



INGVARIELLA ¹

Gintaras Kantvilas ²

Ingvariella Guderley & Lumbsch, in R. Guderley, H.T. Lumbsch & G.B. Feige, *Nova Hedwigia* 64: 152 (1997).

Type: *I. bispora* (Bagl.) Guderley & Lumbsch

Thallus crustose, with a pseudocortex of rather amorphous hyphae. Photobiont trebouxoid, with ± globose cells 7–15 µm diam. Ascomata apothecia, urceolate, sunken in the thallus, lacking a proper exciple but with a thin margin derived from degenerated, carbonised hymenial material, typically enveloped with thalline tissue; periphyses absent. Disc grey-black, deeply concave, widely exposed from the outset. Hypothecium mostly hyaline. Hymenium hyaline, I+ slowly yellowish brown, KI+ deep blue. Asci cylindrical, 2(–4)-spored, with a thickened tholus, KI– or KI+ very weakly blue, and an intensely KI+ blue outer wall and cap. Paraphyses simple, slender, straight, 1–2 mm thick, separating in K, non-capitate. Ascospores muriform, broadly ellipsoid to oblong, non-amyloid, at first hyaline, soon becoming grey and then brown, non-halonate, thin-walled. Conidiomata not known. Chemistry: nil.

A monotypic genus widely distributed in drier, temperate parts of the world, including the Australian mainland. Due to a superficial resemblance and a suite of shared characters such as the saxicolous habit, trebouxoid photobiont, urceolate apothecia, straight, simple paraphyses, and muriform ascospores, *Ingvariella* was considered in the past to be related to *Diploschistes* (Graphidaceae). However, its position there was always tentative and with the support of molecular data and a re-evaluation of several key anatomical features, notably the absence of periphyses, structure of the ascomatal wall, and the reaction of the asci in iodine (Fernández-Brime *et al.* 2011), it has been transferred to the Stictidaceae, with relationships to *Absconditella*, *Conotremopsis* and *Cryptodiscus*, corticolous or muscicolous genera with minute, gyalectoid apothecia.

Key references: Guderley *et al.* (1997); Mangold *et al.* (2009); Fernandez-Brime *et al.* (2011).

1 *Ingvariella bispora* (Bagl.) Guderley & Lumbsch

In R. Guderley, H.T. Lumbsch & G.B. Feige, *Nova Hedwigia* 64: 152 (1997); —*Urceolaria bispora* Bagl., *Nuovo Gior. Bot. Ital.* 3: 246 (1871); *Diploschistes bisporus* (Bagl.) Steiner, *Sitzungsber. Kaiserl. Akad. Wiss., Wien, Math.-Naturwiss. Cl., Abt. 1*, 102: 155 (1893).

Thallus reddish brown to bronze, rimose-areolate, smooth to rather unevenly lumpy, to c. 500 µm thick, forming undelimited patches to c. 50 mm wide, interspersed with other lichens. Apothecia 0.3–1 mm diam., scattered or crowded together; margin in section opaque brown, 30–100 µm thick. Hypothecium 30–90 µm thick. Hymenium 70–110 µm thick, overlain by a brownish grey, granular epithecium unchanged in K; asci 2-spored, 68–90 × 22–30 µm. Ascospores densely muriform with up to 8–13 transverse and 3–5 longitudinal septa, 30–37.5–48(–56) × (14–)15–18.4–24.5(–29) µm.

Occasional on exposed rocks, mainly in lowland, low-rainfall areas but also sometimes extending to alpine elevations. The deeply urceolate apothecia, sunken in the bronze, crustose thallus, are diagnostic.

1 This work can be cited as: Kantvilas G (2023). *Ingvariella*, version 2023:1. In MF de Salas (Ed.) *Flora of Tasmania Online*. 2 pp. (Tasmanian Herbarium, Tasmanian Museum and Art Gallery: Hobart). <https://flora.tmag.tas.gov.au/lichens/genera/ingvariella/> (accessed 14 September 2022).

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

Above Black Gully Creek, 1 km NE of Hamilton, 42°33'S 146°51'E, 140 m, 1999, G. Kantvilas 252/99 (HO); Bisdee Tier, 42°26'S 147°17'E, 640 m, 2009, G. Kantvilas 133/09 (HO); Mt Montagu summit, 42°55'S 147°10'E, 1060 m, 2016, G. Kantvilas 28/16 (HO).

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