



ABSCONDITELLA¹²

Gintaras Kantvilas³

Absconditella Vězda, *Preslia* 37: 238 (1965).

Type: *A. sphagnum* Vězda & Poelt

Thallus crustose, effuse, typically rather gelatinous or goniocyst-like, ecorticate. Photobiont a unicellular green alga with ± globose cells (?*Cystococcus*). Ascumata apothecia, usually minute, urceolate and ± translucent when moist. Disc usually concave. Proper exciple persistent, in section composed of conglutinated, pseudoparenchymatous or thin, parallel hyphae. Hypothecium hyaline, poorly differentiated. Hymenium hyaline, non-amyloid, I-, KI- or weakly yellowish brown, not interspersed. Asci narrowly cylindrical, I-, KI-, 8-spored, with a thickened tholus. Paraphyses ± simple, indistinctly septate; apices swollen but not pigmented. Ascospores ellipsoid to fusiform-ellipsoid, transversely septate, hyaline, non-halonate, thin-walled. Conidiomata not known. Chemistry: nil.

A genus of about ten species, mostly overgrowing thin films of algae on soil, bark or wood in cool, moist climates of both hemispheres. All species are extremely inconspicuous and at least some are short-lived, early successional lichens that colonise disturbed habitats. Tasmanian collections are here ascribed, albeit tentatively, to three Northern Hemisphere species, but the genus is still poorly known and rarely collected; hence additional taxa may well be present. *Absconditella* is one of several superficially similar genera with tiny, pale-coloured, ± urceolate apothecia. *Cryptodiscus* differs chiefly by having asci with a thin, weakly amyloid wall and a photobiont that forms colonies of ± globose cells in a gelatinous sheath. *Gyalecta* has a *Trentepohlia* photobiont and asci with a thin, amyloid wall and a poorly developed, non-amyloid tholus.

Key references: Vězda (1965); Bielczyk & Kiszka (2001); Kantvilas (2005); Coppins (2009); Suija & van den Boom (2023).

1 Ascospores 1-septate
Ascospores 3-septate

2 A. delutula
2

2(1) Apothecia <0.1 mm wide; hymenium 90–110 µm thick
Apothecia 0.1–0.15 mm wide; hymenium 60–65 µm thick

1 A. celata
3 A. lignicola

1 *Absconditella celata* Döbbeler & Poelt

Herzogia 4: 364 (1977).

Thallus effuse, sometimes rather granular or goniocyst-like; photobiont cells irregularly roundish, 5–20 µm diam. Apothecia 0.05–0.1 mm wide, roundish, scattered, superficial or somewhat sunken in the thallus or substratum; margin whitish, persistent; disc plane to concave, pale brownish. Hymenium 90–110 µm thick;

1 This work can be cited as: Kantvilas G (2023). *Absconditella*, version 2023:1. In MF de Salas (Ed.) *Flora of Tasmania Online*. 3 pp. (Tasmanian Herbarium, Tasmanian Museum and Art Gallery: Hobart). <https://flora.tmag.tas.gov.au/lichens/genera/absconditella/> (accessed 13 September 2022).

2 This treatment was supported by the Australian Biological Resources Study's National Taxonomy Research Grant Program (grant no. 4-EHINNOL).

3 Tasmanian Herbarium, Tasmanian Museum & Art Gallery, PO Box 5058, UTAS LPO, Sandy Bay, TAS 7005, Australia

asci 75–90 × 8–10 µm; paraphyses straight, simple, 0.7–1 µm thick, with apices irregularly swollen to 2 µm. Ascospores 3-septate (very rarely 4-septate), uniseriate in the ascus, ellipsoid with acute apices, (12.5–)14–15.6–18(–20) × 4–4.8–6 µm.

Widespread in cool temperate areas of Europe. Tasmanian collections are from soil and rotting wood in disturbed habitats in regenerating wet eucalypt forest and rainforest. *Absconditella celata* is superficially similar to the other species of the genus, but has more minute apothecia. It is distinguished from *A. lignicola* by its thicker hymenium, longer asci, and by the generally larger, consistently uniseriate ascospores with more acute apices. In addition, the photobiont cells of this species tend to be smaller than those of *A. lignicola*. The identification of Tasmanian specimens remains uncertain, as their apothecia are neither as deeply red-brown nor as perithecia-like as those of specimens from Europe.

West of Tahune Bridge in the Warra SST, 43°06'S 146°41'E, 100 m, 2007, G. Kantvilas 209/07 (HO); Western Explorer Road, 41°22'S 145°02'E, 380 m, 2003, G. Kantvilas 571/03B (HO).

2 *Absconditella delutula* (Nyl.) Coppins & H.Kilias

In Hawksworth *et al.*, *Lichenologist* 12: 106 (1980); —*Lecidea delutula* Nyl., *Flora* 12: 106 (1980).

Thallus effuse, very thin, greenish and rather glossy; photobiont cells irregularly roundish, 7–15 µm diam. Apothecia 0.07–0.15 mm wide, roundish to irregularly ellipsoid, scattered, initially rather sunken but soon superficial; margin whitish, persistent; disc plane to concave, pale orange-brown. Hymenium 65–90 µm thick; asci 50–70 × 5–8 µm; paraphyses entangled but predominantly simple or only sparingly branched, 0.7–1 µm thick, with apices irregularly swollen to 1–3.5 µm. Ascospores 1-septate, ellipsoid, often with rather acute apices, 8–9.6–12 × 3–3.9–5 µm.

Widespread in the cool temperate latitudes of Europe, and also reported in Australasia from Queensland. All Tasmanian collections are from regenerating wet eucalypt forest and rainforest where the species colonises logs, cut stumps, dead *Gahnia* leaves and clay soil, usually in the first 3–5 years after logging. This is a very inconspicuous lichen, recognised by the tiny, pale apothecia and glossy, rather gelatinous thallus that forms a greenish, film-like scum, often associated with *Placynthiella icmalea*. It is difficult to detect with the naked eye and is typically collected fortuitously.

West of Tahune Bridge in the Warra SST, 43°06'S 146°41'E, 200 m, 2002, J. Jarman s.n. (HO); King William Saddle, 42°13'S 146°07'E, 820 m, J. Jarman s.n. (HO).

3 *Absconditella lignicola* Vězda & Poelt

Nova Hedwigia 40: 344 (1984).

Thallus effuse, glossy and gelatinous to rather granular and scurfy; photobiont cells irregularly roundish, 10–30 µm diam. Apothecia 0.1–0.15 mm wide, roundish, scattered, superficial; margin whitish, persistent; disc plane to concave, pale brownish. Hymenium 60–65 µm thick; asci 45–60 × 5–10 µm; paraphyses straight, simple, 0.7–1 µm thick, with apices irregularly swollen to 2 µm. Ascospores 3-septate, ellipsoid with rounded or acute apices, (8–)10–12.2–15(–17) × 3–3.9–5 µm.

Widespread in cool temperate areas of the Northern Hemisphere. Recorded in Tasmania from wet eucalypt forest, where it grows on rotting wood, bark and on the rotting leaf bases of the large rosette sedge, *Gahnia grandis*, as well as on peaty soil in buttongrass (*Gymnoschoenus*) moorland. It is distinguished from *A. delutula* by the 3-septate ascospores, and from *A. celata* by the shorter asci.

West of Tahune Bridge in the Warra SST, 43°06'S 146°42'E, 130 m, 1998, J. Jarman s.n. (HO); at foot of Hamilton Moraine, 41°59'S 145°34'E, 600 m, 1998, G. Kantvilas 197/98 p.p. (HO).

REFERENCES

Bielczyk U, Kiszka J (2001) The genus *Absconditella* (Stictidaceae, Ascomycota lichenisati) in Poland. *Polish Botanical Journal* **46** 175–181.

Coppins BJ (2009) *Absconditella* Vězda (1965). In CW Smith, A Aptroot, BJ Coppins, A Fletcher, OL Gilbert, PW James, PA Wolseley (Eds), *The Lichens of Great Britain and Ireland*, 123–124. (British Lichen Society: London)

Kantvilas G (2005) Two ephemeral species of the lichen genus *Absconditella* (Stictidaceae) new to Tasmania. *Muelleria* **21** 91–95.

Suija A, van den Boom P (2023) Phylogenetic relationships, taxonomic novelties, and combinations within Stictidaceae (Ostropales, Lecanoromycetes, Ascomycota): focus on *Absconditella*. *Mycological Progress* **22** 46. <https://doi.org/10.1007/s11557-023-01889-2>

Vězda A (1965) Flechtensystematische Studien II. *Absconditella*, eine neue Flechtengattungen. *Preslia* **37** 127–143.

INDEX

A

<i>Absconditella</i>	1
<i>Absconditella celata</i>	1, 2
<i>Absconditella delutula</i>	2
<i>Absconditella lignicola</i>	2
<i>Absconditella sphagnum</i>	1

C

<i>Cryptodiscus</i>	1
<i>Cystococcus</i>	1

G

<i>Gahnia</i>	2
---------------------	---

<i>Gahnia grandis</i>	2
-----------------------------	---

<i>Gyalecta</i>	1
-----------------------	---

<i>Gymnoschoenus</i>	2
----------------------------	---

L

<i>Lecidea delutula</i>	2
-------------------------------	---

P

<i>Placynthiella icmalea</i>	2
------------------------------------	---

T

<i>Trentepohlia</i>	1
---------------------------	---