

Pachyphiale Lönnr.
(GYALECTACEAE)

After Rose & James

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Thallus crustose, superficial, whitish green or green-gray, thin, effuse. Photobiont Trentepohlia. Apothecia at first immersed, then emergent, becoming concave, with a conspicuous persistent true exciple and sometimes a thin thallus-like exciple; disc red-brown to orange, rather gelatinous in texture. True exciple well developed, of narrow, thin, compacted hyphae, the outer edge red-brown, pale within, often containing crystals. Epihymenium well developed, fleshy, red-brown. Hymenium I+ pale blue (mainly ascus walls). Paraphyses simple, thread-like, septate, \pm hooked at the tips. Asci elliptical; wall I+ blue, not or only slightly thickened at apex and without internal apical apparatus. Spores (8-)16-48, colorless, acicular to fusiform, multiseptate, lying parallel to one another or spirally arranged in ascus. Pycnidia ca. 100 μ m diam., reddish brown; wall pale red-brown above, colorless below; conidiogenous cells elongate-ampulliform, arising in groups on short-branched conidiophores, enteroblastic, acrogenous; conidia 12-20 x 1 μ m, curved to thread-like, simple, colorless. No substances. On bark of deciduous trees in ancient woodland or parkland. Temperate.

1. Apothecia 0.15-0.4 mm diam.; spores 3-7(-9)-septate, 15-35 x 3.5-5(-6) μ m, ends rounded to shortly acute; paraphyses > 1 μ m wide; pycnidia larger; conidia otherwise. P. fagicola

1. Apothecia < 0.25 mm diam.; spores 1-3-septate, 9-15 x 4-7 μ m, ends blunt; paraphyses c. 1.0 μ m wide; pycnidia 25-40 μ m diam.; conidia ellipsoid, 1.5-2.0 x 0.8-1.0 μ m. P. gyalizella

P. fagicola (Hepp) Zwackh

Thallus somewhat immersed, very thin, chinky or scurfy to powdery, pale greenish to brownish, sometimes disappearing. Apothecia 0.15-0.4 mm across, subsessile, often crowded; disc dull, reddish flesh colored to dark reddish, dark brown, or blackening, not very exposed, concave; proper exciple commonly concolorous with disk; thalline exciple absent or disappearing. Spores 15-35 x 3.5-5(-6) μ m, 3-7(-9)-septate, (8-)16-48/ascus, fusiform, the ends rounded or shortly acute. Pycnidia occasional. On bark of deciduous trees in old woodlands and on bark-barked, wayside trees. Massachusetts; Minnesota.

P. gyalizella (Nyl.) S. Ekman

Thallus thin, chinky, grayish to ashy white, becoming powdery. Apothecia to 0.25 mm diam., deeply concave, dark red, the margin entire, dark red to dusky brown. Hypothecium hyaline. Spores over 8 per ascus, 1-3-septate, 10-16 x 4-7 μ m, ends blunt; paraphyses c. 1.0 μ m wide. Pycnidia 25-40 μ m diam.; conidia ellipsoid, 1.5-2.0 x 0.8-1.0 μ m. On smooth bark of Acer rubrum, Massachusetts. Presently known only from the type collection.

Literature

Ekman, S. 1996. Corticolous and lignicolous Bacidia

Fink, B. 1935. Lichen Flora of the United States

Rose, F. and P. W. James. 1992. Pachyphiale. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.