

Candelina Poelt
(LECANORALES: CANDELARIACEAE)

After Poelt

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Thallus rosulatefoliaceous, tightly appressed, forming distinct rosettes that may coalesce; marginal lobes comparatively long and narrow, convex to flattened, not rarely somewhat plicate; color golden to greenishyellow; affixed by hapters; rhizines absent; soredia absent. Upper and lower cortices distinct, thin, fragile, "Candelinattype". Medulla lax, of rather stiff, elongated hyphae. Apothecia sessile, lecanorine. Spores 8, unicellular to bicellular, narrowly ellipsoid, often slightly reniform. Pycnidia immersed. Pycnidia as in the rest of the Candelariaceae. Pycnospores ellipsoid. On rocks in hot and dry regions. Type species: C. mexicana.

1. Medulla completely white. Lobes usually flat, lying closely on the hypothallus. Apothecia present. C.
submexicana

1. Medulla golden yellow throughout. Lobes mostly convex, loosely to rather tightly appressed, to 5 mm long, not conspicuously divided into small lobes. Apothecia present. C.
mexicana

C. mexicana (B. de Lesd.) Poelt

Thallus distinctly rosetted, single rosettes ca. 23 cm wide, often confluent; marginal lobes to 5 mm long, often continuing into the thallus center, ca. 0.30.8 mm wide, rather crowded but entirely free from one another and occasionally overlapping; upper side convex to especially towards the periphery flattened, at the tips strongly flattened to weakly concave, loosely dichotomously branched, notably fragile. Thallus center mostly of small, often tangled, secondary lobes overgrowing the primary ones. Upper surface smooth, strong yellow, occasionally with a more orangish tone, around the pycnidial ostioles stronger orange. Lower side distinctly set off, completely corticate, yellow at the margin, otherwise whitish, confex, flat, or plicate, attached by hyphae or frequently very coarse hapters. Thallus disitnctly layered. Upper cortex of Candelinattype; end cells \pm ellipsoid to angular, ca. 58 μ m long and 5 μ m wide. Algal layer ca. 25 μ m high. Algae globose, ca. 69 μ m diam., not very crowded; not rarely single cells also present in lower part

of medulla. Medulla very loose, intense gold yellow, K+ reddish, mostly of stiff, straight hyphae, slightly torn, entirely interspersed with yellow granules and needles. Lower cortex similar in structure to upper one, occasionally somewhat thicker, interspersed when yellow, sharply set off from medulla.

Apothecia scattered or in crowded groups, sessile on the surface, roundish to, when old, wavy sinuous, ca. 0.51(1.2) mm diam.; margin rather thin, persistent, sometimes appearing double, acute; disks flat to slightly convex, smooth. Cortex distinct, similar to that of thallus, ca. 1220 μ m thick and then 23 cell layers high; cells ca. 38 μ m in longest dimension. Medulla very loose, interspersed with yellow granules, especially towards the outer margin with large groups of algae. Excipulum narrow, laterally ca. 812 μ m wide, of elongated hyphae. Hypothecium of entangled cells, ca. 2540 μ m high. Hymenium 5570 μ m high. Paraphyses simple, at the base 2 μ m thick, then slowly clavate thickened to 4.5 μ m, free, not anastomosed, the ends discrete. Asci broadly clavate. Spores to 8, ellipsoid to oblong ellipsoid, often slightly curved, ca. (9)1116.5 x 3.55 μ m.

Pycnidia immersed in projecting thalline warts, globose to short ellipsoid, the wall interspersed with yellow granules; fulcra ca. 1018 μ m long, at the base ca. 2 μ m thick, at the tips ca. 1 μ m thick; pycnospores 23 x 11.5 μ m, short ellipsoid.

On limefree, rocks (e.g., granite), in dry, sunny, manured situations on horizontal to sloping surfaces. Mexico (San Luis Potosi, Tenayuca) and Texas; also known from Costa Rica, Venezuela and Columbia.

C. submexicana (B. de Lesd.) Poelt

Similar to C. mexicana, but differing as follows: Thallus mostly smaller, the lobes to ca. 2 μ m long, 0.20.51 mm wide, strongly flattened, closely appressed, with a stronger reddish tone, K \pm distinctly reddish. Medulla white, without yellow granules or needles. Apothecia 0.30.5 mm wide, "vergent" [closely? constrictedly?] sessile; disk flat; margin entire to crenate; spores 1115 x 3.34.5 μ m. Texas, New Mexico, Arizona, Mexico (Nayarit, Tenayuca, Guanajuato).

Literature

Poelt, J. 1974. Zur Kenntnis die Flechtenfamilie Candelariaceae.