

MONEROLECHIA

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Monerolechia Trevis., *Linnaea* 12: 296 (1856)

From the Greek *moneres* (single) and *lekis* (a small shield), in reference to the individual squamules of the thallus.

Type: *M. badia* (Fr.) Kalb

Thallus crustose, bullate to subsquamulose or becoming distinctly squamulose, thick, ±continuous or becoming areolate, 1–5 cm wide; squamules convex, closely appressed, 0.5–1.0 mm wide. Prothallus absent. Isidia, soredia and lobules absent. Upper surface pale to dark chocolate-brown, rarely greyish brown, dull or glossy, epruinose or rarely pruinose, phenocorticate; upper cortex c. 25 µm thick. Medulla white, lacking calcium oxalate crystals, I–. Lower cortex c. 25 µm thick. Ascomata apothecia, lecideine, 0.3–0.9 mm wide, scattered, discrete, rounded, at first punctiform, soon becoming sessile, constricted at the base; disc black, plane or becoming convex; margin black, thin, rarely persistent, usually becoming excluded. Excipulum 35–45 µm thick; outer zone red-brown or carbonaceous; inner zone pale brown or colourless, K–. Epihymenium 4–10 µm thick, olive-brown to dark brown or black, K–, N–; hymenium 50–80 µm thick, colourless, I+ blue, not interspersed with oil globules. Hypothecium 60–80 µm thick, dark reddish brown or carbonaceous. Paraphyses 1.5–2.5 µm thick, simple to moderately branched; apices swollen, 3–5 µm thick, with a dark brown cap. Asci broadly clavate, *Physcia*-type, 8-spored, 45–55 × 13–18 µm; apical apparatus thick, I+ blue, similar to that of *Cratiria*. Ascospores *Buellia*-type, 1-septate, olive-brown to dark brown, broadly oblong to ellipsoidal, with obtuse ends, 10–15 × 5–8 µm; internal walls of uniform thickness; outer wall weakly ornamented. Conidiomata pycnidial, immersed in the thallus, urceolate to globose; conidiophores of type V (*sensu* Vobis, 1980), arogenous. Conidia bacilliform, 3–5 × 1.0–1.5 µm.

The monotypic and cosmopolitan *Monerolechia* is usually initially parasitic on a range of foliose and crustose lichen genera, eventually establishing independent thalli over rock or, more rarely, decorticated wood.

References

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Lecidea badia Fr., *Syst. Orb. Veg.* 1: 287 (1825); *Buellia badia* (Fr.) A.Massal., *Mem. Lich.* 124 (1853). T: "am Südabhang des Kalkenburgs bei Klagenfurt", Kärnten, Austria, 1890, *J.Steiner* (F.G.C.Arnold, *Lich. Exs.* No. 1505); neo: UPS *n.v.*, *fide* T.Foucard, R.Moberg & A.Nordin, *Nordic Lichen Fl.* 2: 70 (2002).

Buellia turgescens Nyl. ex Tuck., *Gen. Lich.* 185 (1872); *Amandinea turgescens* (Nyl.) Marbach, *Biblioth. Lichenol.* 74: 109 (2000). T: Nova Anglia, [Massachusetts, U.S.A.], ex *Herb. Tuckermann 5538* (post mortem Nylanderii insertum); lecto: H-NYL 9534 *n.v.*, *fide* B.Marbach, *Biblioth. Lichenol.* 74: 109 (2000).

For further synonymy, see Bungartz *et al.* (2007) and Galloway (2007).

Illustrations: V.Wirth, *Die Flechten Baden-Württembergs*, 2nd edn 196 (1995), as *Buellia badia*; B.Marbach, *Biblioth. Lichenol.* 74: 110 (2000), as *Amandinea turgescens*; T.Foucard, R.Moberg & A.Nordin, *Nordic Lichen Fl.* 2: 91 (2002), as *Buellia badia*; F.Bungartz & T.H.Nash III, *Bryologist* 107: 23, fig. 1; 24, fig. 2 (2004).

Description as for the genus.

Chemistry: Thallus K–, C–, KC–, P–, UV–; no lichen substances detected.

This species occurs mainly in temperate Australia (W.A., Qld, N.S.W. and Tas.) where it grows on variety of foliose and crustose lichens of the genera *Aspicilia*, *Caloplaca*, *Diploschistes*, *Physcia* and *Xanthoparmelia*, as well as independently on rock; also in Europe, Macaronesia, North and South America, Asia, Africa and New Zealand.

W.A.: near summit of Mt Brown, 3 km SE of York, *J.A.Elix 31678* (CANB). Qld: *s. loc.*, *K.Kalb 28945* (Herb. Kalb). N.S.W.: Merungie Gap Rd, 20 km WSW of Rankins Springs, *H.Streimann 44847* (B, CANB). Tas.: 3 km SE of Broadmarsh, *G.Kantvilas 157/93* & *J.A.Elix* (HO).

This species is characterised by the pale to dark chocolate-brown, areolate to squamulose thallus, asci of the *Physcia*-type, a distinctive carbonised excipulum, scattered, black, lecideine apothecia, *Buellia*-type ascospores and the absence of lichen substances.