



## CONOTREMOPSIS<sup>12</sup>

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*Conotremopsis* Vězda, *Folia Geobot. Phytotax.* 12: 313 (1977).

Type: *C. weberiana* Vězda

Thallus byssoid. Photobiont *Trentepohlia*, with the cells in filaments 6–10 µm wide or subglobose, 10–20(–30) µm wide and occurring singly or in short chains, entwined by fungal hyphae c. 2 µm wide. Ascomata apothecia, minute, tubular or barrel-shaped, closed at first, when mature opening by a splitting of the apex of the proper exciple into dentate lobes. Disc plane to concave. Proper exciple carbonised, persistent, in section cupulate, opaque black-brown. Hypothecium hyaline. Hymenium hyaline, non-amyloid, I–, KI–, not interspersed. Asci very narrowly cylindrical, non-amyloid, 8-spored, with a thickened, KI– tholus and a thin, acute, ocular chamber. Paraphyses simple, with apices neither swollen nor pigmented. Ascospores filiform, indistinctly transversely 80–100-septate, hyaline, non-halonate, thin-walled. Conidiomata not known. Chemistry: nil.

A monotypic, epiphytic genus, known from wet forests in Tasmania, New Zealand and, remarkably, from Réunion. Together with *Absconditella*, *Cryptodiscus* and *Ingvariella*, *Conotremopsis* is included in the family Stictidaceae. It is distinguished from these genera by the barrel-shaped apothecia with a carbonised exciple, the extremely long, filiform, multi-septate ascospores, and by the *Trentepohlia* photobiont.

Key references: Vězda (1977); Kantvilas & Jarman (1999); Galloway (2007).

### 1 *Conotremopsis weberiana* Vězda

*Folia Geobot. Phytotax.* 12: 314 (1977). Type: Tasmania, Lake St Clair National Park, on saplings near shore of Lake St Clair at beginning of trail to Mt Hugel, 24 February 1968, W.A. Weber & D.N. McVean (holo—COLO; iso—BM!, CANB!, FH, HO!, LD, PRA-V, UPS, US).

Thallus fluffy, especially at the margins, dull pinkish orange to orange-green, fading to pale grey in storage, forming circular thalli to c. 10 cm wide. Apothecia superficial, basally constricted, 0.2–0.3 mm wide, 0.5–0.8 mm tall; proper exciple grey-black, covered by a thin weft of whitish hyphae, flaring and dentate at the apex with usually 5 triangular lobes, in section 25–50 µm thick, K–. Hymenium 500–600 µm thick; asci 430–500 × 8–10 µm; paraphyses c. 1 µm thick. Ascospores 80–100-septate, tightly coiled in the ascus, 400–420 × 2–2.5 µm.

Widespread in cool temperate rainforest, typically at higher elevations, where it occurs on the moderately dry sides of tree trunks, especially *Nothofagus cunninghamii*. The fluffy, orange-pink, circular thalli are unmistakable and grow directly on bark or overgrow bryophytes and other lichens. Although particularly common in the forests of the Great Western Tiers, Central Plateau and Cradle Mountain-Lake St Clair areas, *Conotremopsis* is widespread and extends southward to the Southern Ranges and westward to the Mt

1 This work can be cited as: Kantvilas G (2023). *Conotremopsis*, 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/conotremopsis/> (accessed 14 September 2022).

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

Murchison area. The minute, brittle, loosely attached apothecia make observation of the asci and ascospores very challenging, and the anatomical drawings of Vězda (1977) are exceptional.

Anthony Road, 41°50'S 145°38'E, 560 m, 1989, G. *Kantvilas* 10/89 (HO); track to Wylds Craig, 42°28'S 146°25'E, 880 m, 1998, G. *Kantvilas* 281/98 (HO); upper reaches of Little Fisher River, 41°46'S 146°20'E, 1000 m, 2012, G. *Kantvilas* 25/12 (distributed as *Edit Farkas: Lichenes Delicati Exsiccati Editae: 37*) (HO).

## REFERENCES

- Kantvilas G, Jarman SJ (1999) Lichens of rainforest in Tasmania and south-eastern Australia. *Flora of Australia Supplementary Series 9*. (Australian Biological Resources Study: Canberra).
- Galloway DJ (2007) *Flora of New Zealand Lichens*. Revised second edition. (Manaaki Whenua Press: Lincoln).
- Vězda A (1977) Flechtensystematische Studien X. *Conotremopsis weberiana* gen. novum et sp. nova, eine neue Flechte aus der Familie Ostropaceae. *Folia Geobotanica et Phytotaxonomica* **12** 313–316.

## INDEX

<b>A</b>		<b>N</b>	
<i>Absconditella</i> .....	1	<i>Nothofagus cunninghamii</i> .....	1
<b>C</b>		<b>S</b>	
<i>Conotremopsis</i> .....	1	Stictidaceae.....	1
<i>Conotremopsis weberiana</i> .....	1	<b>T</b>	
<i>Cryptodiscus</i> .....	1	<i>Trentepohlia</i> .....	1
<b>I</b>			
<i>Ingvariella</i> .....	1		