

# Diploschistes muscorum subsp. bartlettii

## FAMILY

Graphidaceae

## AUTHORITY

*Diploschistes muscorum* subsp. *bartlettii* Lumbsch

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lichens - Crustose

## CURRENT CONSERVATION STATUS

2018 | Not Threatened | Qualifiers: SO

## BRIEF DESCRIPTION

White crust with urceolate apothecia; on soil or lichenicolous on *Cladonia* squamules in dry habitats.

## DISTRIBUTION

**North Island:** Auckland (Whatipu), South Auckland (20 km SW of Te Awamutu), Wellington (Ruapehu, Kaimanawa Ranges, Ruahine Ranges, Rimutaka Ranges), Hawke's Bay (Kaweka Ranges). **South Island:** Nelson (Kakapo Peak, Mt Cobb, Cobb Valley), Canterbury (Mackenzie Country), Otago (Dredgeburn, Central Otago mountains, Cromwell, Alexandra, Teviot Valley), Southland (Homer Cirque, Fiordland, Waituna Lagoon).  
Mainly E of the Main Divide.

Also known from Australia, Tasmania, Chile, Argentina, Brazil, Ecuador, Easter Island, India, Nepal, Indonesia, Madagascar, East Africa and South Africa.

## HABITAT

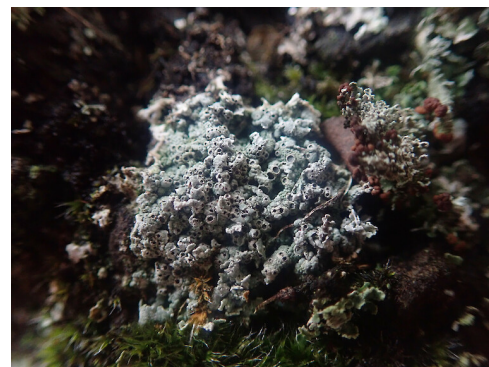
On soil, mosses, plant debris and occasionally *Cladonia* squamules, in rather dry habitats (often in dryish underhangs in alpine areas). Common on dry, denuded grasslands of the inland lake basins where it forms characteristic "cow pats" on exposed, sandy soil, together with *Siphula coriacea* and terricolous species of *Xanthoparmelia* (*X. molliuscula*, *X. reptans*, *X. semiviridis*).

## DETAILED DESCRIPTION

**Thallus** creamish fawn, grey-brown or greyish, continuous to areolate, uneven, warted or hummocky, 1–4 cm diam., on soil, mosses or plant debris (occasionally on *Cladonia* squamules). **Apothecia** urceolate, common, crowded, disc 0.2–0.8(–1) mm diam., black, ±pruinose. Proper exciple swollen, inflexed, concolorous with thallus, often puckered, or plicate. Hymenium 120–150(–175) µm tall, hyaline. Hypothecium 10 µm thick, colourless, **Paraphyses** 1–1.5 µm thick, simple, unbranched. **Asci** cylindrical to clavate, unitunicate, 90–140 × 15–35 µm, without an apical tholus, 8-spored. **Ascospores** uniseriate in ascus, brown, muriform, ellipsoidal to broadly ellipsoidal, 19.5–30 × 5–14 µm. **Chemistry:** Cortex K+ yellow to red, C+ red, Pd–; containing lecanoric (major), diploschistesic acid (tr.) and orsellinic acid (tr.).



On *Cladonia enantia* squamules on basalt rock wall, Mt Eden Auckland. Photographer: Marley Ford, Date taken: 27/07/2022, Licence: CC BY.



On *Cladonia enantia* squamules on basalt rock wall, Mt Eden Auckland. Photographer: Marley Ford, Date taken: 27/07/2022, Licence: CC BY.

### **SIMILAR TAXA**

*Diploschistes muscorum* ssp. *bartlettii* is distinguished from the Northern Hemisphere taxon *D. muscorum* ssp. *muscorum*, by its higher hymenium, the broader, consistently 8-spored asci, and a Southern Hemisphere distribution.

### **SUBSTRATE**

Terricolous, lichenicolous (on *Cladonia squamules*)

### **ATTRIBUTION**

Fact sheet prepared by Melissa Hutchison (30 December 2021). Distribution, Habitat, Features, and Similar taxa sections copied from Galloway (2007).

### **REFERENCES AND FURTHER READING**

Galloway D.J. 2007: *Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi*. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/diploschistes-muscorum-subsp-bartlettii/>