

Myxilla rosacea, Lieberkühn, sp., var. *japonica*, nov. (Pl. XXVI. fig. 3; Pl. XXVII. figs. 8, 8a, 8b, 8c; Pl. XLVII. fig. 3).

1859. *Halichondria rosacea*, Lieberkühn, Archiv f. Anat. u. Physiol., vol. ix. p. 520, Taf. xi. fig. 2.

1862. *Myxilla rosacea*, Schmidt, Spong. Adriat. Meer., p. 71.

1862. *Myxilla fasciculata*, Schmidt (*non* Lieberkühn),¹ Spong. Adriat. Meer., p. 71.

1864. *Myxilla tridens*, Schmidt, Spong. Adriat. Meer., Suppl. i. p. 36.

1864. *Myxilla Esperii*, Schmidt, Spong. Adriat. Meer., Suppl. i. p. 36.

Sponge (Pl. XXVI. fig. 3) lobate or digitate; frequently flattened. The largest specimen is of an irregularly lobate form and 56 mm. in length. *Colour* in spirit very variable; ranging from very pale, creamy yellow to almost quite black. *Texture* firm, compact and rather leathery. *Surface* uneven, corrugated, and sometimes minutely hispid. *Dermal membrane* very thin and transparent. *Pores* not very abundant, scattered. *Oscula* few, small, scattered.

Skeleton.—The main skeleton consists of a very compact and symmetrical reticulation; when seen in thin section (Pl. XLVII. fig. 3) the network appears to be made up of a number of triangular meshes, the apices of six such triangles meeting in a common point while the bases form a hexagon; this arrangement is in places very distinctly visible but is, of course, never mathematically exact. The sides of the triangular meshes are of exactly one spicule's length, and are formed of from one to about six stylote spicules lying side by side. There is no proper dermal reticulation, but at a depth of about 0.14 mm. below the dermal membrane the skeleton arrangement just described suddenly gives place to another and totally different one. This takes the form of a number of brushes of tornote spicules, each brush only one spicule in length, and with the component spicules diverging upwards towards the dermal membrane, which they support, and through which their points often project for a short distance.

Spicules.—(a) *Megasclera*; of two kinds. (1) Entirely spined, short, slightly curved styli (Pl. XXVII. figs. 8, 8a) tapering rather suddenly to a sharp point at the apex, size about 0.14 by 0.0126 mm. (the diameter is very variable, that given is about the maximum), making up the main skeleton; (2) smooth, hastately pointed tornota (Pl. XXVII. figs. 8b, 8c) rather thicker in the centre than elsewhere, size about 0.175 by 0.007 mm., occurring in brushes supporting the dermal membrane. (b) *Microsclera*; of two kinds—(1) small, tridentate isochelæ, with rather strongly curved shaft, which appears to be slightly expanded laterally, especially towards the two ends; length up to about 0.03 mm.; (2) slender sigmata, usually much contort, length up to about 0.045 mm.

This sponge differs from Schmidt's types of the species chiefly in the possession of a shorter, stouter, and more strongly spined stylote spicule; in Schmidt's types, also, the

¹ According to Vosmaer, Notes Leyden Mus., vol. ii. p. 123, 1880.