

*Melitodes rubeola*, n. sp., var.

The colony is branched, the branches freely anastomosing. An average specimen measures 130 mm. in height and about 200 mm. in greatest breadth. The branches are all given off in the one plane, so that the whole colony presents the form of a broad fan; the branches arise from a short simple axis, which is attached and is about 4 mm. in diameter. A second small colony arising alongside speedily anastomoses with it, in the same plane; while a third colony of about the same dimensions, but arising at a short distance though parallel to the first, soon by a series of cross anastomoses, becomes connected therewith; forming, as it were, a fan within a fan.

The meshes are extremely irregular in outline, and the branches end in a series of free bifurcations; about 0.5 mm. in diameter.

The polyps are crowded irregularly over the branches; they are retractile within verrucæ, which are about 1 mm. in diameter, but these do not project much above the surface of the cœnenchyma. When retracting, the tentacles fold in first and then the body of the polyp is withdrawn; a coronet of bent spindle-shaped spicules surrounds the bases of the tentacles, and a few straight spiny spindles strengthen the dorsal portions of the tentacles.

The cœnenchyma is dense and the surface has a roughened, glistening appearance from being studded over with masses of Stachelkeule and half-sided spiny spindles; the internodes when stript are pinkish and grooved.

The spicules measure:—The Stachelkeule are somewhat smaller and less spiny than in the type, measuring 0.14–0.04; 0.16–0.04; 0.1–0.04 mm. The one-sided spiny spindles when seen in shortest axis are curiously like Blattkeule, but the extremities are spiny, not blunt; they measure 0.06–0.04; 0.08–0.06 mm. The double crosses measure 0.06–0.04; 0.08–0.04 mm. The curved and bent spiny spindles, which are chiefly of a yellow colour, are 0.3–0.02; 0.26–0.04; 0.2–0.04; 0.22–0.04; 0.16–0.04 mm. The flat angular spicules found in the verrucæ are 0.12–0.02 mm. The straight warty spindles are 0.14–0.04 mm., and there are a few spindles with only a central knot of spines measuring 0.1–0.02 mm.

The colour in spirits is a grayish-white for the internodes; and a bright pink for the nodes. The polyps are of a yellowish hue, owing to the presence of yellow-coloured spicules; when dried the colour is a pinkish-yellow with yellow polyps.

*Habitat.*—Station 190, Arafura Sea; depth, 49 fathoms.

*Melitodes philippinensis*, n. sp. (Pl. XL. fig. 8).

Portions of several colonies of this species are in the collection from the Philippines. It seems to be variable in its colouring.