

The number of mesenterics varied in the three specimens investigated between twenty-eight and thirty-six, according to their size. The dorsal and ventral zones of mesenteries approximate always with macromesenteries.

No channel filled with cells is present at the bases of the mesenteries; the muscle-pennons indistinct; the generative organs so abundantly developed as to fill the greater part of the cœlenteron. These latter occur only on the macromesenteries, and consisted of testicular follicles in the three specimens studied.

The cœnenchyme is extremely thin, and possesses internally smooth connecting-tubes lined by endoderm; on the upper surface Foraminiferal shells are sparsely embedded; while on the other side, which covers the Gastropod shell, these are entirely absent.

The name *thalamophilus* was chosen with reference to Thalamophora and Polythalamia, names which have been applied to the Foraminifera.

*Epizoanthus stellaris*,\* n. sp. (Pl. I. fig. 4).

“Polyps of inconsiderable height, nearly saucer-shaped; body-wall vertical at the sides, but strongly flattened above; on its horizontal upper surface are numerous radial ridges, separated by furrows, 15–20 in the adult animal; colour of the colony dark greyish-brown; deposits very various.”

*Habitat*.—Station 201, off Samboangan, Philippine Islands; 82 fathoms.

*Dimensions*.—Of the individual polyps—height, 0.05–0.4 cm.; diameter, 0.15–0.7 cm.

“Of this species I possess a colony, covering the rooting spicules of a *Hyalonema* for a distance of about 14 cm., and consisting of about 100 individuals. The cœnenchyme forms a tube open at both ends, and surrounds like a sheath the bundle of spicules, the latter being about 5 mm. thick. The individuals spring from it at longer or shorter intervals by an elliptical base, measuring in the largest polyps (3–4 mm. high) about 5–7 mm. in diameter. From these to the smallest, which hardly project above the cœnenchyme, and are 1.5–3 mm. broad, by 0.5–1 mm. high, every transition is found. All the animals are strongly contracted; on the strongly flattened, discoidal, horizontal surface of the body-wall may be dimly seen the entrance to the interior by a circular pit. From this point outwards radiate over the surface of an adult specimen, about 15–20 ridges separated by furrows.

“The colour of the colony is a dirty dark-grey. The body-wall is of considerable thickness, caused by the strongly developed mesogloea. The exterior surface of the latter is charged with various deposits, consisting of irregular grains of sand and lime, sponge spicules of very varied origin, and finally of the small dark crystalline bodies which cause the dark tint of the colony. These deposits occur in additional quantity on the radial ridges before mentioned. They are continued inwards as elevated ridges over the edge of the covering fold without a break, and run even further, on the inner