

Melanolecia Hertel

After Poelt & Vezda

Rev. 5/94

Thallus crustose; medulla varied (weak) amyloid medulla. Photobiont chlorococcoid. Apothecia always present, carbonaceous black (even when wet); disk commonly pruinose (then bluegray); margin at least when young prominent, swollen. Hymenium K/I+ blue. Hypothecium colorless to brownblack. Excipulum carbonaceous black. Paraphyses delicate, partly branched and anastomosing, the ends weakly to moderately strongly thickened. Asci slender, with robust tholus, therein an amyloid tubular structure. Spores 8, simple, colorless, thinwalled, middle sized to large, young ones often with a halo. Pycnidia immersed; pycnosporangia short pegform. Vegetative propagules absent. Almost all on calcareous rock in cooler regions.

Differs from Farnoldia in that the asci have a weakly I+ blue tholus and very long conidia; the one species reported from N. America and apparently not transferred to Farnoldia, M. transitoria, differs from Farnoldia jurana in having smaller spores, lower hypothecium, smaller apothecia often sunken into rock. I do not know which species besides F. jurana have been transferred to Farnoldia.

Thin (815 um) microtome sections are indispensable for judging the apothecial construction. Similar lecideoid genera which likewise may show a very dark excipulum, include Porpidia (hypothecium radiating into the excipulum darker than this), L. hypocrita group (likewise hypothecium darker, hypothecium and excipulum K+ purpleviolet), Clauzadea (greenish apothecia with brownish to brown disk; older asci and paraphyses _____[need to translate Poelt & Vezda's something's missing from Anderegg's translation]), Carbonea (spores small, ± oblong), Tremolecia (hymenium I+ yellowbrown, blue only after treatment with K, tholus without amyloid structures, thallus rusted to almost black). Caution is also in order in the case of poorly developed specimens of other species with normally stronger differentiated (also non uniformly carbonaceous) excipulum.

Spores on the average under 14 um long (1015 x 57 um); hypothecium 5570 um high. Apothecia to 0.6 mm wide, very rarely to 1.1 mm wide, often somewhat sunken into the rock. On pure limestone, alpine, predominantly on slanting and steep surfaces.

This species is the only one I know of that is still retained under Melanolechia (the others are mostly now in Farnoldia). M. transitoria

Literature

Poelt & Vezda. 1981. Erg. II.