

Stenocybe Nyl. ex Körber
(CALICIALES)

Thallus and photobiont absent. Apothecia clearly stalked, black to olivaceous brown; head obovoid. True exciple well developed, consisting of dark brown, periclinally arranged hyphae; in some species forming a thickened margin surrounding a \pm sunken pore-like disk. Stalk consisting of dark brown, periclinally arranged hyphae. Asci cylindrical, formed singly from ascogenous hyphae with croziers, uniformly thickened at the apex, with a single functional wall layer, \pm persisting until the spores mature. Spores simple to 3(-7)-septate, ellipsoid, rarely elongate-fusiform, uniseriately arranged, pale to dark brown-gray. No substances. In humid and rather shaded situations on broad-leaved trees or hepatics, saprobic or parasitic; the species are mainly confined to a single host.

After Tibell, and others

Rev. 5/96

1. Spores 42.5-55.1 x 10.6-14.7 μ m, (3-)5-7-septate. Stalk 1.1-2.1 mm high, black; capitulum obconical, with slightly constricted excipulum margin, 0.24-0.34 mm diam. (rarely widened, cup-shaped in old ascomata and to 0.7 mm dim.), consisting of periclinally arranged, slightly branched, sclerotized hyphae; stalk very dark brown in section, without hyaline coat; excipulum 20-34 μ m thick laterally, formed as a continuation of stalk, consisting of 8-12 layers of periclinally arranged, very thin, hyaline to pale brown, outermost cells ca. 2 μ m thick, dark brown, turning outwards towards surface. Excipulum [in upper part?] 40-62 μ m thick. Hypothecium pale, obconical, with numerous hyaline oil droplets. Asci cylindrical, 235-315 x 12-17 μ m, with uniseriate spores; ascus apex thickened, with short blunt canal in semimature stages. Spores dark brown, ellipsoid to slightly fusiform, with moderately and evenly thickened walls and septa; pale at a small area just at apices; walls ornamented with very minute warts when old. On trunks of Pseudotsuga menziesii or sometimes Tsuga heterophylla, in humid, often dense, forests, 150-1100 m, Pacific Coast (Alaska, British Columbia, Washington). S. clavata

1. Spores under 40 μ m long and 12 μ m wide, not more than 3-septate. 2

2. Spores 18-36 x 7-11 μ m. Stalk 1-2 mm long. On bark of fir trees. Apothecia 0.76-1.46 mm tall, dark brown to black, epruinose, with well developed narrowly obconical excipula that are typically vertically pleated; stalks occasionally forked to multibranched, consisting of periclinally arranged hyphae; paraphyses absent; spores 8, uniseriate in cylindrical asci, elliptic to elliptic-elongate, straight to

slightly curved, uniformly brown to, more typically, mottled with light to dark brown hues, lighter end cells and darker septa, (18.62)17.43-[25.18]-32.92(42.14) x (4.90)4.92-[6.57]-8.22(8.33) um, surface conspicuously papillate to reticulate. Stalk black; capitulum 0.2-0.6 mm wide. Stalk 0.05-0.1 mm thick. Spores finally 3-septate. Thallus endostubstratic, algae unassociated, although free-living algae often mixed in. Pycnidia not seen. Corticolous on Abies. In montaine forests, Maine; elsewhere. S. major

2. Spores to 20 um long and 6 um wide. Stalk under 1 mm long. On deciduous trees 3

3. Stalk black, opaque when moist; capitulum cup-shaped to top-shaped, 0.08-0.15 mm wide. Stalk simple, rarely branched. Asci somewhat extruded. Paraphyses absent. Asci soon disintegrating. Spores (10-)13-128(-20) x 4-5(-6) um, at first simple, then 1-3-septate, when uniformly pale gray-brown. Thallus endosubstratic; algae unassociated, but free-living algae often mixed in. Pycnidia not seen. Apothecia 0.19-0.70 mm tall, dark brown to black, epruinose, with well developed narrowly obconical to cup-shaped excipula that are indistinctly pleated vertically; stalks commonly forked to multibranched, consisting of periclinally arranged hyphae; mazaedium absent. Spores 8, e-septate at maturity (except for middle septum, septa often difficult to distinguish), uniseriate in cylindrical asci, narrowly elliptic, straight to slightly curved, ("11.27")11.12-[14.03]-16.95(18.62) x (2.94)3.08-[3.95]-4.82(4.90) um, surface indistinctly marked. On bark of decaying and living alder twigs and main branches, particularly overhanging streams, lakes and bogs, montane. On bark of living or decaying Alnus, particularly near streams, lakes, or bogs. Maine; elsewhere. S. pullulata

3. Stalk brownish, pale and translucent when moist; capitulum ± spherical to top-shaped, 0.2-0.3 mm wide. Capitulum brown-black. Asci ± persistent, 65-70 x 4.5-5 um, narrow-cylindrical. Spores 13-20 x 4-6 um, ellipsoid, often slightly constricted, simple or sometimes thinly 3-septate (soon 3-septate according to Poelt). On twigs of Populus, rarely on Salix or Corylus. S. tremulicola

ADD:

S. minutissimum (syn Calicium minutissimum) See Merrill, 1909 for description.

Literature

Selva, S. B. 1988. The Caliciales of northern Maine. The Bryologist 91: 2-17.

Tibell, L. 1975. The Caliciales of boreal North America. Symb. bot. upsala. 21(2): 1-128.

Tibell, L. 1991. A new species of Stenocybe from western North America. The Bryologist 94(4): 413-415.

In: Purvis, et al., Lichen Flora of Great Britain and Ireland.

S. minutissimum (syn. Calicium minutissimum)

S. major (syn.? S. euspora)