

The branchial aperture is distinctly six-lobed, and the whole branchial siphon is considerably pigmented of a reddish-brown colour (Pl. XIX. fig. 10). The atrial aperture is prolonged into a long narrow siphon which opens into the common cloacal cavity (Pl. XIX. fig. 11, *at.*).

The branchial sac is thick and opaque. The stigmata are small and not very numerous. The endostyle is large and has a serpentine course (Pl. XIX. fig. 3, *en.*).

The tentacles are very numerous, remarkably so for a Compound Ascidian, and are also, some of them, singularly long and narrow. Their bases are closely placed (Pl. XIX. fig. 12). They have all the appearance of being extensile and retractile, as some portions of them have a stretched out appearance (Pl. XIX. figs. 12, 13). Some of the epithelial cells on the surface of the tentacles are large and fusiform, with very large central ovate projecting nuclei. These cells are placed generally in little groups, with their long axes pointing along the tentacle. On the edges of the tentacle, as seen under a high magnification (about 1000 diameters), the nuclei form rounded projections of considerable size (Pl. XIX. fig. 13). At the extreme tip of the tentacle these cells are much more numerous, and cover almost the whole surface, the nuclear projections giving it quite a rough knobbed appearance (Pl. XIX. fig. 14).

The alimentary canal occupies the broad rounded posterior end of the Ascidiozoid. The stomach is large and globular, and is smooth on the outer surface. The intestine is short. A few tailed larvæ were found in the colony; the single pigmented sense organ is placed near the posterior end of the body, the endostyle is large, and they are in many ways very like those of *Colella pulchra* (compare Pl. XIX. fig. 15, and Pl. XV. fig. 12).

*Cystodytes philippinensis*, n. sp. (Pl. XX. figs. 1-12).

*The Colony* is of irregular form, flat and incrusting, and of moderate thickness. The colour is dark brownish-grey, rather lighter round the edges. The surface is uneven but fairly smooth. The common cloacal apertures are inconspicuous.

The length is 4 cm., the greatest breadth is 3 cm., and the thickness about 5 mm.

*The Ascidiozooids* are elongated antero-posteriorly, and are usually placed at right angles to the surface. The usual size is 2.5 mm. antero-posteriorly, and slightly more than 1 mm. in greatest breadth. The anterior end is slightly narrower, and terminates in the branchial siphon, while the atrial projects from its dorsal extremity. The posterior end of the body is broad and rounded. The posterior half or three-fourths of the Ascidiozoid is concealed by a calcareous capsule formed of disk-shaped spicules. The anterior end projects from this capsule and is quite unprotected.

*The Test* is firm and rather stiff. It is smooth on the upper surface, and is moderately transparent. It does not vary much in thickness, and the edges are prominent and rounded. The matrix is clear and homogeneous, but it is greatly reduced and