

Canomaculina Elix & Hale

After Kurokawa, and others

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Thallus foliose, adnate or loosely attaching, 5-20 cm wide; lobes plane, subrotund to rotund at apices, 1-15 mm wide, sparsely to moderately ciliate; cilia sparse to dense, black, ca. 1 mm long, simple or often branched, often markedly tapered; attachment organs dimorphous, consisting of short rhizoids (extending to the margin or nearly so, simple or rarely branched, 0.05-0.5 mm long) and long, \pm grouped or agglutinated rhizines (c. 1.2 mm long). Pored epicortex present; pseudocyphellae absent. Upper cortex palisade plectenchymatous. Upper surface distinctly maculate, with effigurate maculae, not reticulately cracked (but irregularly cracked in age), without pseudocyphellae, \pm pruinose towards lobe apices; gray or yellow gray or gray-green or pale green [atranorin (major) and chloroatranorin and lichexanthone; usnic acid (minor or absent)]. Some species isidiate or sorediate. Medulla white. Lower surface pale brown to brown, or becoming black in center, papillate or short rhizinate to the margins; short rhizines rather dense, usually formed on whole lower surface, simple or sparsely branched, not reaching the substrate, 0.1-0.3 mm long; long rhizines coarse, formed in groups, usually anchoring the thallus on the substrate, often > 1 mm long. Cell walls containing Cetraria-type lichenan (medulla I+ blue).

Apothecia rather rare, laminal, > 1.5 mm ["cm" in the type description] diam., perforate or imperforate, \pm stipitate; margin of thalline exciple eciliate; spores simple, broadly ellipsoid to ellipsoid (8-20 x 5-12 μ m).

Pycnidia laminal, immersed; pycnosporos filiform (9-16 x 1 μ m).

Medulla with orcinol depsidones and β -orcinol depsidones. On bark or rock, temperate to tropical.

Segregated from Parmotrema; distinguished by broad ciliate lobes with effigurate maculae (not developing into reticulate cracks as in Rimelia), dimorphous attachment organs, and filiform conidia. Syn.: Rimeliella.

1. Thallus isidiate. 2

1. Thallus sorediate. 3

2. Thallus containing norlobaridone, and loxodin (+ or - salazinic); usnic acid never produced in the cortex. Thallus adnate to \pm loosely attached, 5-15 cm diam.; lobes rotund, 7-13 mm wide, sparsely to moderately ciliate; cilia black, sometimes branched, 0.5-2 mm long; upper surface mineral gray but soon turning straw-buff in herbarium, shiny, moderately to densely isidiate; isidia cylindrical, simple or branched, rarely ciliate apically; lower surface pale to dark brown. Medulla K+, P+ or K-, P-. Apothecia rare, 3-5 mm diam.; margin

isidiate; disc imperforate when young; spores 8-11 x 5-8 μ m.

Midwestern to Southeastern U.S., w to Arizona, south into

Mexico. C. subinctoria (Zahlbr.) Elix

2. Thallus lacking norlobaridone and ixodin; small amounts of usnic acid often produced in the cortex. Medulla KC-, K+ red, P+ orange, with salazinic acid only, UV-. Cortex often with traces of usnic acid. Thallus adnate to loosely adnate, 6-9 cm across; lobes rotund, 8-14 mm wide; cilia moderate to sparse, ca. 1 mm long; upper surface pale stramineous-green to gray-white, plane, shiny, white-maculate, becoming irregularly reticulately cracked; isidia simple to slightly branched, cylindrical, 0.1 x 0.3-0.6 mm, becoming numerous; lower surface pale brown or blackening in center; rhizines short, numerous, to margins. Apothecia absent. On bark. North Carolina, Alabama, Florida; Mexico. C. neotropica (Kurok. in Hale) Elix

3. Medulla K+ yellow then red, C-, KC-, P+ pale orange red, with salazinic acid. Thallus loosely adnate, to 15 cm broad, rather coriaceous; lobes rotund, 10-12 mm wide; margins often ascending, subcrenate, sorediate; soralia elongate, in older specimens becoming crescent shaped; sorediate lobes involute; cilia 1.0-1.5 mm long; upper surface mineral gray turning buff in herbarium, plane, shiny, strongly white maculate, reticulately cracked with age; lower side uniformly pale to dark brown, rarely blackening, densely short rhizinate to the margin or with a narrow papillate zone along margins. Apothecia rare, imperforate. On bark. Georgia and Mexico.

..... C. subsumpta (Nyl.) Elix

3. Medulla K-, KC+ red, C-, P-, containing norlobaridone (cryptochlorophaeic acid according to Hale, 1964) and protolichesterinic acid. Thallus loosely adnate, membranous, 8-12 cm wide; lobes round and broad, 5-12 mm wide; margins ciliate and sorediate; cilia to 2 mm long; soralia linear or becoming irregular and submarginal; upper surface pale greenish to yellowish gray, plane, shiny, strongly white-maculate, becoming rimose; lower surface pale brown to blackening in center, densely rhizinate; rhizines short, to margins. Apothecia unknown. Norlobaridone. On bark or rock. Texas, Nebraska. R. conferenda (Hale) Elix

Literature

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