

Phylliroë atlantica, Bergh.

Phylliroë bucephala, Souleyet, Voy. de la Bonite, Zool., ii., 1852, p. 399-415, pl. xxxv. figs. 1-18.¹

„ *atlantica*, Bergh, Verhandl. d. k. k. zool.-bot. Gesellsch. Wien, Bd. xxi., 1871, pp. 1302-1305.

„ „ Malacolog. Untersuch., *loc. cit.*, pp. 212-231, Taf. xxviii. figs. 1-18, xxix. figs. 1-15, xxx. fig. 1, xxxi. figs. 1-2.

Sacci hepatici posteriores medio non coarctati. Glandulæ hermaphrodisiacæ paginâ inferiore castaneæ.

This species differs from that of the Mediterranean in the absence of the constriction² in the middle of the posterior hepatic sacs, and in the chestnut-brown colour of the underside of the hermaphrodite glands.

A series of thirteen individuals was taken on the surface in the Atlantic near the coast of Africa, 16th August 1873, and off St. Vincent, Cape Verde Islands, 26th April 1876.

Most of the specimens were well preserved and of medium size, the length averaging 12 mm. (without the rhinophoria), and the height 9 mm.; a few were smaller, not measuring more than 8.5 mm. in length. The colour quite as usual.

The form of the animals and the structure of the organs of the body agree perfectly with the previously examined specimens.

The *central nervous system* has been already described by me. H. von Jhering³ considers that the upper pair of ganglia represent the cerebral, and the lower pair the pleuropedal (visceropedal). I do not believe this interpretation to be right, since the upper ganglia sometimes exhibit a very marked line of division into two parts, and occasionally the upper commissure between the two ganglia is distinctly double, which appears to indicate a separate connection between the two cerebral on the one hand, and the two pleural ganglia on the other. The upper ganglia give off two strong nerves to the walls of the upper part of the body. The visceral commissure certainly in most cases appears to be derived from the inferior ganglia, but the same is the case with the sub-cerebral commissure, which nevertheless has its origin in the upper ganglia. The genital nerve, described by von Jhering, is not the true *nervus genitalis* but the right *nervus pedicæus (longus)*, which, passing between the windings of the spermatic duct, extends along the walls of the lower part of the body. The true *nervus genitalis* does not seem to be derived from the inferior ganglia. I never saw the commissures uniting the inferior ganglia quite so distinct from each other as von Jhering⁴ figures them; the visceral commissure was always free, but the other two

¹ The true *Phylliroë bucephala* of Lesueur and Péron inhabits the Mediterranean (Bergh, *loc. cit.*, p. 231).

² In two small individuals, measuring 5 to 6 mm. in length, the underside of the glands was not coloured, and the hepatic sacs had several constrictions. Are these specimens really *Phylliroë bucephala*? (Bergh, *loc. cit.*, p. 235).

³ Vergl. Anat. d. Nervenyst. d. Moll., Leipzig, 1877, pp. 185-189.

⁴ *Loc. cit.*, Taf. ii. fig. 5.