

Although I have no specimens of this genus *Habrodictyum* for special examination, it follows from Wyville Thomson's above quoted (p. 101) generic diagnosis and figures¹ that the two species distinguished by Wyville Thomson, *Habrodictyum corbicula*, Valenciennes, and *Habrodictyum speciosum*, Quoy and Gaimard, are very closely related to *Regadrella phœnix*, Oscar Schmidt. Whether the agreement goes so far that the two species must be included in a common group I cannot decide, though I regard this as by no means improbable. Wyville Thomson was certainly right in uniting Gray's two genera *Heterotella* and *Corbitella*, and in entirely dropping the generic name *Alcyoncellum*, which really referred to a calcareous sponge.

Habrodictyum agrees with *Regadrella* in this, that the skeletal framework of the tube-wall is formed of an irregular network of fibrous bundles, which in the upper part are only united by means of the soft parts of the body, but which towards the somewhat diminished inferior extremity become gradually more and more firmly welded together by siliceous matter, and finally pass into a knotted base which grows directly upon the solid substratum. The irregular distribution of the parietal apertures is characteristic of both genera. The spicules described and in part figured by Wyville Thomson do not, on the whole, differ much from the spicules of *Regadrella*. Only the rosettes, which are scattered throughout the parenchyma, and which in *Regadrella* are provided with a transverse terminal cross belonging to the terminal rays, exhibit in *Habrodictyum speciosum* true oxyhexasters with proportionately long principal rays and shorter pointed terminals.

While in *Habrodictyum corbicula* the wall of the tube is affirmed to be sharply separated from the transversely disposed terminal sieve-plate by a lip-like margin, such a separation is entirely wanting in *Habrodictyum speciosum*, since the lattice-like network of the tube-wall passes directly and without change into the gently arched terminal plate. Whether *Habrodictyum corbicula* contains the parenchymal oxyhexasters which are so abundantly present in *Habrodictyum speciosum*, has not been determined with certainty.

Genus 2. *Eudictyum*, Marshall.

This somewhat doubtful genus contains only a single species, *Eudictyum elegans*.

Eudictyum elegans, Marshall.

In his investigations into the Hexactinellida² Marshall has described, under the name *Eudictyum elegans*, a specimen in the Museum of the Amsterdam Zoological Garden, which is perhaps identical with the above-mentioned *Habrodictyum speciosum* of Wyville Thomson, and at any rate, very closely allied to it. According to Marshall the tissue of the wall of the hollow club-shaped sponge shows longitudinal and trans-

¹ *Ann. and Mag. Nat. Hist.*, ser. 4, vol. i. pl. iv.

² *Zeitschr. f. wiss. Zool.*, Bd. xxv. p. 211, 1875.