

Erioderma leylandii

SYNONYMS

Erioderma glaucescens sensu D.J.Galloway (1985)

FAMILY

Pannariaceae

AUTHORITY

Erioderma leylandii (Taylor) Müll.Arg.

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; the spreading, rosette-forming thallus encircling twigs; the tomentose upper surface; the white, felted lower surface with bundles of blue-black rhizohyphae; and the conspicuous, marginal apothecia.

DISTRIBUTION

North Island: Northland (Three Kings Islands, Ranfurly Bay), Auckland (Waitakere Ranges), South Auckland (near Thames, Waiotapu Valley, Mangaotaki Valley King Country, Te Kauri Reserve Otorohanga, Waimiha Stream) to Wellington. **South Island:** Nelson (Inangahua), Westland (Kelly's Creek, Kumara, Lake Kanieri, Fox Glacier, Karangarua River), Canterbury (Boyle River), Otago (Dart Valley).

Known also in Queensland and New South Wales, Mexico, Guatemala, Colombia, Ecuador, Bolivia, Peru, Venezuela, Brazil, St Helena, South and East Africa and the islands of the southern Indian Ocean.

HABITAT

In moist, humid, often successional habitats, along streamsides, in regenerating scrub associations etc., on twigs of *Coprosma* spp., *Dacrycarpus dacrydioides*, *Kunzea* spp., *Leptospermum scoparium* agg., *Olearia* spp., *Phyllocladus alpinus*. Associating with the lichens *Coccocarpia palmicola*, *C. erythroxyli*, *Degelia gayana*, *D. dulpomarginata*, *Erioderma sorediatum*, *Fuscoderma applanatum*, *Leioderma pycnophorum*, *L. sorediatum*, *Pannaria fulvescens*, *Physma chilense*.



Corticolous on manuka, Wainui Auckland.
Photographer: Marley Ford, Date taken:
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Corticolous on manuka, Wainui Auckland.
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DETAILED DESCRIPTION

Thallus foliose, dorsiventral, 1-3(-7) cm diam., rosette-forming to irregularly spreading, lobes 0.5-1.5 cm diam., margins entire, often ascending and strongly inrolled, exposing white lower surface, naked and slightly thickened, to irregularly rhizinate. **Upper surface** dark slate-blue when wet, pale olive-greyish when dry, smooth or shallowly wrinkled, undulate, glabrous and ± shining in small patches, ± continuously tomentose, tomentum arachnoid to dense and thick and rather shaggy, whitish or grey-white or olivaceous, soredia absent. **Lower surface** white, never yellow or brownish, arachnoid, continuous, felted, hyphae in veins, very shallowly ridged or uneven or ± faintly bullate. Rhizines short, 0.1-0.8 mm long, black, in small, dense, squarrose tufts, scattered, marginal, rarely laminal, inconspicuous, often absent, rarely pale greyish or whitish, rarely as a thin marginal fringe. Medulla white. Photobiont in chains, cells ± globose, thick-walled 7-10 µm diam., *Sctonema*. **Apothecia** marginal, subpedicellate 0.5-2.0(-6.0) mm diam., plane at first becoming convex-glomerulate with age, marginate, margins entire slightly raised, persistent, concolorous with disc or paler, glabrous, exciple smooth to verrucose-scabrid, pale flesh-coloured or whitish, minutely white-pubescent to densely tomentose-hirsute, disc red-brown to dark brown or black, concave, plane or convex, smooth or furrowed-glomerulate or ± gyrose-contorted with small secondary apothecia developing centrally, glabrous or minutely white-pruinose, pruina delicate, pubescent. Hymenium colourless, 60-70 µm tall. Hypothecium pale orange-brown or red-brown 70-80 µm thick. Paraphyses straight, dense, simple 3-4 µm diam., apices multiseptate, rounded, projecting from surface of disc, tips free. **Asci** 8-spored, broadly to narrowly clavate. **Ascospores** uniseriate or biseriate, rounded to oval (8.3-) 10.2-12(-14) × 6.8-8.3 µm, wall 1.5 µm thick, not warted, colourless.

Chemistry: Medulla Pd + yellow-orange; containing pannarin. UV+ pale grey spots.

SIMILAR TAXA

Another subspecies, *Erioderma leylandii* subsp. *vellisgerum*, occurs in southern Chile, but that species has larger spores and a lower surface that becomes distinctly sulphur-yellow or brownish on storage and contains argopsin in place of pannarin.

SUBSTRATE

Corticolous (twigs and branches)

ETYMOLOGY

erioderma: woolly skin

ATTRIBUTION

Fact sheet prepared by Marley Ford (3 March 2021). Brief description, Distribution, Habitat and Features sections copied from Galloway (1985) & Galloway (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.
Taylor M., Bialeski R.L. and Allan H.H. 2002: Meanings and origins of botanical names of New Zealand plants. *Auckland Botanical Society Bulletin* 26.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/erioderma-leylandii/>