

Sagiolechia Massal.

After Poelt, 1969, and Coppins & James, 1992

Rev. 5/94

Thallus crustose, thin or immersed, effuse, uniform, ecorticate; attached to substrate by medullary hyphae.

Apothecia initially immersed, eventually 1/2 immersed to sessile, round; proper margin thin, dark; thalline margin absent (present but sometimes disappearing according to Rogers); true exciple prominent, distinctly crenate, black, shining, when senescing may become pale to almost white or piepald; in section dark brown in outer part, colorless within; disk black, concave to convex, sometimes umbonate or gyrose; hypothecium colorless or dark brown; hymenium colorless, I+ blue to reddish; epihymenium dark brown, K-; paraphyses septate, simple or sparingly branched, frequently anastomosed, apical 1-3 cells often swollen and bound by a dense matrix; periphyses present or not; asci cylindrical (clavate according to Rogers), unitunicate, wall I+ blue; apical dome I-, K/I-; spores 8 (a few sometimes aborting), ellipsoid to fusiform, transversely (2-)3-septate at maturity, ellipsoid to fusiform, hyaline, uniformly thin walled, often with a thin perispore.

Pycnidia immersed; conidiogenous cells short-ampulliform, in a single layer, enteroblastic, acrogenous (exobasidial); pycnospores short, bacilliform, colorless. Photobiont Trentepohlia. No substances. On calcareous rocks or on acidophilous bryophytes, plant debris or soil, montane.

Differs from Gyalidea in the mainly simple paraphyses, an I+ blue ascus wall, and photobiont, Trentepohlia.

1. Thallus ± endolithic, on pure limestone or dolomite. Apothecia (0.3-)0.4-0.7(-1) mm wide, broadly sessile on thallus or with the bases sunken; envelope not developed under hymenium; spores (10-)12-28 x 6-9 µm. Thallus inconspicuous, when partly superficial appearing as a pale orange stain, greenish gray in herbarium, sometimes scurfy, effuse, not delimited. Apothecia frequently in lines or ± contiguous in groups of 2-3, appearing gyrose; true exciple thick, deeply divided or fluted into 3-8 segments, often star-like, well developed, under 120 µm thick, in section black-brown, merging below with lower part of hypothecium; disc little exposed, with a central, convex, sterile plug; epithecium red- to black-brown; hymenium 100-115 µm tall; paraphyses ca. 1 µm wide, apices ca. 4 µm wide. Asci 100-400 x 10-20(-25) µm, elongate-clavate or cylindrical. Spores (1-)3-septate, one occasionally oblique, or septa quadrate. Moist areas, high elevation.S. protuberans

1. Thallus over acidophilic mosses and plant remains, rarely directly

on soil. Apothecia (0.5-)0.7-2 mm, with strongly contracted base, sessile on thallus; envelope definitely developed even under hymenium; spores 16-24 x 5-7 um. Thallus a thin film, rarely thicker, and thinly warted-uneven, gray, pale gray or gray-violet, sometimes with brown tinge; forming haustoria within host cells. Apothecia scattered or in clusters of 2-4; true exciple prominent, \pm elevated, crenate, divided into 3-8 segments, in section black-brown, merging into hypothecium; disc concave, becoming flat or irregularly convex, brown-black, shiny; epithecium red-brown or brown; hymenium 80-120 um tall; hypothecium well developed, brown-black; paraphyses ca. 1 um wide, apices 4.5 um wide. Asci 70-110 x 10-12 um, elongate-clavate. Spores 3-septate. Pycnidia ca. 100 um diam., half-immersed; conidia 3.5-4 x 1 um. Moist areas, above treeline.S. rhexoblephara

Literature

Coppins, B. J. and P. W. James. 1992. Sagolechia. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.

Poelt, J. 1969. Bestimmungsschlüssel europäischen Flechten. Cramer, Vaduz.

Rogers, 19 . Genera of Australian Lichens.