

Vestergrenopsis Gyelnik

After Henssen, and Thomson

Rev. 5/94

Thallus placodioid, forming rosettes; lobes stellateradiating, closely adpressed. Isidia present or absent. Upper cortex not distinctly differentiated; hyphae shortcelled in upper part of thallus, periclinally oriented in paralel along the length of the lobes, looser and with more elongated cells in a lower medullary zone. Lower cortex absent; underside pale. Photobiont Scytonema; cells in chains.

Apothecia hemiangiocarpic, sessile. Thalline exciple concolorous with thallus, entirely paraplectenchymatous, with included photobiont cells. True exciple much reduced, inconspicuous. Epihymenium redbrown. Hymenium colorless to + pale brown, I+ blue. Hypothecium pale yellowbrown, of interwoven hyphae. Paraphyses simple, rarely forked toward the apices, + conglomerated, upper cells enlarged, + moniliform. Asci clavate, without an I+ blue tholus. Spores (8)1216, colorless, simple, sometimes with plasma bridges, ellipsoid to subglobose.

No substances. On siliceous rocks, often moist and shaded or exposed to seepage.

The genus is not easily confused with any other except Koerberia, which can also share the same distinctive thallus features (small, thin, tightly appressed radiately lobed rosettes, with olivegreen surface and longitudinal pale striae on the lobes).

1. Thallus with isidia; isidia + numerous, globose to fingerlike, becoming flattned, to 1 x 0.1 mm, + thickly dispersed in central area of thallus. Thallus of tiny radiating lobes; lobes flat, longitudinally grooved and striated, rarely smooth, 26 mm long, 0.20.4 mm broad, the tips to 0.8 mm broad. underside pale, with pale rhizines; upper side dark olive brown; interior hyphae longitudinally estended, those in the center cylindrical, those toward the margins ellipsoid, loosely arranged. Apothecia, when present, to 1mm diam., with thalloid margin; disk brown; hymenium 80125 um thick, hyaline, the upper part brown; subhymenium hyaline, 4070 um, of ellipsoid cells in radiating rows; pseudoexcipulum with 1 large, broadly ellipsoid cells; paraphyses septate, simple or sparingly branched, 2 um thick, the tips to 7u, often monilliform; asci 5558 x 11.513 um; spores (8)1216, hyaline, 1celled but frequently with cytoplasmic bridges

and appearing 2celled. (Can be confused with Koerberia sonomensis, which differs mainly in that laciniae are developed marginally, and which occurs in California). On rock faces temporally covered with running water, sometimes on vertical cliffs. Arctic, S to Washington.V. isidiata

1. Thallus without isidia. Thallus to 4 cm diam., olivebrown to dark brown; lobes radiating, 0.2-0.5 mm wide, widening to 0.8(2) mm at apices, elongate, fanlike, flat, longitudinally grooved and striate, matt, nodulose uneven towards the center; nodules 0.2-0.3 mm wide, coarse, at first globose to cylindrical, becoming + flattened, erect or decumbent, conspicuous, at times forming small, simple or branched, secondary, overlapping lobules. Underside pale with short, pale rhizines. Medullary hyphae oriented longitudinally. Apothecia to 0.8(1) mm diam., frequent, scattered, rounded; disc brown to blackbrown, matt; margin thalloid; exciple hyphae radially oriented; hypothecium dense, 4070 um; epithecium brown; hymenium 85125 um; paraphyses 1.5 um, the tips to 8.5 um and monilliform; asci clavate, 3750 x 7.510 um; spores 1216, hyaline, 1celled but appearing 2celled, 710 x 46 um. On siliceous rocks frequently wet by seepage, rare, Alaska to Greenland (and in California?). Distinguished from Placynthium species, e.g. P. pannariellum, by the pale underside of the thallus.V. elaeina

Literature

- Henssen, A. 1963. A study of the genus Vestregrenopsis. Can. J. Bot. 41: 1359-1366.
- James, P. W. and P. M. Jorgensen. 1992. Vestergrenopsis. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.
- Thomson, J. W. 1984. American Arctic Lichens. I. The Macrolichens. U. of Columbia Press, New York.