MELANELIA

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Melanelia Essl., Mycotaxon 7: 46 (1978); from the Greek melas (black or very dark) or melano- (in compound words), in reference to the colour of the upper surface, and -elia, the last syllable of Parmelia, from which it was segregated.

Type: M. stygia (L.) Essl.

Thallus foliose, loosely to tightly adnate. Lobes irregular to sublinear, 0.5–6 mm wide, with eciliate margins. Upper surface brown to brown-black (K- and HNO₃- or HNO₃+ pale red), emaculate, with or without pseudocyphellae, isidia, soredia and cortical hairs; upper cortex paraplectenchymatous, with a non-pored epicortex. Cell walls containing isolichenan. Medulla loosely packed, white. Lower surface pale tan to black; rhizines mostly simple, rarely furcate or penicillate at apices, tan to black. Ascomata apothecial, laminal, sessile or rarely shortly pedicellate; disc concave to flat, imperforate, red-brown to black-brown. Ascospores ellipsoidal, 8 per ascus, 10–20 × 7–10 µm. Conidiomata pycnidial, laminal, immersed. Conidia fusiform to weakly bifusiform, 5–7 × 1 µm.

The lichen genus Melanelia Essl., a segregate of Parmelia Ach. s. lat., was subsequently shown to be a heterogeneous assemblage of species (Lumbsch, Kothe & Elix, 1988). This led to a new circumscription of Melanelia which has excluded the discordant elements now accommodated in Pleurosticta Petr. Melanelia species grow on bark, rock and moss. Four species of Melanelia are known to occur in Australia, and are generally on bark and rarely common. They are found from the semi-arid areas of southern Australia on trunks of Callitris, Allocasuarina and Casuarina, to the cool-temperate Nothofagus-Tasmania forests of Tasmania.


1 Thallus lacking both soredia and isidia .................................................................................. M. pseudoglabra
1: Thallus isidiate or sorediate .................................................................................................. 2
2 Thallus isidiate, soredia lacking (1:) .................................................................................... M. piliferella
2: Thallus sorediate, isidia lacking ......................................................................................... 3
3 Thallus thick; upper surface dark brown to black-brown, with cortical hairs (2:) ....... M. fuscosorediata
3: Thallus thin; upper surface olive-brown to red-brown, lacking cortical hairs ..................... M. subglabra