

Species: *Titanoderma prototypum*

Family: Lithophylloideae

Morphology: Grows as a small encrusting plant. Rarely larger than 1-2 cm in diameter. Growing edge is encrusting onto the benthos.

Surface Texture: This species grows as a single cell layer that grows with cells arranged in a fan shaped pattern. Distinctive swirls are formed from multiple overlapping layers of cells.

Conceptacle morphology: Low hemispherical mounds, 250-500 μm diameter, single pore.

Cell structure: Single layer hypothallus.

Tissue thickness: Thin, 100 μm , depending on the number of overlapping layers.

Abundance and Ecology: Very rare, most often found amongst the rubble in high wave action grooves between 1-10 meters depth. Also in cracks, crevices and overhangs.

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

Similar Species: Surface texture resembles both *Lithoperella atlantica* and *Titanoderma bermudense*. The conceptacles are smaller and the cell walls are less bold in *T. prototypum* than in both of these other species.

Photographs: A. A typical small live plant *in situ*, approximately 1.5 cm across. B. A microscopic view of the surface texture and conceptacles. C. The surface texture showing some conceptacles (SEM). D. A cross section of the algal thallus (SEM).

Collection sample numbers: 103, 106, 107.

