

Bathelium Ach.

After Harris (1995)

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Pseudostromata somewhat raised to sessile, globose to elongated and irregular in outline, with one to many ascomata, brown, often shiny, rarely pruinose, with a very distinctive outer layer of brownish short celled, intricately entwined and branched hyphae forming a jigsaw puzzle-like pattern, pseudostromatal "medulla" filled with oxalate (?) And pigment crystals or granules, most often K+ red; cartilaginous, amorphous cortex-layer surrounding the individual ascomata within the pseudostroma. Ascospores ranging from relatively small (20-30 μ m) and transversely 3-septate to very large (200-300 μ m) and muriform.

1. Ascospores transversely septate, 4-celled; hymenium not inspersed. Pseudostromatal pigment bleeding yellow in K; ascospores 18-28 x 6-9 μ m. Florida to the Carolinas. B. carolinianum (Tuck.) R. C. Harris (syn. Trypethelium carolinianum)

1. Ascospores muriform; hymenium inspersed. Thallus \pm smooth; ascospores 40-50 x 12-17 μ m, with 10-11 transverse septa. Florida. B. madreporiforme (Eschw.) Trevisan (syn. Trypethelium madreporiforme)

Descriptions

B. madreporiformis

Pseudostromata with an orange pigment within, K+ purple; ascospores (40-)45-55(-75) x (12-)15-20(-22) μ m with (9-)11-13(-17) transverse septa and 2-3 longitudinal septa, thick walled (2-2.5 μ m); hymenium inspersed. Thallus very thin, verrucose (smooth according to Fink), yellowish, ochraceous, greenish gray, or brownish, epruinose in the type. Perithecia in brown warts, constricted at base, rarely monocarpic and then small and almost spherical, usually polycarpic (5-10 per wart) in round warts, 1-3 mm high, 0.2-0.6 mm across, the superficial portion flat, the ostiole minute and slightly depressed. Medulla of the warts with numerous orange, K+ red crystals (probably parietin). Peristomium apical, generally pruinose, white, circular or elliptic, 0.1-0.2 mm across, sunken in the tips of the warts, plane, very rarely slightly projecting. Structure of the fruiting warts complex, with external zone composed of hyphae with brown walls, middle zone (medulla) containing orange crystals, and internal zone "doublant" [French] the pyrenium and composed of coalescent hyphae; cortical and algal zones of the thallus are interrupted at the base of the warts. Pyrenium entire, black, thick around the ostiole; perithecial cavity 0.22-0.30 mm diam., 0.30-0.36 mm high; hypothecium little thickened; paraphyses septate, netlike anastomosed; asci clavate, 170-190 x 40 μ m. Spores 8, ellipsoid to fusiform but broadly obtuse at the apices (oblong according to Fink), the cells cubical. Florida.

Literature

Fink, B. 1935. Lichen Flora of the United States.

Harris, R. C. 1995. More Florida Lichens.

Letrouit-Galinou, M.-A. 19_. Revision monographique du Genre Laurera.