

# Degelia crustacea

## FAMILY

Pannariaceae

## AUTHORITY

*Degelia crustacea* P.M.Jørg. & D.J.Galloway

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lichens - Crustose

## CURRENT CONSERVATION STATUS

2018 | Data Deficient | Qualifiers: SO

## BRIEF DESCRIPTION

Characterised by the corticolous habit; the crustose to subsquamulose thallus; the paraplectenchymatous upper cortex of anticlinal hyphae; the I+ blue reaction of the hymenium; ellipsoidal ascospores, 10–15 × 5–8 µm; and a negative chemistry.

## DISTRIBUTION

**North Island:** Northland (Waipoua, Kawakawa, Russell) to Auckland (Waitakere Ranges) and South Auckland (Hunua Ranges).

On bark of lowland coastal trees and shrubs. Known also from Australia (NSW) and Juan Fernandez.

## HABITAT

A pioneer of bare bark of stems or branches of trees and shrubs in humid, lowland, coastal forests of northern New Zealand, in regions with a subtropical climate. Like *D. periptera* it may prove to have a wider distribution area in the Tasman Sea region, and may be restricted to that region.

## DETAILED DESCRIPTION

**Thallus** small-squamulose to crustose, squamules closely appressed, attached to a blue-black prothallus, forming orbicular patches to 3 cm diam. **Squamules** incised, sometimes lobulate, to 0.1 mm diam., not noticeably enlarged at margins. **Upper surface** blue-grey. Cortex 25 µm thick, paraplectenchymatous of anticlinal hyphae. **Apothecia** rather rare, brown to blackish, to 1 mm diam., with a distinct, coronate thalline exciple to 100 µm thick, and a paraplectenchymatous proper exciple to 125 µm thick. **Hymenium** colourless, I+ blue to 120 µm tall. **Hypothecium** yellowish to 100 µm thick. Asci cylindrical, 60–90 × 12–15 µm, with amyloid apical structures. **Ascospores** ellipsoidal, 10–15 × 5–8 µm. **Pycnidia** not seen.

**Chemistry:** TLC–, all reactions negative.



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### **SIMILAR TAXA**

It appears to be related to *Degelia periptera*, another northern species, which, however, has long, stellately radiating lobes that are apically fan-shaped, and a differing cortical anatomy (upper cortex not paraplectenchymatous). Separated from *Degeliella* by the hymenium I+ persistent blue.

*Degelia crustacea* is superficially similar to the subantarctic *D. rosulata*. It differs from that species in its more crustose habit and the blue, instead of reddish iodine reaction of the hymenium.

### **SUBSTRATE**

Corticolous

### **ATTRIBUTION**

Fact sheet prepared by Marley Ford (5 September 2021). Brief description and Features sections copied from Galloway (2007). Habitat, and similar taxa copied from Jørgensen & Galloway (2000).

### **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.

Jørgensen P.M., Kantvilas G., & Galloway D.J. 2000: Three new species in the lichen genus *Degelia*. *The Lichenologist*, 32(3): 257-262.

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/degelia-crustacea/>