

Santessoniella Henssen
(PANNARIACEAE s. lato)

After Henssen, 1997, and others

THALLUS minute, grayish, olive or brownish, granulose to subfruticose, corticate on all surfaces, with Nostoc as photobiont, \pm uniformly distributed through the thallus. Lobes flattened or terete, frequently knotted.

APOTHECIA biatorine; excipulum annular, composed of radiating hyphae with roundish or angular lumina. Hymenium with true paraphyses; paraphyses distinctly septate and occasionally branched in upper part, c. 2 μ m thick at base, to 4 μ m thick at tip. Asci 8-spored, apex with a narrow, amyloid ring (tube); ascospores colorless, simple, ellipsoidal, warty or smooth.

PYCNIDIA \pm globose, concolorous with the apothecia or paler; **conidia** 4-5 x 1 μ m, rod-shaped, produced laterally by short-celled conidiophores.

CHEMISTRY: No substances.

ECOLOGY AND DISTRIBUTION: On mosses, bark and decaying wood, more rarely on soil or rock.

Differs from Parmeliella in thallus structure (e.g., in having the photobiont \pm uniformly distributed through the thallus rather than having a distinct photobiont layer and photobiont-free medulla).

S. arctophila (Th. Fr.) Henssen v. arctophila

THALLUS granulose; lobes 0.04-0.08, rarely up to 0.3 mm diam, globose or irregular in shape, scattered or closely aggregated in small groups, swelling when wet and drying into wrinkled clumps, grayish green or brownish, often shiny; cortex \pm brownish, 8-16 μ m thick, composed of one or two layers of cells, medullary hyphae 4.5-6 μ m thick, reticulately arranged.

APOTHECIA adnate, to 0.6-2.5 mm diam.; disc brown orange to dark red or brown-red, plane to convex, smooth epruinose; proper margin narrow, entire, paler than disc, non-gelatinous; thalline margin absent; excipulum 95-145(-215) μ m thick; subhymenium (excipular tissue below the hymenium) 75-145(-205) μ m tall, hypothecium (ascogenous layer) 40-60 μ m tall; hymenium 110-120(-140) μ m tall, l+ blue then rapidly brown-red; spores ellipsoid with rounded ends, 16-23 x 8-12 μ m, warty.

ECOLOGY AND DISTRIBUTION: On moss over soil. Boreal-arctic, very rare in N. America, Alaska, Hudson's Bay, and Labrador.

S. arctophila v. terricola Henssen

Differs from typical variety by having elongated and irregularly branched lobes that are aggregated to form crusts up to several square cm across and 0.2-0.4 mm thick, in which the apothecia and pycnidia are

surrounded or in part also covered by the lobe tips. On soil and plant debris. Greenland.

Literature

Henssen, A. 1997. Santessoniella, a new cyanophilic genus of lichenized ascomycetes. Acta Univ. Ups. Symb. Bot. Ups. 32(1): 75-93.