

# Dufourea incavata

## SYNONYMS

*Jackelixia incavata*, *Oxneria incavata*, *Physcia incavata*, *Xanthoria incavata*, *Xanthoria parietina* var. *incavata*

## FAMILY

Teloschistaceae

## AUTHORITY

*Dufourea incavata* (Stirt.) Frödén, Arup & Søchting

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lichens - Foliose

## CURRENT CONSERVATION STATUS

2018 | Data Deficient

## BRIEF DESCRIPTION

Characterised by the corticolous habit; neat, rosette-forming thalli 2–7 cm diam., with entire, rounded margins conspicuously thickened and inrolled below and there furnished with 1–2 discontinuous rows of short, whitish rhizines, with larger more scattered whitish rhizines elsewhere on the lower surface. The upper surface is pale-yellowish to yellow-orange, matt and coriaceous. Apothecia are ±central, rounded, subpedicellate with occasional whitish rhizines developing on the thalline exciple below the disc. The proper exciple is prosoplectenchymatous, a type found also in *Xanthomendoza* (q.v.) and in the recently described *Xanthoria bonae-spei* (Kodratyuk et al. 2004a: 354–355).

## DISTRIBUTION

**South Island:** Marlborough (Molesworth), Canterbury (Ashley Gorge, Selwyn Gorge). Recently observed on Banks Peninsula (Knight 2019, Hutchison 2019).

## HABITAT

*Dufourea incavata* is a corticolous species in the *Xanthoria parietina*-group, so far known only from bark of *Acer pseudoplatanus*\*, *Hoheria* and *Populus nigra*\* where it associates with *Haematomma babingtonii*, *Hyperphyscia adglutinata*, *H. plinthiza*, *Phaeophyscia hispidula*, *P. orbicularis*, *Physcia adscendens*, *P. jackii*, *Punctelia subrudecta* and *Teloschistes velifer*. It is still extremely poorly collected and understood in New Zealand and its ecological requirements are not fully understood (Kondratyuk & Galloway 1996).



Hinewai Reserve, Banks Peninsula.  
Photographer: Melissa Hutchison, Date taken:  
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## DETAILED DESCRIPTION

**Thallus** rounded, in neat rosettes 2–7 cm diam., closely attached centrally and at margins, corticolous. Lobes 8–20(–35) mm long and 3–5 mm wide, moderately thick, occasionally discrete from margins to centre, generally  $\pm$ imbricate, margins rounded, entire, conspicuously thickened below. **Upper surface** plane to undulate, shallowly ridged or pitted, matt, coriaceous, pale yellow-white or yellow at margins, darkening centrally. **Lower surface** white, smooth, with 1–2 rows of short (0.1 mm tall), tufted discontinuous groups of white rhizines along lower side of margins, elsewhere with scattered white anchoring rhizines 0.5–1 mm long. **Apothecia** sessile to subpedicellate, clustered centrally, rounded to irregular through mutual pressure, (0.5–)1–2(–3) mm diam., disc matt, orange, plane to subconvex or shallowly undulate; thalline exciple concolorous with thallus, thick, persistent, entire, occasionally with short, tufted, whitish rhizines below; proper exciple pseudoprosoplectenchymatous. **Asci** 57–65  $\times$  16–18  $\mu$ m. **Ascospores** 14–5–19  $\times$  7.2–10  $\mu$ m. Pycnidia scattered or in small groups, submarginal and laminal, slightly raised, orange, with a darker apical pore.

**Chemistry:** K+ purple; containing parietin.

## SIMILAR TAXA

From the few specimens examined, *Dufourea incavata* is a rather constant species similar to *Xanthoria parietina* (particularly shaded specimens), but differing from it in the mode of attachment to the substratum (rhizines at lobe margins and scattered elsewhere on the lower surface, rather than scattered hapters as in *X. parietina*); the thickening and inrolling of the lower surface of the lobe margins; the generally smaller apothecia with occasional excipular rhizines, and the thicker, more coriaceous lobes. Additional collections are necessary to establish unequivocally the limits of variation in this species. It is possible that *D. incavata* might be better accommodated in *Xanthomendoza* (q.v.), though a definite opinion on its true status has not yet been settled, and recently Kondratyuk & Kärnefelt (2003) transferred it to the new genus *Oxneria*, though this is still somewhat in doubt.

## SUBSTRATE

Corticolous

## ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (26 June 2021). Information in the Brief description, Distribution, Habitat, Features and Similar taxa sections copied from Galloway (1985, 2007).

## REFERENCES AND FURTHER READING

- Galloway D.J. 1985: *Flora of New Zealand: Lichens*. Wellington: PD Hasselberg, Government Printer. 662 pp.
- Galloway D.J. 2007: *Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi*. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.
- Hutchison M.A. 2019: iNaturalistNZ observation of *Dufourea incavata*. <https://inaturalist.nz/observations/35404071>
- Knight A. 2019: iNaturalistNZ observation of *Dufourea incavata*. <https://inaturalist.nz/observations/24545888>
- Kondratyuk S.Y. and Galloway D.J. 1996: Notes on *Xanthoria* Th.Fr. 1. The identity of *Xanthoria incavata* (Stirton) Zahlbruckner. *Lichenologist* 28(2): 189–193.
- Kondratyuk S.Y. and Kärnefelt I. 2003: Revision of three natural groups of xanthorioid lichens (Teloschistaceae, Ascomycota). *Ukrayins'kyi Botanichnyi Zhurnal* 60: 427–437.
- Kondratyuk S.Y., Kärnefelt I, Søchting U. and Arup U. 2004a: New species of *Xanthoria* (Teloschistaceae) from Southern Africa. *Bibliotheca Lichenologica* 88: 349–362.

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/dufourea-incavata/>