

ON SOME VARIATIONS IN THE NEMATODE GENERA *PORROCAECUM* AND *ECHINOCEPHALUS*

By T. D. SOOTA, *M.Sc.*, *Zoological Assistant, Zoological Survey of India, Calcutta.*

While working on an unnamed collection of nematodes in the Zoological Survey of India, which contained *Porrocaecum angusticolle* Baylis and Daubney, 1922 and *Echinocephalus spinosissimus* Baylis and Lane, 1920 the author noticed certain important variations in them. In his opinion they are not regarded significant enough for the present to treat them as new species. However, it is considered desirable to record the variations as below :—

Order : ASCAROIDEA Railliet and Henry, 1915.

Family : ASCARIDAE COBBOLD, 1864.

Sub-family : *ANISAKINAE* Railliet and Henry, 1912, *emend. Baylis, 1920.*

Genus : **Porrocaecum** Railliet and Henry, 1912.

1. **Porrocaecum angusticolle** Baylis and Daubney, 1922.

Male.—The male specimens measure 42-88 * in length and 0.61-0.95 in maximum width, in the posterior half of the body. The nerve ring is situated at a distance of 0.65-1.1 and the excretory pore 0.79-1.3 from the anterior end. The oesophagus with the oblong ventriculus, measures 3.59-5.6 in length. The ventriculus varies in length from 0.44-0.6 and 0.28-0.48 in width. The intestinal caecum is 2.3-4 in length. The tail measures 0.26-0.39 and the spicules 0.89-1.25 in length.

Female.—The female specimens vary in length from 57-108 with the maximum width of 1.04-1.4 in the posterior half of the body. Nerve ring is situated 0.9-1.21 from the anterior end and excretory pore at a distance of 1.05-1.44. Oesophagus with the oblong ventriculus, measures 4-6.4 in length. Ventriculus is 0.5-0.8 in length and 0.4-0.57 in width. Intestinal caecum varies in length from 2.3-3.7.

The vulva is situated at a distance of 21-44 from the anterior end. The eggs in the uterii measure 0.07-0.0812 in length and 0.0525-0.0696 in width. Anus lies 0.6-0.7 from the tip of the tail.

* All measurements are given in millimeters.

Reg. No. W.3807/1, Zoological Survey of India, Calcutta.

Host.—*Gyps bengalensis* Gmelin.

Locality —Hoshiarpur (Punjab).

Remarks.—The largest specimen of this species recorded by Baylis and Daubney (1922¹), measures only 55 in the male and 90 in the female while in a more recent record by Morgan and Schiller (1950²) from American Hawks the male is 78 and female 140 ; whereas the specimens the author has examined have attained a length of 88 in male and 108 in female indicating by far the greatest length for male. Besides this, the large number of preanal papillae in these specimens is also noteworthy. So far, the number recorded is not more than 20 pairs while the present author has counted 25-33 pairs in the males.

Order : FILARIOIDEA Weinland, 1858.

Family : GNATHOSTOMIDAE RAILLIET, 1895.

Sub-family : GNATHOSTOMINAE Baylis and Lane, 1920.

Genus : **Echinocephalus** Molin, 1858.

2. **Echinocephalus spinosissimus** Baylis and Lane, 1920.

Male.—The male specimen measures 58 in length and 1.04 in maximum thickness, in the middle of the body. Oesophagus is 6.7 long. Tail is 1.2 in length.

Female.—The female specimens measure upto 59 in length and 1.09 in maximum thickness. The oesophagus is 6.09 long. Tail is 1.25 in length.

Reg. No. W.3808/1, Zoological Survey of India, Calcutta.

Host.—Shark.

Locality.—Sandheads, mouth of the River Hooghly.

Remarks.—Out of 8 worms in this lot of collection only three, *i.e.*, one male and two females are in good state of preservation. These specimens differ from others so far recorded, in the great length attained by both the sexes. The largest male measures 58 and female 59 while in the earlier record by Baylis and Lane (1920³) it is 35.4 and 31 respectively.

The author is thankful to Dr. B. S. Chauhan, Assistant Superintendent for guidance and help during the course of this work.

¹ Baylis, H. A., *Fauna Brit. India, Ceylon and Burma*, Nematoda, I, pp. 71-73 (1936).

² Morgan, Banner Bill and Schiller, Everett L., *Trans. Amer. Micros. Soc.*, 69 (4), p. 371-372 (1950).

³ Baylis, H. A., *Fauna Brit. India, Ceylon and Burma*, Nematoda, II, pp. 193-195 (1939).