

Leioderma erythrocarpum

SYNONYMS

Pannaria erythrocarpa

FAMILY

Pannariaceae

AUTHORITY

Leioderma erythrocarpum (Delise ex Nyl.) D.J.Galloway & P.M.Jørg.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

2018 | At Risk – Naturally Uncommon | Qualifiers: SO, Sp

BRIEF DESCRIPTION

Characterised by the corticolous habit; and its arachnoid-hairy upper surface ($\times 10$ lens); a character shared only with its sorediate counterpart, *Leioderma sorediatum*.

DISTRIBUTION

North Island: Northland (near Russell, Rakitu Island, Tapu Bush N. Kaipara). **South Island:** Marlborough (Motuara Island, around Cook's Cairn).

Known also from Madagascar, Mauritius, Réunion, the Philippines, Sarawak, Indonesia, Java, Papua New Guinea, Tahiti, the Marquesas Is, and New Caledonia.

HABITAT

On bark and on rocks in *Kunzea* forest, s.l. to 200 m.

DETAILED DESCRIPTION

Thallus orbicular to irregularly spreading, 1–5(–8) cm diam., rather loosely attached. Lobes to 6 mm wide, lacinate, discrete to \pm imbricate. Margins slightly thickened, shallowly undulate to sinuous, \pm ascending, crenate, incised with squamulose to digitate phyllidia. **Upper surface** finely and \pm uniformly arachnoid-hairy, often irregularly undulate or \pm shallowly pitted, dark grey-blue when wet, pale buff-grey when dry, often with numerous brown-pink apothecial initials. **Lower surface** ecorticate, whitish to pale buff, arachnoid, with scattered tufts of white to blue-black rhizohyphae. **Apothecia** laminal, scattered to crowded, sessile, 1–2 mm diam., disc concave, pale red-brown to pinkish rarely dark brown or blackened; proper exciple prominent, persistent, transparent when wet, whitish when dry. Hymenium I+ persistent blue. **Ascospores** ellipsoidal, rather thick-walled, slightly roughened, 13–20(–23) \times 6–12 μ m.

Chemistry: TLC–, all reactions negative.

SIMILAR TAXA

Leioderma sorediatum

Fuscoderma



Maunaupaki Track, Coromandel Peninsula.
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SUBSTRATE

Corticolous

Leioderma is a predominantly Southern Hemisphere genus in the Pannariaceae (Eriksson *et al.* 2004; Pennycook & Galloway 2004), most closely related to *Erioderma*, but distinguished from it by an absence of chemical characters and small, laminal apothecia (Jørgensen 2003). Seven species are currently known, with New Zealand (4 species), Australia and Ecuador (3 species) being the main present-day areas of speciation. It is absent from Africa, Europe and Asia (apart from the the Pacific seaboard), and from E of the Rockies and Andes in North and South America respectively, with the exception of *L. glabrum* in Brazil. It is thus a Gondwanaland genus with two major biogeographical elements: (1) a warm temperate–subtropical or Tethyan element comprising *Leioderma erythrocarpum* and its sorediate counterpart *L. sorediatum*, and also *L. duplicatum* and *L. glabrum* and (2) a cool temperate or austral element comprising *L. pycnophorum*, the generitype. Species of *Leioderma* are primarily corticolous, being epiphytes of forest trees and shrubs. The genus *Fuscoderma* (q.v.) was formerly included as a distinct subgenus of *Leioderma*.

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (3 September 2021). Brief description, Distribution, Habitat, Features, and Extra information sections copied from Galloway (2007).

REFERENCES AND FURTHER READING

- Eriksson O.E., Baral H.-O., Currah R.S., Hansen K., Kurtzman C.P., Rambold G. & Laessøe T. 2004: Outline of Ascomycota – 2004. *Myconet* 10: 1-99.
- 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. 2003: Conspectus familiae Pannariaceae (Ascomycetes lichenosae). *Illicifolia* 4: 1-78.
- Pennycook S.R. & Galloway D.J. 2004: Checklist of New Zealand “Fungi”. In: McKenzie, E.H.C. (Ed.) Introduction to fungi of New Zealand. *Fungi of New Zealand/Ngā Harore o Aoteroa* Volume 1. *Fungal Diversity Research Series* 14: 401-488.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/leioderma-erythrocarpum/>