

broken up by the presence of innumerable bladder cells which in most places are so abundant as to become polygonal by mutual pressure, and reduce the matrix to a system of mere bands and membranes separating the cavities from one another. The usual small variously shaped cells are abundant all through the test. In the neighbourhood of the Ascidiozooids are found the large discoid spicules which form the calcareous covering.

*The Mantle* is strong and has a well-developed musculature. The muscle fibres are large and numerous, and form a close network. They run in all directions.

*The Branchial Sac* is small and thick walled. The transverse vessels are wide and all of one size. The stigmata are rather small. The fine longitudinal vessels are narrower than the stigmata.

*The Tentacles* are numerous and rather long.

*Locality*.—Samboangan; depth, 10 fathoms.

Of this species of *Cystodytes* three small colonies were obtained off Samboangan in the Philippine Islands, from a depth of 10 fathoms. It is closely allied to the last described species, but they differ in a number of details which are pointed out below.

Like *Cystodytes draschii* this is a flat or nearly flat expanded incrusting colony, which is probably attached to foreign objects by the greater part of its lower surface. It is of quite irregular shape (Pl. XX. figs. 1, 2), and grows out into rounded lobes. The margin is thick and projecting as in the last species, but it is more irregular and not so transparent. A slight expanded thin margin is present at one or two points. The upper surface is undulating, and has besides numerous very slight elevations which correspond to the anterior ends of the Ascidiozooids. It is smooth and somewhat glistening, but not so much so as in the case of *Cystodytes draschii*. The lower surface (Pl. XX. fig. 2), on the contrary, is not so rough as in the previous species. It is, however, very irregular, and has various foreign bodies—sand-grains, shell fragments, and Polyzoa—adhering to it. There is a slight rounded margin, varying from 2 mm. to 5 mm. in thickness, round the greater part of the edge (Pl. XX. fig. 2), which evidently did not adhere.

The colour is distinctly duller and darker than in *Cystodytes draschii*, and has none of the yellowish tinge found in that species, otherwise it is similar. The Ascidiozooids show through in the same indistinct manner (Pl. XX. figs. 1, 2), but form smaller light-coloured areas than in the previous species. The under surface is scarcely at all lighter in colour than the upper, and the Ascidiozooids do not show through so distinctly on this surface. In short the Ascidiozooids altogether are rather less conspicuous in this species than in the last.

In a section the Ascidiozooids are seen to be mostly placed vertically in the colony (Pl. XX. fig. 3); some, however, are inclined. No arrangement in systems can be distinctly made out. The general shape of the Ascidiozoid and its relation to the surrounding calcareous capsule (Pl. XX. figs. 3, 5) is the same as in *Cystodytes draschii*.