

Massalongia Krber
(PLACYNTHIACEAE)

After Henssen (1963), Thomson (1984), and Fink (1935)

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Thallus small, foliose; lobes squamulose or elongate and forming rosettes, brown, ± isidiate at margins. Soredia absent; isidia and folioles present. Upper cortex pseudoparenchymatous. Lower surface pale, of densely interwoven, longitudinally oriented hyphae, without cortex; rhizines brown or black. Hypothallus absent. Photobiont Nostoc. Medulla of loosely interwoven hyphae.

Apothecia hemiangiocarpic, laminal or marginal. True exciple present. Hymenium brown above, K, colorless below, I+ blue; paraphyses coherent, septate, simple (or branched according to Galloway), ± swollen and pigmented at the apices. Asci cylindrical, ?Peltigera type, with apically thickened walls. Spores 8, colorless, ellipsoid to fusiform, 2(4)celled, sometimes constricted at the septa.

Pycnidia with wall brown above, paler below; pycnospores bacilliform or slightly dumbbellshaped. No substances.

Superficially resembling some species of Pannaria or Parmeliella, from which it can be distinguished by the septate spores.

Needs more info. from Henssen on M. microphyllizum

1. Overgrowing mosses. Lobes soon elongated, up to 5 mm long. Algal cells below the hymenium; spores usually 2celled; paraphyses simple. Prothallus lacking. Thallus tiny foliose, of flattened lobes 0.52 mm broad, 0.53.0(10) mm long, irregularly branched, ascending, and overlapping, often crowded; apices incised; upper side brown (to redbrown or bluegray), smooth, or with round or globose isidia, the isidial tips sometimes breaking and simulating soredia (but true soredia absent), matt; underside whitish to brown with brown rhizines; upper cortex of 38 rounded, thinwalled cells covered by a gelatinous layer, pseudoparenchymatous; medulla of loosely interwoven mainly vertical hyphae, with numerous Nostoc colonies; lower cortex of longitudinal hyphae more or less loosely interwoven. Apothecia to 2 mm across but usually much smaller, often stipitate, brown (redbrown to somewhat pale and yellowishtinged), smooth, with paler proper margin composed of exciple plus pseudoexcipulum; hymenium 70130 um, the upper part brown; paraphyses septate,

unbranched, 2 um thick, the tips thickened to 56 um; subhymenial layer hyaline, of interwoven hyphae, 4580 um thick; exciple pseudoparenchymatous, pale; paraphyses imple; asci clavate, 5779 x 11.514.5 um; spores 8, hyaline, 2(3)celled, ellipsoid to fusiform, 1127 x 4.58.5 um. Pycnospores slightly dumbbellshaped, 46 x 1 um. On mosses and humus, on boulders and rock faces, rarely on soil, arcticalpine, Alaska to Greenland, south to Nova Scotia in the east and Colorado and California in the west.

Easily mistaken for Pannaria praetermissa, which differs in that the thallus becomes sorediose, the upper cortex has angular cells with strongly gelatinous walls, and the spores are

nonseptate..... M. carnosa

1. On soft sandstone. Lobes ± squamulose, to 2 mm long. No algal cells below hymenium; spores frequently 3 and 4 celled; paraphyses branched.

Thallus thin; squamules small, dark yellowish brown to cervine brown, closely clustered, irregularly somewhat lobed, marginally ascending; lower surface pale.

Apothecia 0.40.8 mm diam., sessile; disc slightly concave to convex, dark reddish brown; proper exciple thin, paler than disc, finally disappearing; hypothecium hyaline to yellowish; asci inflatedclavate. Spores 1628 x 69 um. Southern

California. M. microphylliza

Literature

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