

Physciella Essl.
(LECANORALES: PYXINACEAE)

After Esslinger

Rev. 5/94

Thallus foliose, small to medium sized, usually less than 45 cm diam. (rarely to 7 cm), \pm appressed; upper surface from almost white to (more often) gray or graybrown; lower surface white to pale tan, with usually sparse concolorous rhizines. Lobes elongate to rounded, seldom over 12 mm wide (very rarely to 67 mm), usually less. Upper cortex paraplectenchymatous; medulla of loosely interwoven hyphae; lower cortex prosoplectenchymatous.

Apothecia lecanorine, laminal, sessile to short stipitate, lacking rhizines on lower surface of exciple. Hymenium hyaline; hypothecium hyaline to pale tan; spores 8, graybrown to brown, 1-septate, varying from Physciatype to Pachysporariatype, with intermediates. Pycnida laminal, immersed; conidia ellipsoid, ca. 2.54 x 11.5 μ m. No substances. Type species: P. chloantha.

Distinguished from Physcia by the lack of atranorin in upper cortex, lack of medullary substances, and having and short, ellipsoid conidia. Differs from Phaeophyscia in lacking rhizines on excipular cortex, lacking cortical hairs on thallus, lacking medullary substances, and having a pale, prosoplectenchymatous lower cortex.

1. Thallus without soredia, isidia or lobules, primarily sexual (fertile). Upper surface dingy graywhite. Lower surface white to pale tan with mostly sparse, concolorous rhizines. Thallus orbicular, to 3.5 cm diam.; lobes 0.31.5(2) mm broad, short and rounded or often elongate, appressed. Apothecia frequent, to 1.5 mm diam., sessile to short stipitate; margin entire or becoming irregularly crenate. Spores (15)1723.5 x 6.59 μ m. Pycnospores ellipsoid, 3 x 1 μ m. No substances. Mainly on bark, at mid to high elevations, Arizona to

Texas.P. nepalensis

1. Thallus bearing soredia, isidia or lobules, primarily asexual (sterile). Pycnospores ellipsoid, 2.53.5 x 1 μ m.2

2. Soralia usually numerous, marginal or terminal, mostly distinctly labriform, sometimes also with scattered laminal soralia forming later. Apothecia rare. Lower surface light tan to white, with sparse, concolorous rhizines. Soredia farinose.

Lobes rather short and ± rounded to somewhat elongate, often and crowded, (0.4)0.71(1.5) mm across, frequently ascending at the tip, especially when sorediate, sometimes with a few pale rhizines visible along the margins. Thallus closely adnate, 35 cm broad, ± orbicular, or often composed of numerous, discrete, ascending lobes which may coalesce over fairly large areas (and therefore are often inextricably intermixed with other species). Cortex and medulla K, C, P (no substances). Apothecia to 1 mm diam., sessile to very short stipitate; margin entire or becoming irregularly crenate; spores 1722.5 x 811 µm. Mostly on bark in woods or along roads, rarely on rock. Eastern (southern Manitoba to New England, southward except in coastal plain and west to Texas, Colorado, and the Dakotas. P. chloantha

2. Soralia primarily laminal or submarginal, rounded and punctiform to irregular in shape, occasionally also some submarginal or marginal (but not distinctly labriform) soralia. Apothecia usually more frequent, often slightly stipitate, to 2 mm diam.; margin entire to somewhat crenate or rarely sorediate; spores (14)1722 x (6)710 µm. Thallus ± orbicular, to 3.5 cm diam.; lobes 0.51.5(2) mm broad, short and rounded to rather elongate, appressed or sometimes somewhat ascending. Lower surface white to pale tan, with mostly sparse, concolorous rhizines. No substances. On bark and rock, common. Northeastern (Great Lakes area to New England), and westward (Dakotas to Texas). P. melanchra

Literature

Esslinger, T. L. 19 . Phaeophyscia

Esslinger, T. L. 1986. Studies in the lichen family Physciaceae. VII. The new genus Physciella. Mycologia 78(1): 9297.