

Placynthiella Elenkin

After Purvis, 1992

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Thallus dark green-brown to blackish, sometimes tinged reddish or chestnut brown, effuse, granular-verrucose or leprose, or of isidiate-granular goniocysts or areoles, C-, K-, P-. Goniocysts or areoles with an outer layer of brown-walled pseudoparenchymatous hyphae, colorless within. Photobiont ?Chlorella.

Apothecia biatorine, red-brown to brown-black or black, more or less innate, or adpressed to sessile, soon immarginate; thalline exciple absent; true exciple of brown-walled, pseudoparenchymatous cells, well developed but often reflexed, C-; hypothecium dark brown; hymenial gel I+ green-blue; paraphyses ca. 2 µm thick, coherent, gelatinized, simple to often branched but only weakly anastomosing, the tips thickened, irregularly ± capitate, capped with dark brown or red-brown; epihymenium dark brown; asci clavate or cylindrical-clavate, Trapelia-type, the apical dome not, or weakly I+ blue, but with amyloid cap; outer wall of ascus amyloid; spores simple (to 1-septate), ellipsoid, often containing a single large oil drop and several smaller droplets.

Pycnospores unknown. No substances. On acidic, lime-free substrata, particularly bark, wood or soil, less often on rocks.

A segregate from Lecidea, usually easily recognized by the combination of having a dark thallus and usually growing on organic substrates.

1. Thallus coarsely granular-verrucose; granules 100-300 µm diam., C-. Hypothecium mostly hyaline to pale brown. Thallus well developed, ± contiguous or dispersed, brown, often tinged yellowish green when wet; granules noticeably more prominent when wet. Apothecia numerous, to 0.4-0.5(-0.8) mm diam., brownish black, at first plane with a ± elevated true exciple, occasionally becoming convex and immarginate; surface rugose-roughened, matt; exciple deep red-brown, extending into a concolorous hypothecium; epithecium 10-15 µm, red-brown, granular; hymenium 55-60 µm, colorless or pale reddish brown. Spores 10-14 x 4.5-6(-7) µm. Thallus P-, K-, KC- (no substances). Usually on peaty soil or humus, in open areas, often around old stumps, but never on bark. P. oligotropa

1. Thallus minutely granular-isidiate, coralloid, sorediose, or ± subgelatinous; granules under 100 µm diam., C+ red or C-. 2

2. Thallus of isidiate to minutely coralloid-elongated granules, or sorediose, not subgelatinous, C+ red; true exciple ± persistent; disc flat or slightly convex. 3

2. Thallus of low, rounded, never elongate or branched, granules, ± subgelatinous, C-; true exciple soon excluded, disc soon convex. 4

3. Thallus of isidiate to minutely coralloid-elongated granules, black-brown to red-brown. With ± 5-O-methylhiascic acid. Thallus ± shining; granules 25-150(-200) µm tall, 25-50 µm diam., closely packed or sometimes scattered, effuse. Apothecia often absent, 0.2-0.6 mm diam., usually scattered when present, rarely crowded and confluent; exciple often paler. Spores 8-12 x 4-5 µm. Thallus (squashes) P-, K-, KC+ red, with gyrophoric, ± lecanoric, ± 5-O-methylhiascic

acids. On a wide range of acidic habitats, occurring on dead bark and wood of fallen trees and stumps, rotting fence-posts, plant debris, tree roots, \pm horizontal branches, shaded siliceous rocks and humus-rich soils, also a primary colonizer of burned areas. P. icmalea

3. Thallus of soft, sorediose granules, paler, often greenish. Without 5-O-methylhiascic acid. On wood, low elevation, Washington. P. dasaea (Stirton) Tonsberg

4. Apothecia pinkish to dark reddish brown (rarely blackish, and then [usually?] reddish when wet); true exciple present when young, usually soon disappearing; disc plane, soon convex. Hypothecium K-. Spores 8-14(-16.5) x (4-)5-6(-7) μ m. Hypothecium mostly brown-black. Thallus little developed, granular-pulverulent, often minutely wrinkled when dry (x 50); granules 25-100 μ m diam., black-brown, dark green to dark brown when wet. Apothecia usually abundant, often coalescing, 0.12-0.3(-0.5) mm. Thallus P-, K-, KC- (no substances). On peaty soil in open areas, also often on dead bark and wood of fallen trees and stumps, occasionally on bare sandy soil. P. uliginosa

4. Apothecia black, unchanged when wet; true exciple prominent, \pm incurved; disc concave when young, later plane to slightly convex. Hypothecium K+ purple-violet. Spores 9.5-12 x 4-6 μ m. On soil. P. hyporhoda

ADD:

Similar to P. uliginosa, but apothecia black even when wet. Would seem to key to P. hyporhoda, but the hypothecium is K-. Cascades of Washington. P. sp.

Literature

Ozenda, P. and G. Clauzade. 1970. Les Lichens.

Purvis, O. W. 1992. Placynthiella. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.