

Placocarpus Trevisan emend. Breuss (Verrucariaceae)

Thallus thick to very thick, crustaceous-effigurate, in center rimose-areolate; areoles adpressed, sharply angular, constricted at base, diffract by black fissures into secondary, at margin \pm sublobate, lobe tips rotund, adnate or subascending, black below, without rhizohyphae, towards center "telo" [Latin] affixed to substrate. Upper cortex paraplectenchymatous, covered by granulose hyaline layer. Algae trebouxoid, in discontinuous layer. Medulla very thick, of dense intricate hyphae, amyloid, strongly interspersed with hyaline crystals or granules. Lateral and lower cortex paraplectenchymatous.

Perithecia immersed in thallus, subglobose to broadly pyriform. Periphyses simple. Asci oblong-clavate, 8-spored. Spores biseriate, hyaline, ellipsoid to oblong-ovoid, halonate.

Monotypic.

Very similar to Verrucaria in some respects, but differs not only in its larger size but also in a number of taxonomically important characters such as anatomical features and spores. The areolate appearance deriving from the cracking of a primarily continuous crust distinguishes it from Catapyrenium, in which the thallus consists of squamules developing individually from the prothallus.

Placocarpus schaeferi (Fr.) Breuss [syn. Catapyrenium schaeferi]

Thallus thick to very thick (to 1-2.5 mm) due to an excessively developed medulla, cracky areolate in central parts and \pm distinctly effigurate at circumference. Areoles fastened to substrate by a short stalk of densely packed perpendicularly arranged hyphae originating from the medulla, the outermost ones with a great part of the underside free from the substrate with a blackening paraplectenchymatous lower cortex, giving the species an almost lobate appearance when well developed. Surface gray, bluish or bluish pruinose, with tartareous upper surface. Hypothallus thick, black. The thick medulla composed of interwoven hyphae is densely interspersed with minute colorless crystals or granules (thus comparable with the medulla in Squamarina), and slowly turns blue (at least in spots) with iodine.

Perithecia with pale ostiole, 0.25 mm diam.; exciple pale, gel I+ blue; asci broadly clavate; spores biseriate, hyaline to greenish, ellipsoid, (18-)20-28(-32) x 8-10(-12) μ m, halonate, the gelatinous sheet being best developed in premature spores and then about 2.5 μ m thick.

On calcareous rocks or sometimes parasitic on other lichens, Colorado, Wyoming.

Literature

Breuss, O. 19_. Placocarpus.

Thomson, J. W. 19___. Catapyrenium