

Lichens of Great Britain & Ireland edn 3

Draft genus account version 1.1, January 2018

Prepared by Mark Powell, based on the LGBI2 account by Scheidegger (2009)

AMANDINEA Choisy ex Scheid. & H. Mayrhofer (1993)

Thallus crustose, rimose to bullate. **Medulla** I-, not amyloid. **Photobiont** chlorococcoid. **Ascomata** apothecia, lecanorine or lecideine, innate to sessile with broad or constricted base; disc \pm black. **Hypothecium** pale or more usually dark brown, sometimes olivaceous in part. **Hamathecium** of paraphyses, septate, simple or branched in the upper third, apices swollen and pigmented, many with a dark brown cap. **Asci** (4-) 8 (-multi)-spored, clavate, *Lecanora*-type (Fig. 9e). **Ascospores** brown, 1-septate, with or without median spore wall thickenings, often with rugose ornamentation (electron microscopy required for reliable observation of ornamentation). **Conidiomata** pycnidia, often present. **Conidia** filiform, curved, up to 30 μ m long. **Chemistry**: rarely norstictic acid (taxa outside the British Isles), more often no chemical compounds detectable by TLC. **Ecology**: widely distributed on rocks, bark, soil and artificial substrata. **Distribution**: c. 30 species, cosmopolitan.

British species in the genus have affinities with *Buellia* and *Rinodina*; *Buellia*, *Diplotomma*, *Diploicia* and *Rinodina* species differ in having short, bacilliform conidia. However, some recent molecular studies suggest that *Amandinea* belongs in *Buellia*. The genus is retained here until its status has been clarified.

Literature:

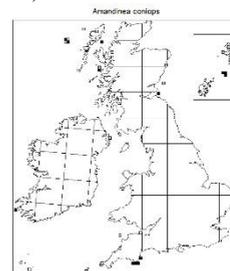
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- Elix, J.A. & Kantvilas, G.** (2016). *Amandinea coniops* (Physciaceae, Ascomycota) and its mimics in Tasmania and New Zealand. *Australasian Lichenology* **78**: 22-31.
- Fryday, A. M. & Arcadia, L.** in (2012): Typification and a revised basionym for *Fuscidea lygaea*, and a new name for *Amandinea lecideina*. *Graphis Scripta* **24**: 40-44.
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- Scheidegger, C.** (1993). A revision of European saxicolous species of the genus *Buellia* De Not. and formerly included genera. *Lichenologist* **25**: 315-364.
- Sheard, J.W. & May, P.F.** (1997). A synopsis of the species of *Amandinea* (lichenized Ascomycetes, Physciaceae) as presently known in North America. *Bryologist* **100**: 159-169.

The species are keyed out under *Buellia*.

Amandinea conioeps (Wahlenb. in Ach.) Choisy ex Scheid. & H. Mayrhofer (1993)

LC

Thallus areolate; areoles *c.* 0.1-0.3 mm diam., pale grey-brown to dark brown, convex, sometimes becoming shortly lobed, often aggregating to form a secondary bullate, warted or subsquamulose crust up to 1-2 mm thick in the thallus centre; a dark prothallus sometimes evident when areoles are dispersed; medulla I-. Apothecia 0.3-0.6 (-0.8) mm diam., superficial; disc plane to slightly convex; true exciple usually persistent but may be excluded in older convex apothecia; epithecium brown, N-; hymenium without oil droplets; paraphyses *c.* 1.5 µm wide, apices up to 4-5 µm wide. Ascospores 13-18 × (7-) 7.5-9 (-10) µm, wall uniformly thickened, minutely warted. Conidia 15-30 × 0.8-1 µm, thread-like, curved. **BLS 203.**



On coastal rocks, especially those manured by birds; locally common. Mainly N. & W. Scotland, extending to S.W. England (Cornwall), W. Wales, Ireland. Scandinavia, Iceland, N. America, and also in the S. Hemisphere, e.g. Tasmania, Antarctica, subantarctic islands.

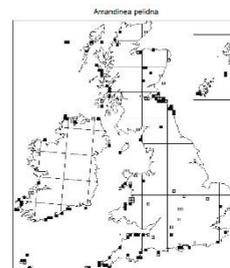
Distinguished from *A. punctata* by the thicker, more warted (becoming sublobulate) thallus, and generally larger ascospores and from *A. pelidna* by the thicker thallus, the larger apothecia and slightly longer and broader spores. In most cases *A. conioeps* is easily recognizable by its bullate thallus and thread-like conidia.

Amandinea pelidna (Ach.) Fryday & Arcadia (2012)

LC

Amandinea lecideina (H. Mayrhofer & Poelt) Scheid. & H. Mayrhofer (1993)

Thallus rimose, whitish to brownish, a dark prothallus often evident; medulla I-. Apothecia lecideine, 0.3-0.6 mm diam., broadly sessile, disc plane, margin thin, persistent; true exciple usually persistent; epithecium brown, N-; hymenium without oil droplets; paraphyses *c.* 1.5 µm wide, apices up to 4-5 µm wide. Ascospores 10-15 × 6.5-8.5 µm, wall with median thickening (*Physconia*-type initially, *Buellia*-type when mature), minutely warted. Conidia 15-30 × 0.8-1 µm, thread-like, curved. **BLS 1292.**



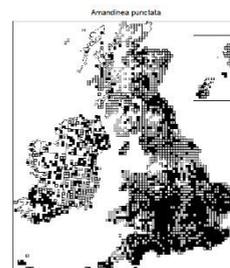
On coastal rocks often in ± sheltered aspects; uncommon. Mainly S.W. England, W. Wales, Ireland. Coastal Europe, N. Africa, N. & C. America, Asia, New Zealand.

Distinguished from *A. punctata* by its restriction to coastal habitats, the rimose thallus, median spore wall thickening, and the frequent presence of pycnidia. *A. conioeps* has a thicker, bullate thallus. *Buellia excelsa* resembles *A. pelidna* but has a white, K+ yellow (atranorin) thallus, and numerous hymenial oil droplets.

Amandinea punctata (Hoffm.) Coppins & Scheid. (1993)

LC

Thallus thin or inconspicuous to thickish, rarely more than 0.5 mm thick at the centre, smooth to rimose and often warted, pale to dark grey, rarely brown; a dark or grey prothallus rarely present; medulla I-. Apothecia, numerous, 0.2-0.6 mm diam., superficial; disc flat to slightly convex, rarely strongly so; true exciple thin, persistent, sometimes later excluded; epithecium brown, N-; hypothecium pale to dark brown; hymenium without oil droplets. Ascospores (8.5-) 11.5-16 (-19.5) × (4.5-) 6-8 (-10.5) µm, usually slightly curved; wall scarcely thickened near septum (*Buellia*-type when mature, may tend towards *Physconia*-type initially), smooth. Pycnidia sparse; conidia 14-20 × 0.5-1 µm, curved-thread-like. **BLS 212.**



On nutrient-rich or -enriched bark₂ wood (including fence posts), rocky substrata and debris, bird-perching rocks (including gravestones); tolerant of SO₂ pollution and inorganic fertilizers; abundant. Throughout the British Isles. Cosmopolitan.

Very variable. Many records on coastal rocks refer to *A. pelidna* (q.v.). Similar, but rarer, species on rocks include *A. conioeps*, *Buellia sequax*, *B. excelsa* and *B. spuria*; and on bark or wood, *B. pulverea* and *B. schaereri*. *Lecidella elaeochroma* which grows in similar habitats differs in the C+ orange reaction of the thallus, the broad margin, particularly in young apothecia, and the unicellular spores.

Host to *Skyttea buelliae* Sherwood, D. Hawksw. & Coppins (1981).