

NOTE ON THE LEECH *LIMNATIS*
NILOTICA.

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A considerable number of accidents caused by the leech *Limnatis nilotica* (Savigny), which is well known under the term "Horse-leech," exist in literature.¹ In the process of being swallowed, the leech attaches itself to the mouth, throat and nasal cavity of men and beasts, causing hæmorrhage as well as hindering respiration. When it penetrates deeper the hæmorrhage may sometimes be very serious and even fatal.

I owe to Dr. N. Annandale of the Indian Museum the opportunity of examining one specimen of leech, which seems to be identical with the species mentioned. The material was obtained, apparently at Quetta, Baluchistan, from the throat of an Austrian prisoner, who had been brought from Persia. In drinking from dirty pools in Persia, he sucked up six individuals, all of which had been at the back of his throat for eight days. This information comes from Capt. A. G. R. Hardwick, R.A.M.C., who has communicated it to Dr. Annandale.

The specimen is of large size, measuring 85 mm. long, exclusive of the posterior sucker, by 16 mm. across, taken almost in front of the posterior fifth of the body, from which the trunk tapers more gradually to the anterior end than to the posterior. The trunk is subcylindrical, presenting on the ventral surface of its anterior end the sucker which is destitute of the three powerful jaws, and in this respect it is unlike the medical leech. The upper lip of the sucker is divided on its inferior surface into two lobes by a deep longitudinal groove. The jaws are covered by papillae and provided with more than 100 minute teeth. The posterior sucker, which is distinctly separated from the trunk by a constriction, is of a circular shape, the diameter being about 12 mm.

The leech, being preserved in spirit, cannot be expected to have retained its original colour. The body is of a uniform brownish grey colour, without being traversed on the dorsal surface by any trace of such four black lines and a median yellow or green stripe as has been described by Blanchard.² Along each side,

¹ Blanchard, R., *Courtes notices sur les Hirudinées, 1. Bull. de la Soc. Zool. de France*, XVI, 1891, p. 218. *Hirudinées de l'Italie continentale et insulaire. Boll. Mus. Zool. Univ. di Torino*, IX, 1894, p. 42. Masterman, E. W. G., *Hirudinea as Human Parasites in Palestine. Parasitology*, I, 1908, p. 282.

² See Blanchard, *loc. cit.*, 1894, p. 43.

separating the dorsal from the ventral surface, is a well-defined, dull orange lateral stripe. In colouration the present specimen can be easily distinguished from *Limnatis (Poecilobdella) granulosa* (Savigny), which presents the colour-pattern peculiar to the sub-genus *Poecilobdella*.¹ The latter species is common in British India.

The trunk is made up of 101 annuli, of which the 5th and 6th are fused ventrally to form the posterior margin of the anterior sucker. The same is true of the 7th and 8th annuli. In the 95th and 96th annuli I have been unable to demonstrate such a tendency of dividing into two as has been put on record by Blanchard.²

There are five pairs of eyes, of which the first three pairs are arranged on the first three annuli, forming a semicircle; the 4th pair lie on the 5th annulus; the 5th pair on the 8th annulus.

The male genital aperture lies in the posterior edge of the 30th annulus, appearing to exist between the 2nd and 3rd annuli of the X somite; the female aperture occurs five annuli behind the male, between the 2nd and 3rd annuli of the XI somite.

The nephridial pores lie in the posterior edge of the last annulus of each somite, but their total number could not be enumerated.

The alimentary tract agrees in the main with the medical leech, the crop being provided with some ten pairs of coeca, which are filled with blood, revealing a deep red colour. The intestine opens out on the dorsal surface of the last annulus, just in front of the posterior sucker.

Limnatis nilotica is of wide distribution, extending from the Azores, through part of Western Europe as well as Northern Africa, to part of Western Asia. It is of interest that its range extends, as stated by Dr. Annandale,³ into the borders and even within the boundaries of the Indian Empire.

¹, ² Blanchard, Révision des Hirudinées du Musée de Turin. *Boll. Mus. Zool. Univ. di Torino*, VIII, 1893, pp. 27, 28.

³ Annandale, N., Note on the Occurrence of the Leech *Limnatis nilotica* in Seistan and the Afghan-Baluch Desert. *Rec. Indian Mus.*, XVIII, pt. III, 1920, p. 135.

