

Family I. SUBERITIDÆ.

No microsclera present.

Genus *Suberites*, Nardo (Pls. XXV., XLI., XLIII., XLV.).

1833. *Suberites*, Nardo, Isis, p. 523.

1864. *Hymeniacion*, pars, Bowerbank, Mon. Brit. Spong., vol. i. p. 191.

Form various, massive to stipitate. Surface devoid of mammiform projections. Skeleton radiately arranged, nearly always with a dermal crust of smaller spicules arranged vertically to the surface. Spicules all monactinal, nearly always tylostylote.

This genus appears to be the most primitive of the family, giving rise on the one hand to mammæ-bearing forms such as *Polymastia*, &c., and on the other to symmetrically radiate forms like *Trichostemma*.

The most interesting of the new species obtained by the Challenger are several stipitate forms which in varying degrees simulate the genus *Stylocordyla* in external appearance (e.g., *Suberites ramulosus*, nobis), always differing, however, from that genus in the presence of monactinal in place of diactinal megasclera.

Suberites carnosus, Johnston, sp.

1842. *Halichondria carnosa*, Johnston, British Sponges, p. 146, pl. xiii. figs. 7-8.

1866. *Hymeniacion carnosa*, Bowerbank, Mon. Brit. Spong., vol. ii. p. 203; vol. iii. pl. xxxvi. figs. 5-9.

1884. *Suberites carnosus*, Ridley, Zool. Coll. H.M.S. "Alert," Brit. Mus., 1884, p. 465.

The occurrence of this sponge at or near Port Jackson has already been noted by Ridley (*loc. cit.*); it appears to be a very widely distributed species, as will be seen from the list of localities in which it has been found, as given below. The Challenger obtained it off the Azores and off Port Jackson, and a variety of the same species from Fernando Noronha.

Localities.—Station 75, July 2, 1873; lat. 38° 38' 0" N., long. 28° 28' 30" W.; off the Azores; depth, 450 fathoms; bottom, volcanic mud. One specimen.

Off Port Jackson; depth, 6 to 15 fathoms. One specimen.

Off Fernando Noronha, September 1, 1873. One specimen of a slight variety, in which the arrangement of the skeleton fascicles at the surface of the sponge is more diffuse than usual. The spicules, also, are larger than usual, measuring in the deeper parts of the sponge about 0.56 by 0.008 mm., and the head varies much in size and is often very irregular in shape; occasionally it may even be absent.

Habitat.—British Isles (Johnston, Bowerbank, &c.); Azores (Challenger); Fernando Noronha (Challenger); Kerguelen Island (Carter); Vancouver's Island (?) (Carter); Port Jackson ("Alert," Challenger).