

Rhizocarpon lecanorinum

COMMON NAME

Crescent-moon lichen

FAMILY

Rhizocarpaceae

AUTHORITY

Rhizocarpon lecanorinum Anders

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Crustose

CURRENT CONSERVATION STATUS

2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by the yellow, crescent-shaped areolae, often enclosing prominent apothecia; a red-brown epithecium; a pale greenish blue hymenium; 8-spored asci; and colourless to greenish or brown-black, submuriform ascospores.

Apothecia surrounded by crescent-shaped areolae; thallus K+ yellow, Pd+ orange (stictic acid).

DISTRIBUTION

North Island: Wellington (Taranaki Falls, Mt Ruapehu). **South Island:** Canterbury (Waimakariri old riverbeds, Hakataramea Valley), Southland (S Mavora Lake).

Known also from Great Britain, Europe, Scandinavia, the high-Arctic, Turkey, and North America.

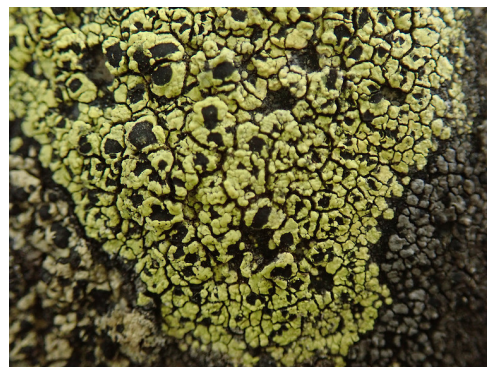
HABITAT

On dry, exposed, sunny rock outcrops in grassland.

Associating with *Buellia dunedina*, *B. stellulata*, *Candelariella vitellina*, *Diploschistes gyrophoricus*, *Immersaria athrocarpa*, *Lecanora rupicola*, *Lecidea fuscoatrula*, *Rhizocarpon geographicum*, *R. grande*, *R. submodestum* and brown and yellow species of *Xanthoparmelia*.



On rounded river stones in dry grassland, West Melton. Photographer: Melissa Hutchison, Date taken: 13/12/2021, Licence: CC BY-NC.



On rounded river stones in dry grassland, West Melton. Photographer: Melissa Hutchison, Date taken: 13/12/2021, Licence: CC BY-NC.

DETAILED DESCRIPTION

Thallus areolate, in spreading patches, 5–10(–25) mm diam., often coalescing into much larger composite colonies. **Prothallus** distinct, black, at margins and between areolae. **Areolae** contiguous, 0.5–1.5 mm diam., mostly crescent-shaped, each segment partly to entirely surrounding an apothecium, to angular or orbicular with or without a central apothecium; flat to subconvex, smooth, bright-yellow to greenish yellow, epruinose. **Apothecia** frequent, rounded, 0.1–1 mm diam., plane to subconvex. Proper exciple persistent but indistinct, concolorous with disc. Epithecium pale red-brown, 7–15 µm thick. Hymenium pale greenish blue, 100–115 µm tall. Hypothecium intense dark-brown, opaque. **Asci** globose, 8-spored, 75–85 × 35–45 µm. **Ascospores** ellipsoidal to somewhat curved, submuriform, slightly constricted at septa, with 8–24 (–28) cells in optical section, colourless at first soon becoming dark-greenish to brown-black, 27–45 × 11–19 µm.

Chemistry: Thallus and medulla K+ yellow, C+ red or –, Pd+ orange, I+ blue; containing rhizocarpic and stictic acids, and occasionally also gyrophoric acid.

SIMILAR TAXA

It is chemically distinct from *R. geographicum*, as it contains stictic acid (K+ yellow, Pd+ orange), rather than psoromic acid (K–, Pd+ yellow). The shape of the areoles (which are crescent-shaped in *R. lecanorinum*) also separates the two species.

SUBSTRATE

Saxicolous

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (31 December 2021). Brief description, 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/rhizocarpon-lecanorinum/>