

Cetrariella Krnef. & Thell
(LECANORALES: PARMELIACEAE)

After Thomson, and others

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Thallus erectfoliose, dark to pale brown; lobes \pm canalicular to almost subtubular, occasionally becoming markedly expanded toward apical portions; pseudocyphellae marginal or laminal on lower surface; cortex paraplectenchymatous, composed of 13 layers of pachydermatous and rather large cells.

Apothecia terminal on lobe tips. Paraphyses usually straight, sparsely branched with swollen tips. Asci broadly clavate, ca. 40 x 15 μ m; tholus moderately small, without amyloid ring structure; axial body ca. 5 μ m; ocular chamber broad, maximal tholus thickness ca. 3 μ m. Spores ellipsoid, ca. 5.10 x 2.55 μ m.

Pycnidia on tips of projections, 1 or 2 layered, nonpigmented, sometimes with cortical tissue beneath; pycnospores sublageniform (bottleshaped), ca. 7.9 x 0.51.5 μ m. Medulla I, K, C+ weak reddish to red, KC+ red (KC in C. fastigiata according to Thomson, but that doesn't make sense), P. Containing hiascinic and gyrophoric acids. On soil, temperate and arctic-alpine.

A segregate from Cetraria. Characterized mainly by the ascus type, but also by the large pachydermatous cortical cells in 13 layers, pycnospore shape, and presence of gyrophoric and hiascinic acids.

1. Lobes flattish, weakly canaliculate; tips acute; scattered laminal and marginal pseudocyphellae usually distinct on lower side, absent on upper side. Branching markedly bimorphic, with broad lower lobes and much tufting and dense branching of the upper flat and markedly smaller (narrower) branches. Surfaces pale (to dark) brown with yellowish base, matt; tips usually paler. Spinules lacking. Thallus forming tufts or mats in low places. Apothecia usually absent. On soil in low, wet swales particularly where water flows from late snowbanks or in spring overflow areas along riverbanks. Arctic-alpine, Alaska to Iceland, southwards to northeasternmost U.S., and rarely in alpine in Pacific NW (British Columbia). Cetrariella delisei (Bory ex Schaer.) Krnef. & Thell

1. Lobes subtubular and cucullate, the tips obtuse; laminal and marginal pseudocyphellae poorly developed. Not markedly bimorphic. Thallus dichotomously branched; lobes 25(10) mm broad,

with short lateral branches; underside dark brown, graybrown, or yellow brown, smooth and pitted, usually glossy; upper side of same color, more pitted, dull or glossy; marginal pseudocyphellae very narrow; laminal ones sparse. Marginal projections to 1 mm long, sparse or absent, rarely on lobe tips, the tips of the projections obtuse. Apothecia marginal on lobe ends; disc to 10 mm broad, brown; margin undulate. On soil in open moist sites in depressions in the tundra and bogs. Arctic (Alaska to Greenland, south to SE Canada). Cetrariella fastigiata (Del. ex Nyl. in Norrl.) Krnef. & Thell

Literature

Krnefelt, I., J.E. Mattsson and A. Thell. 1993. The lichen genera Arctocetraria, Cetraria and Cetrariella (Parmeliaceae) and their presumed evolutionary affinities. The Bryologist 96(3): 394-404.

Thomson, J. W. 1984. American Arctic Lichens. I. The Macrolichens.