

Megalospora Meyen
(MEGALOSPORACEAE)

After Sipman

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Thallus crustose, superficial, continuous, uniform, unstructured (heteromerous according to Galloway), ecorticate, yellowish, greenish or whitishgray, thin or rather thick (ca. 50-150 μ m), smooth, wrinkled, verrucosepapillate, or with isidia or soredia (in \pm contiguous soralia); attached to substrate by medullary or prothallial hyphae.

Apothecia adnate to sessile or subpedicellate, 0.5-5.0 mm diam.; disk circular, concave to flat or convex, brown to blackbrown, roughened, \pm shining, sometimes with a grayish, beige or whitish pruina; thalline margin absent; proper exciple \pm prominent, at first raised, yellowish, brown or black, usually paler than disc, sometimes darker, usually slightly shiny, internally 3-layered, inner zone of thin-walled, radiating hyphae, median zone \pm laxarechnoid; outer edge of dense, conglutinated hyphae; hypothecium usually 3-50 μ m thick, flat, pale, pellucid, usually less inspersed than hymenium; always with oil droplets; epihymenium usually diffusely orangebrown or pale to deep redbrown, ca. 15 μ m thick, sometimes with granular inclusions; hymenium 8-260 μ m tall, colorless, inspersed with oil droplets ca. 17 μ m diam., I or I+ blue; paraphyses ca. 1 μ m wide, indistinctly septate, parallel, \pm simple below, sparsely anastomosed, particularly above, apices slightly thickened (23 μ m); asci ovoidellipsoid to clavate, Lecanoratype, unitunicate, I+ blue (K/I but with K/I+ pale blue with a blue sheath, according to Awasthi); tholus I+ blue, with or without ocular chamber; spores 18, elongate to ellipsoid, ovoid, or \pm globose, straight or curved, sometimes with thickened apices, 1-many-septate, hyaline, thick walled, very large (to over 100 μ m long); septa thin; epispore sometimes prominent, smooth or warted.

Pycnidia with conidogenous cells enteroblastic, cylindrical to elongateampulliform, acrogenous; pycnospores bacilliform. Zeorin, \pm usnic acid, \pm pannarin, \pm lichexanthone. Photobiont chlorococcoid (? Dictyo chloropsis) (Trebouxia according to Rogers), present in upper 60 μ m of thallus, subspherical, 6-12 μ m diam. On mosses on siliceous rocks and trees, or on bark, mainly tropical, to temperate, in humid forests.

1. Spores single in each ascus, straight (or apothecia absent and thallus + sorediate, in M. porphyrites).2
1. Spores 28 in each ascus, mostly curved, (40)70105 x 1524 um curved, usually 511septate, with thin septa without clear pores; hymenium 105180 um high; epihymenium diffusely orangebrown (to brown). Apothecial margin pale yellowish, matt, not very prominent. Thallus whitish gray, KC, P+ orange (pannarin), UV+ orange (lichexanthone), rough, areolate to powdery. On smoothbarked trees, SE U.S. to Mexico..... M. pachycheila
2. Thallus yellowish gray, P, KC+ yellow (usnic acid and zeorin), smooth to rough, areolate and warty. Spores 70140 x 2535 um, (3)79(11)septate, straight. Hymenium under 200 um high; excipulum in section usually K. epihymenium diffusely olivegreen to brown or black. Apothecial margin dark, ± glossy, ± prominent. On bark of broadleaved trees, in sheltered, humid but well lit glades in ancient woodlands, also on mossy rocks and on the ground in coastal sites. Usually sterile. SE U.S., Alabama, Florida, Louisiana (to Mexico). M. tuberculosa ("strain A")
2. Thallus whitish gray, KC, P+ orange (containing pannarin and zeorin), smooth and chinky to wrinkled, sordiate. Spores 4070 x 1624 um, 25septate. Apothecia rare, plane to convex, with ± prominent, pale brown to black margin not containing algae. On conifers, Quebec, New Hampshire, Vermont, Michigan, Wisconsin, N. Carolina, Georgia. M. porphyrites

Literature

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