

Adelolecia Hertel & Hafellner
LECANORALES: BACIDIACEAE?

After Hawksworth, 1992, and others

Rev. November 16, 1998

Thallus immersed or superficial and areolate, fairly well-developed, grey or white, I-, C-, K-. Photobiont chlorococcoid. Apothecia sessile, constricted at base; discs black, concave or plane to somewhat convex, epruinose; margin thick or thin, often folded, prominent, persistent; true exciple dark brown at surface but paler internally, brownish, K+ intense purplish red, not carbonaceous, of radially oriented, wide hyphae, almost pseudoparenchymatous in parts; hypothecium hyaline to pale or dark brown; hymenium 35-50 μ m, \pm colorless to bluish tinged; I+ deep blue; epihymenium green or blue-green, K-, N+ purple; paraphyses mostly simple to sparingly branched and septate, coherent, not markedly expanded at the tips, which are immersed in a greenish epihymenial gel; asci cylindrical-clavate, *Bacidia*-type, 8-spored; spores simple, narrowly ellipsoid, colorless, 6-11 x 3-5 μ m (Wirth, 1980; Hafellner, 1984), smooth, lacking a distinct epispore. Pycnidia unknown. Atranorin in the cortex, the pigment 2-chloroemodin in the exciple and sometimes hypothecium; unidentified products. On somewhat basic, siliceous rock, montane.

A segregate of *Lecidea*.

1. Spores 2.5 μ m wide. Apothecia 0.2-0.5(-0.8) mm diam. *A. kolaensis*

1. Spores 3.5-5 μ m wide. Apothecia 0.5-1.5(-2) mm diam. *A. pilati*

A. kolaensis

Spores 8-12 x 2.5 μ m, indistinctly 1-septate. Thallus very thin to moderately thick, granulose or subverrucose to areolate, grayish or olive, K-; areoles 0.2-0.3 mm wide. Hypothallus thin, discontinuous, black, or absent. Apothecia solitary or aggregated, 0.2-0.5(-0.8) mm, adnate to moderately constricted; disc at first depressed or plane, often becoming convex or hemispherical, black, epruinose; margin persistent or thinning and often disappearing. Exciple distinct from hypothecium, intensely greenish black or with brown, the hyphae 5-7 μ m diam., radially arranged, conglutinate, the lumina variable in width. Hypothecium \pm hyaline, or olive-blackish to purple-brownish or dark brown above; hymenium 40-70 μ m, subhyaline to pale violaceous brown or pale greenish black below; epihymenium \pm green-black. Paraphyses coherent, sometimes slightly enlarged above, the exterior of the walls confluent; lumina ca. 1.5 μ m wide. Spores oblong with rounded ends or varying to oblong. On rock in a brook bed. New York, Newfoundland.

A. pilati (Hepp) Hertel & Hafellner

Thallus fairly well-developed, crustose, of dark grey to whitish areoles, or \pm immersed and scarcely apparent, I-, C-, K-, P-, KC+ pink or KC- (unidentified compound in some specimens). Apothecia 0.5-1.5(-2) mm diam., sometimes aggregated and then angular and mosaic-like, sometimes tuberculate; discs black, plane, epruinose, the margin thick or thin, often folded; exciple not carbonaceous, brownish, K+ purple-red (2-chloroemodin); hypothecium

hyaline or pale; hymenium 35-50 um; epihymenium blue-green, N+ purple-red ("Lecidea green"); paraphyses mostly simple, mostly coherent. Spores narrow, simple, (6-)8-11(-13) x (3-)3.5-5 um. On non-calcareous siliceous rocks, arctic-alpine. Arctic.

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kolaensis (Nyl.) Hertel & Rambold Syn.: *Lecidea conferenda*

pilati (Hepp) Hertel & Hafellner Syn.: *Lecidea pilati*, *L. lyngeana*, *L. subauriculata* Lynge non de Lesd.

Literature

Hafellner, J. 1984. Studien in Richtung einer natürlichen Gliederung der Sammelfamilien Lecanoraceae und Lecideaceae. Beih. Nova Hedwiga 79: 241-371.

Hawksworth, D. 1992. Adelolecia. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.

Wirth, V. 1980. Flechtenflora. Stuttgart: E. Ulmer.