

MORPHOLOGICAL AND TAXONOMICAL STUDIES OF *HYDROSERA COMPRESSA* WALLICH.

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Hydrosera compressa Wallich was described from Gangetic Sunderbunds, 1858 by G. C. Wallich. He collected them from a soft mossy stratum upon submerged algae or tree stems. We found the species attached to *Bostrychia flagellifera* Post (Rhodophyta) from Iriomote-jima (Iriomote island) in southern Japan. We observed the specimens using light microscopy and scanning electron microscopy.

The cells form short chains (two to four cells) by mucilage pads secreted from pseudocelli and attached to the thallus of *B. flagellifera*. The valves are divided into three compartments by two septa thrown across it internally. Valves have three compartments that are inflated; the central one being the largest. About 60 µm in length in valve view, and rectangular in girdle view. The valve face is flat, but bears numerous tiny projections. The valve has a conspicuous rimoportula with S-shaped lips similar to other *Hydrosera*, which lies near the center of the valve, it opens to the external surface as a slit. The pseudosepta extend across the bases of the two parts. Internally the valve surface is covered with scale-like plates with pores, which are a characteristic feature of the genus that has previously been overlooked.

We will also discuss the geographical distribution of this species in Japan and *B. flagellifera* relationships.