

The curious tendency to a strongylate termination exhibited by the actines and cladi is a strongly marked feature.

*Ecionema bacilliferum*, var. *robustum* (Carter).

*Stelletta bacillifera*, var. *robusta*, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. xi. p. 351, pl. xiv. fig. 3, 1883, and *op. cit.*, vol. xvii. p. 123, 1886.

*Sponge*.—Large, conical, compressed; oscules large, few; pores in sieves.

*Spicules*.—I. Megascleres. 1. *Somal oxea*, fusiform, 1.3 by 0.025 mm. 2. *Ectosomal oxea*, 0.15 by 0.01 mm. 3. *Orthotriæne*, rhabdome sharply pointed but frequently strongylate, 1.52 by 0.028 mm.; cladi 0.13 mm. long. 4. *Anatriæne*, rhabdome 1.16 by 0.026 mm., cladi 0.065 mm., chord 0.116 mm., sagitta 0.045 mm. in length.

II. Microscleres. 5. *Microstrongyle*, either smooth, cylindrical, or more or less fusiform, and covered with small, erect, conical spines, when it is indistinguishable from a reduced anthaster. The smooth form is traversed by an axial fibre, which no doubt is also present in the spined variety, where, however, it is obscured by the presence of the spines; 0.045 mm. long. 6. *Chiaster*, actines slender, terminally tylote or not, a minute, spherical centrum sometimes present; 0.008 to 0.012 mm. in diameter.

*Colour*.—(?) Size, 100 mm. in height by 150 mm. in diameter at the summit, and 75 mm. at the base.

*Habitat*.—Ports Elliot and Adelaide, Australia.

*Ecionema densum*, Bowerbank.

*Ecionema densum*, Bowerbank, Proc. Zool. Soc. Lond., p. 323, pl. xxx. figs. 7–14, 1873.

*Sponge*.—Massive or subcylathiform, sessile; surface rough, uneven, sinuous; oscules simple, dispersed.

*Spicules*.—I. Megascleres. 1. *Strongyle*, cylindrical, 1.68 by 0.035 mm. 2. *Plagiotriæne*, rhabdome, esactine strongylate, 1.43 by 0.04 mm.; cladi strongylate, 0.0774 mm. long; chord 0.129 mm. long.

II. Microscleres. 3. *Microstrongyle*, fusiform, tuberculate, 0.0118 by 0.004 mm. 4. *Oxeate spheraster*, centrum small, actines conical, oxeate, bearing erect, conical spines. 5. *Strongylate spheraster*, centrum large; actines bacillary, strongylate, 0.023 mm. in diameter.

*Colour*.—Ochreous-yellow in the dried state.

*Habitat*.—Fiji Islands.

*Remarks*.—This species is founded on a single example, 56 mm. in height and 50 mm. in width. The ectosome is not a cortex, and beneath the outer epithelium is a layer of microstrongyles; no other microscleres occur in this layer.