

Genus *Meliiderma*,<sup>1</sup> n. gen. (Pls. XX., XXI.).

1886. *Chondrocladia* (*pars*), Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 344.

Sponge stipitate. Megasclera stylote to tylostylote. Microsclera, isochelæ of the ordinary *Chondrocladia* form, to which may be added sigmata. In addition to these forms of spicules a special protective spicule occurs encrusting the stem, each spicule consisting of a slightly expanded base of attachment, a constricted neck, and a fusiform, outwardly projecting shaft, terminating in a pointed apex (*vide* annexed woodcut, Fig. 6).

This genus stands in much the same relation to *Chondrocladia* as does *Axoniderma* to *Cladorhiza*, having, like *Axoniderma*, developed a special spicule for external defensive purposes. The form of the extra spicule is, however, totally different in the two cases; and in *Meliiderma* it appears to be confined to the stalk, while in *Axoniderma* it is most abundant in the body of the sponge. In both these cases it is very difficult to say whether the extra spicule ought to be classed amongst *megasclera* or *microsclera*; for the sake of convenience both will here be regarded as *microsclera*, though standing on quite a different footing from other microsclera. The form of the extra microsclera in *Meliiderma stipitata* is as yet unparalleled. From their resemblance to spears or darts we have derived the generic name.

*Meliiderma stipitata*, Ridley and Dendy (Pl. XX. fig. 11; Pl. XXI. figs. 6, 6a, 6b, 6c, 14).

1886. *Chondrocladia stipitata*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 344.

Sponge (Pl. XX. fig. 11) consisting of a spherical head perched on the end of a long stalk, which in the one perfect specimen is much bent. Diameter of head about 12 mm. Length of stalk in the perfect specimen, 25 mm., diameter about 2 mm. At the base the stalk terminates in a flattened expansion which is firmly attached to a fragment of black volcanic cinder. *Colour* in spirit pale yellow. *Texture* of head soft. *Surface* hispid. *Dermal membrane* fairly distinct.

*Skeleton*.—There is no dermal reticulation, and the main skeleton consists chiefly of a very dense band of spiculo-fibre, forming the greater part of the stem; this penetrates the spherical head for a short distance and then expands slightly into a knob-like extremity, from which radiate thin bands of loose spiculo-fibre in all directions, running vertically to the surface. Numerous spicules project for some distance beyond the surface of the sponge, giving to it its hispid appearance.

*Spicules*.—(a) *Megasclera*; of one kind only, viz., long tylostyli (Pl. XXI. figs. 6, 6a, 6b, 6c), often a little crooked, measuring up to 2·2 by 0·038 mm.; head, as a rule, only very slightly indicated, apex sharply pointed; the spicules are broadest in the

<sup>1</sup> Greek *μηλιά*, a spear, and *δέρμα*, the skin.