

MELANELIA

John A.Elix

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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. Ascوماتa 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-Tasmannia* forests of Tasmania.

T.L.Esslinger, A chemosystematic revision of the brown Parmeliae, *J. Hattori Bot. Lab.* 42: 1–211 (1977); T.L.Esslinger, A new status for the brown Parmeliae, *Mycotaxon* 7: 45–54 (1978); T.L.Esslinger, Proposal to conserve *Melanelia* Essl. against *Pleurosticta* Petrak, *Taxon* 29: 692 (1980); H.T.Lumbsch, H.W.Kothe & J.A.Elix, Resurrection of the lichen genus *Pleurosticta* Petrak (Parmeliaceae: Ascomycotina), *Mycotaxon* 33: 447–455 (1988).

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| 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 |