

*Desmacidon conulosa*, Ridley and Dendy (Pl. XXIII. figs. 5, 5a, 5b, 5c; Pl. XXIV. fig. 2).

1886. *Desmacidon conulosa*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 346.

Sponge (Pl. XXIV. fig. 2) consisting, in the case of the larger specimen, of a tough peduncle, expanding and dividing above into two broad, flattened, palmate lobes. Height of specimen 94 mm.; thickness of the lobes 8 mm. Colour in spirit greyish-yellow. Texture firm, tough, resilient. Surface rugose, owing to numerous, thickly placed conuli, which project above the dermal membrane; these are absent from the peduncle. Dermal membrane thin, delicate, transparent. Pores scattered. Oscula small, about 1.5 mm. in diameter, numerous, scattered on both flattened surfaces and a few along the upper margin of the sponge.

*Skeleton*.—Composed of a coarse reticulation of stout spiculo-fibre; the fibres being formed of the oxeote spicules with only a very small proportion of uniting horny substance. The main fibres run more or less vertically to the surface and there terminate in compact, slightly divergent tufts of spicules—the conuli above mentioned.

*Spicules*.—(a) *Megasclera*; of one kind only, viz., very stout, fusiform oxea (Pl. XXIII. figs. 5, 5a), tapering gradually to a very sharp point at each end. Size about 0.7 by 0.057 mm. These spicules occur loosely scattered in the soft tissues of the sponge, as well as in the fibres. (b) *Microsclera*; small palmate isochelæ (Pl. XXIII. figs. 5b, 5c), with large anterior palms and lateral palms only slightly developed. Length about 0.032 mm.

A great number of small, spherical, yellow embryos occur in the deeper tissues of the sponge.

This species exhibits a close relationship to *Desmacidon compressa*, Esper (Ehlers), but differs in the arrangement of the oscula, which, in *Desmacidon compressa*, are said to be large and confined to the upper margin of the sponge. In the description of *Desmacidon compressa* we find also no mention of the remarkable and very characteristic conuli present in the Challenger species. This species forms a connecting link between the more typical species of the genus and the subgenus *Homæodictya*, and in some respects comes very near to *Desmacidon (Homæodictya) grandis*, nobis (vide p. 111), from the same locality.

*Locality*.—Simon's Bay, Cape of Good Hope, 10 to 20 fathoms. One large specimen, from which the measurements given above are taken, and one small one.