

1. *Alcyonidium*.

Alcyonidium, Lamx., Johnst., Couch, Busk, Engl. Cyclop., art. Polyz.; Hincks, &c.

Alcyonium (pars), Linné, Pallas, Müller, Fleming, &c.

Halodactylus, Farre, v. Beneden.

Cycloum and *Sarchochitum*, Hassall.

Character.—Zoœcia immersed or subimmersed. Orifice usually papillæform, more or less exsertile. Zoarium erect and lobate or crustaceous or repent.

(1) *Alcyonidium flustroides*, n. sp. (Pl. X. figs. 13, 14).

Character.—Zoarium erect and foliaceous, much branched, extending to 4 or 5 inches; bilaminate, compressed and flustroid. Zoœcia polygonal, arranged in irregular longitudinal series, the septa between which are raised and strongly marked. The substance of the walls semigelatinous, irregularly dotted with small black granules. Orifice minute, papillæform, superior. Polypide with about sixteen tentacles. Ova scattered, usually singly, in the zoœcia. Width of branches about 4 mm.; zoœcia irregular in size, from about 0.8 × 0.4 mm. to 1.6 × 0.6 mm.

Habitat.—Station 142, lat. 35° 4' S., long. 18° 37' E., 150 fathoms, green sand.

This species forms straggling tufts of loosely entwined and sometimes anastomosing branches, which are quite soft and flexible in the upper part, though the stem and lower branches become hard and firm near the base. Sometimes the branches embrace and adhere firmly to some foreign substance, such as worm tubes, &c. The structure is at first sight very obscure, as the substance is very thick and opaque; immersion for a short time in acid, however, renders it much more transparent and enables the nature of the zoœcia to be seen. Many of these contain polypides alone, others polypides and ova together, and others again either "brown bodies" or scattered ova only. The orifices are very small and often quite obscure. The walls seem to be partly membranous and partly of a semigelatinous nature, irregularly dotted with small black granules which are possibly argillaceous. In the form of the cell and the raised septa this species resembles *Alcyonidium mytili*, as described by Mr. Hincks,¹ but entirely differs from that form in its erect bilaminate mode of growth.

¹ Brit. Mar. Polyz., p. 498, pl. lxx. figs. 2, 3.