

Leprocaulon Nyl. ex Lamy
(DEUTEROMYCOTINA)

After Lamb & Ward, 1974

Rev. 5/94

Primary thallus ± persistent, densely powderyleprose, diffuse, unstructured, giving rise to a secondary, dwarf fruticose thallus of small pseudopodetia which are slender, ± erect, ± terete, branching, interwoven, cartilaginous, fragile, ecorticate, smooth, ± clothed with leprosesorediate, floccosetomentose granules or squamulelike structures (superficially somewhat similar to phyllocladia of Stereocaulon). Cephalodia absent. Ascocarps and pycnidia unknown. Chemistry complex, including a range of depsides, depsidones, phloroglucinal derivatives, triterpenoids, and fatty acids. Photobiont Trebouxia. On soil or siliceous rock, in ± sheltered and dry areas, often in crevices.

1. Pseudopodetia faintly yellowish or aeruginoseyellowish (usnic acid), slender, filiform, to 7(10) mm high, 0.10.3 mm thick, usually simple in the lower portion, in the upper portion ± strongly branched, yellowishwhitish to more often pale greenish or bluishgreen, subtly arachnoidtomentose, ± covered with mealy powdery granules, the granules disintegrating and turning green; axial strand developed. Producing a weakly developed turf or a sorediate crust. Thallus K, P, KC+ yellow, containing zeorin. On thin soil, especially in crevices associated with ± dry sides of cliff faces and walls, rarely on the trunks of old broadleaved trees and pearty soils, most frequent in coastal sites.

..... L. microscopicum

1. Pseudopodetia white, whitish gray, bluish white or creamcolored, without distinct yellowish tinge (usnic acid absent; atranorin present).

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2. Pseudopodetia ± dorsiventral, forming flattened fronds with mainly distichous (dichotomous in one plane) branching, when welldeveloped elegantly dendroidplumose, bearing minute, softly pulverulent, ± powdery particles. Pseudopodetia in small, scattered groups or tufts, attached by a holdfast, or dying at the base and then ± decumbent, flattened; soft and gragile, 12 cm tall and 0.4 mm thick towards base, upper branches much finer, to

0.15 mm thick, whitish, glaucous grayish white or pale glaucous green, matt, tomentose or velvety, main branches glabrous, terminal branchlets very fine, coralloid. Phyllocladial granules on terminal branchlets, scarce to absent on ventral side, crowded, minute (to 0.1 mm diam.), often dissolving into smaller granules. Photobiont in irregular groups on surface of pseudopodetia and in powdery granules, loosely enveloped with hyphae. Thallus K or + brownish (or K+yellow?with atranorin according to Galloway), P+ orangered to miniatered, containing protocetraric and physodalic acids, or sometimes also with didymic, and grayanic acids, and unknowns. Usually corticolous or lignicolous, sometimes on mosses, occasionally on rock, in damp, shaded, humid habitats, often coastal. L. arbuscula

2. Pseudopodetia not dorsiventral; branching not dichotomous, not dendroidplumose, without fine powdery granules. Usually on soil or moss over rock. 3

3. With distinctly developed phyllocladial granules; central axis well differentiated; color chalkywhitish. Pseudopodetia 0.20.3 mm thick, without rootlike basal structures. 4

3. With illdefined, ± confluent, irregular lumps; central axis absent; color light gray or bluish white, not chalky.
Pseudopodetia forming ± continuous crusts, erect or partly decumbent, 24 mm tall, 0.250.50 mm thick, irregularly branched, terete or partly slightly flattened, white or ashy white, dull, with soft but not tomentose surface, base without rootlike structures; surface ± uniformly covered with concolorous lumps (0.10.2 mm diam.); whole structure homogeneous, of compactly interwoven, darkened, opaque, somewhat leptodermatous hyphae 34 um diam.; those on the outside loose and floccose, the algae mostly in groups near the surface, chiefly in the small lumps. Thallus K+ yellow or K, but always containing atranorin (and often unidentified fatty acids); in N. America either P+ persistent intense golden yellow (strain IV: squamatic and baeomycesic acids) or P+ intense yellow then, in places only, orangered (strain III: thamnolic acid); C. On soil or soil over rocks or in crevices of rocks, arctic, southward to Washington and the central Rocky Mountains. L. subalbicans

4. Thallus P+ persistent, rather pale yellow, with rangiformic acid. L. gracilescens

4. Thallus (in N. America) P+ persistent intense yellow or orangeyellow, (strain III: squamatic and baeomycesic acids). Alaska. L. albicans

Literature

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