

Species: *Hydrolithon boergesenii*

Family: Mastophoroideae

Morphology: grows as a small encrusting plant found on loose rubble and also grows as a rodolith in shallow high energy habitats. Can be up to 10 cm in diameter, but is typically 2-4cm across. Growing edge is encrusting onto the benthos. Color is typically a bluish purple but can be variable determined by local light intensity.

Surface Texture: This species grows with a tessellate surface texture. Scattered trichocytes can be found but are not always present.

Conceptacle morphology: low hemispherical mounds, 200-400 μ m diameter, single pore. Conceptacles can occur in very dense fields.

Cell structure: Parallel hypothallus.

Tissue thickness: Medium, 200-300 μ m.

Abundance and Ecology: Can be found at 1-70m depth. rare, but can be common in some habitats such as small fields of rubble on the reef slope between 10-30m in Curacao. Seems to like intermediate light and high flow.

Distribution: Throughout the Caribbean basin. Observed in Belize, Bonaire, Curacao, Florida, Mexico.

Similar Species: color surface texture resembles *Paragoniolithon accretum*. The conceptacles of *H. boergesenii* are smaller and lower, and the surface texture is more boldly tessellate than in *Paragoniolithon accretum*.

Photographs: A. a typical live plant *in situ*, with dense conceptacles. B. a microscopic view of the surface texture, notice the patches that give it a tessellate texture C. an image (SEM) of conceptacles and tessellate surface texture D. A cross section of the algal thallus (SEM).

Collection sample numbers: 53, 79, 102, 105

