

Apatoplaca Poelt & Hafellner

After Poelt & Hafellner, 1980

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Thallus crustose, whitish or gray, C. Apothecia large, black, marginate at least when young; margin including a few algae; hypothecium pale; hymenium hyaline; epihymenium K+ violet; asci clavate, of the Teloschistestype, swollen below the apex; spores hyaline, simple, oblong, 1424 x 48 um. Paraphyses branched above, the tips clavate, weakly thickened. Excipulum pale inside. On calcareous sandstone.

A segregate from Lecidea.

A. oblongula

Thallus continuous to weakly rimose, uneven, pure white (to ochrewhite on reddish substrate), chalky, thin to thick (to 0.8 mm) but confluent with granules of substrate, I, K, C, P, to 4 cm across, with broad and irregular fissures and grains of sandstone visible in the surface, but partly subareolate, rough and distinctly limited with a thick margin to another lichen. Hypothallus not visible. Photobiont trebouxoid, 1520 um diam.

Apothecia dense (ca. 45 per square cm), 0.50.8(1.2) mm wide, single or in dense groups, rounded, at first subimmersed, then ± prominent or rarely sessile, 0.30.4 mm thick, distinctly constricted at base, pale part 250400 um deep and at base a 100 um thick, continuous algal stratum; medulla little developed; disc pure black, concave to plane; margin thick, black, soon elevated above thallus, containing a few algae. Exciple cellular, pale inside, thin, confluent with hypothecium, when young 5070 um thick at edge and laterally, at least in exterior half sordid bluegreen (according to Magnusson; narrow outer marginal zone reddish black according to Hertel), but at base ca. 20 um and colorless, I+ blue; cortex K+ violet. Hypothecium ca. 50150 um high, hyaline, grayish grumose (inspersed?), I+ dark blue. Hymenium (75)85100(110) um, hyaline, I+ dark blue. Epihymenium 1525 um, indistinctly delimited, sordid bluish (according to diagnosis; graygreen according to Magnusson's description, brownish pale gray according to Hertel), P, C+ brownviolet, N ± violet, K+ bright (bluish to reddish) violet. Paraphyses gelatinized, indistinct, 1.72 um, branched above, apices slowly and constrictedly clavate, 46 um. Asci 6070 x 1520 um, clavate, Teloschistaceaetype, without axial mass; tholus I+.

Spores 8, simple or occasionally 1-septate, hyaline, (14)1724 x (4)68 μm , oblongellipsoid ($L:W = 2.72.8:1$). On calcareous sandstone, Utah, Colorado. Distinguished by the long spores, K⁺ violet epihymenium, and presence of algae below the hypothecium.

Literature

Hertel, H. 19 . Herzogia 3: 365. Magnusson, A. H. 1952. Acti Horti Gothob. 19: 3738.

Poelt, J. and J. Hafellner. 1980. Apatoplaca Genus novum Teloschistacearum (Lichenes). Mitt. Bot. Staatss. Mnchen 16: 503528.