Psilolecia Massal.
(LECANORALES)

After Coppins & Purvis, 1992 and Lowe

Rev. 5/94

Thallus often also bright yellow or greenish, but sometimes dull green or whitish gray; leprose or granulareareolate, of ± distinct goniocysts interconnected by filamentous hyphae, C, K. Photobiont Trebouxialike or Stichococcus.

Apothecia bright to deep yellow, eventually with reddish or greenish tone, or blackish, K, adnate or sessile, soon convex to ± globose and immarginate, occasionally becoming tuberculate. Thalline exciple absent; true exciple poorly developed, often reduced to a narrow zone at base of apothecia, with protruding, hyaline, thinwalled, gelatinized radiating hyphae; hypothecium hyaline or pale, I; hymenium to ca. 30 um high, laterally reflexed, variously pigmented, I+ blue; epihymenium often not clearly delimited; paraphyses simple or slightly branched and anastomosing, the tips not or slightly thickened; asci 8spored, cylindricalclavate, the apical dome K/I+ pale blue with dark blue apical tube diverging towards the apex, the wall colorless with a k/I+ dark blue outer layer, Porpidialike. Spores cylindrical, oblongovate, clavate or teardropshaped, 37 x 1.52(3) um, simple, colorless, without a perispore.

Anamorphs, where known, hyphomycetous with discrete enteroblastic conidiogenous cells arising directly on the thallus surface; conidia ovoid to pyriform, colorless, adhering in chains, simple. With rhizocarpic or gyrophoric acids, or no substamnes. In sheltered, ± humid situations, usually on overhanging surfaces of siliceous rocks, rarely on soil or humus, borealarctic.

1. Thallus bright greenish yellow or yellowish green, UV+ dull to bright orange, with rhizocarpic acid. Discs yellowgreen to pale or lemon yellow or yelloworange, to olivaceous or brownish yellow. Epihymenium intense yellowolivaceous, granular, K, N; spores (4)57(8) x (1)1.52 um, oblongellipsoid. Thallus widespreading, leprose granular and often rimose, rarely granulareareolate, effuse. Photobiont usually trebouxioid, very rarely with Stichococcus. Apothecia rather rare, often ± hidden in welldeveloped thalli, mainly 0.10.3 mm diam. and convex, rarely tuberculate and to 0.5(0.7) mm diam. Hypothecium ± hyaline. Anamorph unknown. Thallus P, K, KC, C. On dry, shady

situations particularly on noncalcareous rocks and walls, rarely recesses in dry bark and wood. New York, Massachusetts, Minnesota. When sterile can be confused with Chrysothrix spp. or Chaenotheca furfuracea. .....P. lucida

1. Thallus white to pale greenish gray (yellowish green to dark green according to Lowe), UV, with no lichen substances. Discs dark brown to blueblack or sometimes livid blackish or reddish brown. Epihymenium pale green to bluegreen (olivaceous orgreenish black according to Lowe), K+ greenish, N+ purplered; spores 45 x 1.52 um, ± tearshaped (oblongovoid). Thallus forming small patches, granular to granularverrucose, effuse. Photobiont Stichococcus. Apothecia frequent, 0.10.3(0.4) mm diam., ± globose to tuberculate, often surrounded by a basal whte rim of protruding excipular hyphae; Hypothecium ± hyaline to pale green (pale olivaceous to greenblack according to Lowe). Anamorph frequent, the thallus surface often with scattered conidiogenous cells 712 x 12 um, ± cylindrical; conidia 715 x 22.3 um, ± oblong. On roots, stones and consolidated soil of dry underhangs on banks or the root systems of fallen trees. New York; Washington state. [If thallus C+ red and apothecia pale, see P. leprosa, which is known from Greenland]. .....P. clavulifera

Literature

Coppins, B. J. and O. W. Purvis. 1992. Psilolechia. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.

Lowe, _. 19__. The genus Lecidea in the Adirondack Mountains.

Poelt & Vezda. 1981. Erg. II.