauca* Muller and Henle, Pacific coast of Japan, were as then present worms, are being reported, from the intestine of *Trygon sephen* Cuvier, 1871 at Panji, Goa state, (West coast of India), India.

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