

Colella pedunculata (Quoy and Gaimard) (Pls. V.–IX.).

Aplidium pedunculatum, Quoy and Gaimard, Voyage de l'Astrolabe (Zoologie), t. iii. pt. 2, p. 626, pl. xcii. figs. 18, 19.

Aplidium pedunculatum, Cunningham, Voyage of the "Nassau," Trans. Linn. Soc. Lond., vol. xxvii. p. 490.

The Colony is club-shaped, and is attached by the base of a long peduncle, which increases in size as it is traced upwards to the ellipsoidal head in which the Ascidiozooids are placed. The surface is fairly smooth. The colour of the head is yellowish-grey; of the stalk yellow or brown.

Size—head, 1.5 to 3.8 cm. in length, 0.8 to 2.2 cm. in greatest breadth; stalk, 6.5 to 9.2 cm. in length.

The Ascidiozooids are imbedded in the common test, and are of fair size. The body of each is composed of thorax and abdomen with a long vascular appendage.

The Test is soft and gelatinous in the head, but hard and stiff in the peduncle.

The Mantle is rather thin, and the musculature is irregular.

The Branchial Sac is large, and has five rows of stigmata on each side. The transverse vessels are all of the same size. The stigmata are very long and narrow, and are regularly arranged.

The Dorsal Lamina is represented by a series of long triangular languets.

The Tentacles are sixteen in number and are all of the same size.

The Dorsal Tubercle has a simple circular aperture.

The Alimentary Canal is large, and extends for a considerable distance behind the branchial sac.

The Reproductive Organs are not of large size. They lie alongside the alimentary canal.

The Incubatory Pouch is very large, and may be coiled spirally.

Localities.—(a) Station 313, January 20, 1876; lat. 52° 20' S., long. 67° 39' W.; depth, 55 fathoms; bottom, sand; bottom temperature, 47°·8 F.

(b) Kerguelen Island, depth, 10 to 60 fathoms.

(c) Station 151, February 7, 1874; lat. 52° 59' 30" S., long. 73° 33' 30" E.; depth, 75 fathoms; bottom, volcanic mud.

(d) Station 315, January 26, 1876; lat. 51° 40' S., long. 57° 50' W.; depth, 12 fathoms; bottom, sand and gravel.

(e) Station 314, January 21, 1876; lat. 51° 35' S., long. 65° 39' W.; depth, 70 fathoms; bottom, sand; bottom temperature, 46° F.

Fifty years ago Quoy and Gaimard¹ described a Compound Ascidian under the name of *Aplidium pedunculatum*. A short description and two coloured figures were given. The latter show a single specimen of the natural size (*loc. cit.*, fig. 18) and a magnified view of a small portion of the surface (*loc. cit.*, fig. 19). The colony exhibits a striking

¹ Voyage de l'Astrolabe (Zoologie), 1834, t. iii. pt. 2, p. 626, pl. xcii. figs. 18, 19.