

COMUNICACIÓN

A new nematode Hysterothylacium aetobatum from ray fish, Aetobatus narinari (Euphrasen)

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ABSTRACT

The present paper reports a new species of a nematode of *Aetobatus narinari* caught off the Bay of Bengal at Visakhapatnam. It could be distinguished by body measurements, arrangement of papillae on the lips, length of intestinal caecum, position of vulva, number and arrangement of caudal papillae, position and size of spicules and shape of tail. The new species is named as *Hysterothylacium aetobatum*.

Key words: *Hysterothylacium aetobatum* n.sp., nematode, intestine, *Aetobatus narinari*, Visakhapatnam.

INTRODUCTION

The course of a survey of the parasites of marine eel fishes of Bay of Bengal (Visakhapatnam), a new species of a nematode *Hysterothylacium aetobatum* of the family Anisakidae Railliet et Henry, 1912 was recovered from the intestine of *Aetobatus narinari*. The new species is described in this paper and it has been shown that they have to be considered as constituting a new species.

MATERIAL AND METHODS

The host *Aetobatus narinari* was obtained from Bay of Bengal at Visakhapatnam.

Nematodes were fixed in hot 70% alcohol and were preserved in 10% glycerol. Glycerol and creosote were used to facilitate detailed examinations. For enface view examination the head of one male parasite was cut with a sharp blade and brought into the desired position under

the cover glass using creosote on the slide.

All measurements are given in millimetres.

OBSERVATIONS

Family: Anisakidae Railliet et Henry, 1912

Genus: *Hysterothylacium* Ward and Magath, 1917
Hysterothylacium aetobatum n.sp.

(Figures 1 and 2)

Material: Two males and two females

Host: *Aetobatus narinari* (Euphrasen)

Location: Intestine

Locality: Visakhapatnam (Bay of Bengal), Andhra Pradesh, India

Type specimens: Specimens deposited in the Museum of the Zoology Department, Andhra University, Visakhapatnam, India.

Body medium sized, widens anteriorly and tapers down posteriorly. Cuticle thin, striations absent. The head carries three large lips, they are clearly separated from each other and the space

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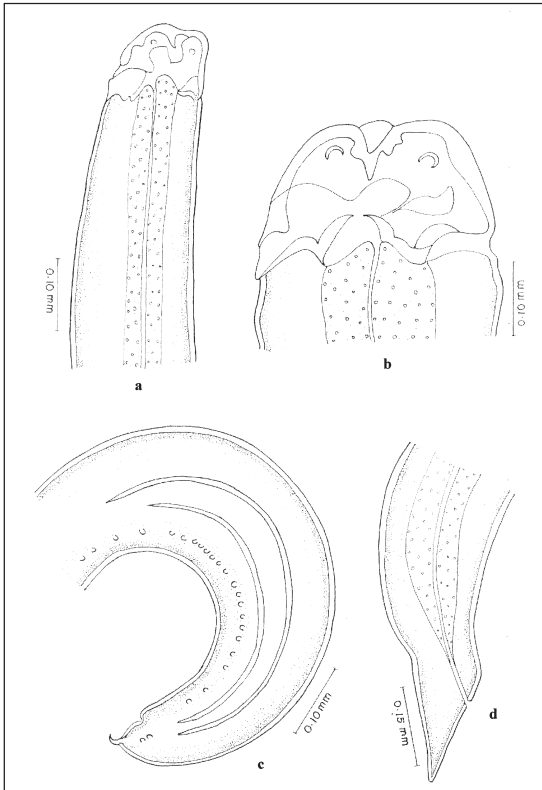


Figura 1. *Hysterothylacium aetobatum* n.s.p. a: Anterior end of male. b: Head of male - enlarged. c: Posterior end of male. d: Posterior end of female.

between the two adjacent lips is occupied by very prominent interlabia. Dorsal lip has two round ends which fit into the cavities of the two subventral lips. Interlabia large and covered with thick cuticle.

Oesophagus is divided into two portions, an anterior muscular portion and a posterior glandular portion. A large and posteriorly directed oesophageal appendix is given into the ventriculus. Intestine thick, long caecum is thrust out anteriorly. Excretory pore is situated at the level of nerve ring. Vulva equatorial. Tail conical in both sexes.

Male: Measures 18-19 length and maximum width 0.288-0.312. Body widest in the posterior region and narrowest just behind the lips. Head diameter 0.132-0.156. Nerve ring at 0/372-0.396 from the anterior end. Mouth is surrounded by three lips. Oesophagus measures 1.632-1.668 length 0.120-0.132 width. Ventriculus 0.060-0.072 length 0.120-0.132 width. Oesophageal

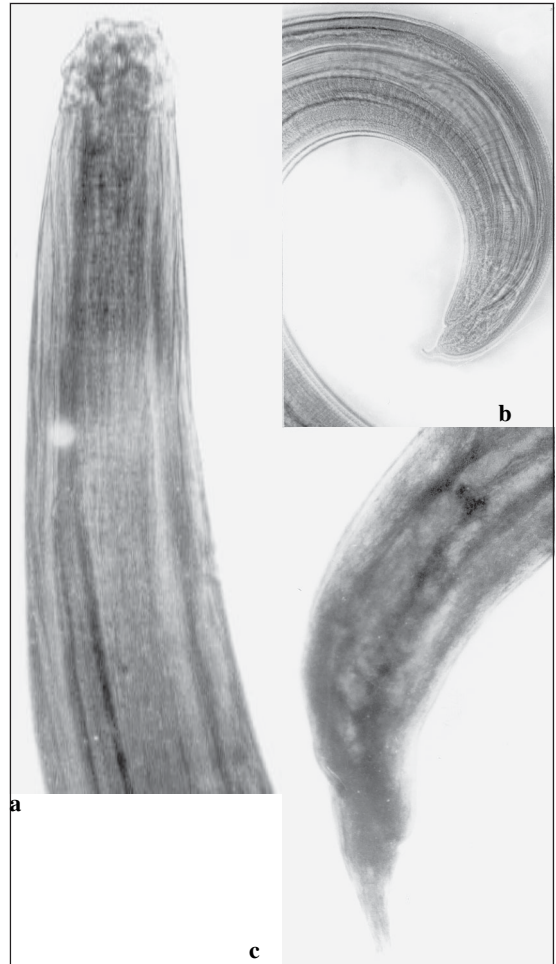


Figura 2. *Hysterothylacium aetobatum* n.s.p. a: Anterior end of male. b: Posterior end of male. c: Posterior end of female.

appendix 0.732-0.780 and intestinal caecum 4.596-4.956.

Tail short, conical, 0.132-0.144 in length. Posterior end of male curved. Altogether 24 pairs of sessile papillae in caudal region. 22 pairs precloacal and 2 pairs postcloacal. Caudal alae absent. Spicules unequal, left spicules 0.684-0.708 and right spicule 0.792-0.828.

Female: Measures 20-21 in length with maximum width of 0.468-0.492. Head diameter is 0.120-0.132. Nerve ring at 0.432-0.456 from anterior end. Mouth is surrounded by three lips. Oesophagus 1.872-1.920 length and 0.156-0.168 in width. Ventriculus 0.072-0.084 length, 0.120-0.132 width. Oesophageal appendix 0.744-0.768

and intestinal caecum 4.788-4.884 length.

Tail conical 0.252-0.276 long. Vulva 7-8 from head end. Eggs, spherical and 0.006-0.012 in diameter. Rectal glands absent.

DISCUSSION

Hysterothylacium was erected in 1917¹. Dollfus (1933)² erected the genus *Thynnascaris* with same characters as *Hysterothylacium*². Deardorff and Overstreet (1980)³ examined the type specimen of *H. brachurum* and confirmed the *Hysterothylacium* as valid genus. The present specimens considered as *Hysterothylacium* and compared with hitherto described species of *Hysterothylacium*.

Hysterothylacium aetobatum n.sp. shows resemblance in unequal spicules to *H. synpapillus*⁴; *H. ogcocephali*³ *H. reliquens*³; *H. corrugatum*³; *H. aduncum*⁵; *H. pelagicum*⁶; *H. elurensis* Rajyalakshmi and Vijaya Lakshmi, 1995; *H. nellorensis*⁷ and *H. japonicum*⁸ but differs from body measurements, type of striations on the cuticle, length of intestinal caecum, position and size of spicules, number and arrangement of caecal papillae, position of vulva and shape of tail in both sexes.

The new species differs in body measurements from *H. incurvum*³; *H. trichiuri*³; *H. fortalezae*³; *H. chaunaxi*³; *H. fabric*⁹; *H. cornutum*⁶; *H. scomberoides*⁶; *H. pseudotumbili*¹⁰ and *H. neocornutum*¹¹; *H. krishnai*¹² n.sp.; *H. kiranii*¹³; *H. carutti*¹⁴; *H. longicaecum*¹⁵; *H. rhamdiae*¹⁶; *H. channai*¹⁷; *H. punctati*¹⁸; *H. fossilii*¹⁹; *H. narayanensis*²⁰; *H. patagonense*²¹; *H. nipponense*²²; *H. geschei*²³ and *H. physiculi*²⁴.

The present species has close resemblance to *Hysterothylacium longicaecum* in having a long intestinal caecum but differs from it in body size, location of nerve ring, size of the spicules, number and arrangement of caudal papillae and shape of tail in male, hence a new species is erected as *H. aetobatum*.

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