

rock. It is from 10 to 20 mm. in height, with a broad diameter of 70 mm. and a medium diameter of 40 mm. in width. It bends upon itself into two nearly equal portions, which have an average diameter of about 20 mm. each. The marginal zone for about 5 mm. in width is rough, as in the other species of the genus, while the upper portion of the column is divided into constrictions partly corresponding to the lobes of the capitulum; it is wrinkled.

The capitulum is very extensively lobed, the lobes often growing over one another. The whole mass, which in shape follows the contour of the column, or nearly so, might be described as kidney-shaped, with an outer convexity of 130 mm., and an inner concavity of about 60 mm. On each half of the head there are about six principal lobes, each of which is again lobed; the outer edges of each lobe are everted and fold down against the column; the inner edges between each pair of lobes fold in over the central portion of the capitulum; these meet those from the opposite lobes, sometimes growing over one another, and quite concealing from view the central portions of the capitulum. Thus the upper surface of the capitulum has the appearance of a Meandrine coral. The texture is rough.

The autozooids are numerous, well marked, and arranged on the lobes with a certain amount of regularity, in rows parallel to the edges of the lobes, with an average distance from each other of 1.5 mm., with about 1 mm. between the rows. The polyps of one row appear to be alternate with those of the adjoining row.

The siphonozooids are numerous, not easily perceived when the specimen is taken fresh from spirits, but quite perceptible on a dried morsel.

The colour is of a uniform dull brown.

The spicules of the sterile trunk measure—the tuberculated spindles 0.54–0.14; 0.42–0.1 mm.; the more slender spiny spindles 0.44–0.06; 0.34–0.04; 0.22–0.02 mm. Those of the capitulum measure—the straight or curved spiny spindles 0.3–0.02; 0.16–0.02 mm.; the club-shaped forms, with roughened heads 0.18–0.04; 0.16–0.04 mm.; and the four-rayed forms 0.3–0.06; 0.26–0.08; 0.16–0.06 mm.

*Habitat.*—Off Kandavu, Fiji Islands.

*Sarcophytum trocheliophorum*, Marenzeller, var. *amboinense* (Pl. XLI. fig. 11).

*Sarcophytum trocheliophorum*, Marenzeller, Zool. Jahrb., Bd. i. p. 359, Taf. ix. figs. 5, 6.

*Sarcophytum pulmo*, Ehrenborg, Klunzinger (*non* Esper).

A specimen in the collection appears to belong to this species, which is very widely distributed throughout the Indian Ocean. It had been attached to a mass of soft coral rock, by an irregular clinging base, from which a short column was developed: this has the rough lower layer and the smoother upper portion, and varies in height. The basal portion adapts itself in great measure to the inequalities of the surface to which it adheres.