

Species: *Porolithon pachydermum*

Family: Mastophoroideae

Morphology: grows as an encrusting plant with very smooth surface, can look chalky. Can cover extensive parts of the reef. Growing edge is encrusting onto the benthos. Color is typically a light blue to tan.

Surface Texture: This species grows with a smooth surface texture that looks granular under the microscope. Growing edge is adherent to the benthos. Trichocytes grow in dense aggregations found in depressions on the surface.

Conceptacle morphology: low mounds often slightly raised or flush with the surface, 100-200 μm diameter, single pore. Conceptacles are very rare and may not be visible on the surface as they can be buried.

Cell structure: Hypothallus is parallel with regular perithallus.

Tissue thickness: very thick, >800 μm

Abundance and Ecology: Can be commonly found at shallow depths. Typically grows in high light on top of spurs in shallow reef habitats with high flow. Can form large algal ridges in the right wave exposure.

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

Similar Species: None, the smooth surface texture and ecological zonation is distinct. Genetically this species has been found to be a species complex but there are no morphologic characters that correspond with the species.

Photographs: A. a typical small live plant *in situ*, approximately 2 cm across. This plant has been excavated by chiton herbivory creating the deep holes you see. B. a live plant showing its smooth chalky surface texture. C. A cross section of a relatively thin algal thallus (SEM). The large pits visible in the parathallus are sunken conceptacles.

Collection sample numbers: 58, 89.

