

Lecanora rupicola

COMMON NAME

White rim lichen

SYNONYMS

Lichen rupicola

FAMILY

Lecanoraceae

AUTHORITY

Lecanora rupicola (L.) Zahlbr.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Crustose

CURRENT CONSERVATION STATUS

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

BRIEF DESCRIPTION

Characterised by the saxicolous habit; and the pale-brown, to blackish, flat to convex apothecial discs, covered with a fine, grey-white, to bluish-white-pruina reacting C+ yellow-orange.

DISTRIBUTION

North Island: Wellington (Kapiti I.). **South Island:** Canterbury (Devil's Gap, East Peak, near Mt Sinclair, Banks Peninsula, McKenzie country), Otago (Poolburn Reservoir, Manorburn, Teviot River, Kakanui Mountains, Horse Ra., Old Man Ra., Waikouaiti, Maungatua).

Known also from Great Britain, Europe, Scandinavia, North America, Asia, Australia.

HABITAT

On sunny, exposed rock outcrops and slabs in subalpine grassland in full sunlight, and also occasionally on roofs of underhangs of schist tors in high-alpine habitats, 450–1650 m (Galloway 2002b).



DETAILED DESCRIPTION

Thallus white to grey, pale fawn-buff, rather smooth, areolate cracked, areolae minute, angular, ± convex, often intersected by dark lines of prothallus, forming mosaics on flat rocks 5–8(–10) cm diam. **Apothecia** sessile, often subinnate at first, 0.2–1.5 mm diam., disc pale brown, white or grey-pruinose, C+ orange, pruina thin to dense, concave to plane to subconvex, margins thin, entire or crenulate, concolorous with thallus. Ascospores ellipsoid, 10–14 × 6–7 μm.

Chemistry: Thallus K+ yellow, C–, KC+ yellow; apothecial disc C+ yellow or orange, KC+ orange; containing sordidone, atranorin, roccellic acid in the apothecia and atranorin and roccellic acid in the thallus (Leuckert & Poelt 1989). Lumbsch & Elix (2004: 54) also record chloroatranorin (minor) and eugenitol (minor) from this species. The group is discussed by Leuckert & Poelt (1989) who define infraspecific taxa and chemodemes within each species. This aggregate deserves closer study in New Zealand where it seems best developed on rocks in upland and alpine habitats of Central Otago (Galloway 2002). The thallus is often parasitised by *Rimularia insularis* that gradually grows throughout the hyphae of the host, taking over the host's photobiont cells. Apothecial discs are sometimes also parasitised by *Arthonia glaucomaria* and *A. varians** (Baron 1999: 49, fig. 39), causing the discs to become blackened. Leuckert & Poelt (1989: 129) record the following lichenicolous taxa from *L. rupicola*: *Buellia* sp.*, *Opegrapha maculans** (Arnold) Hafellner, *Rhizocarpon inimicum** Poelt & Vězda and *Rinodina insularis** (Arnold) Hafellner.

SIMILAR TAXA

It is part of a group of related lichens that include *Lecanora bicincta* and *Lecanora swartzii*. Can also be confused with *Lecanora farinacea*.

SUBSTRATE

Saxicolous

ETYMOLOGY

rupicola: From the Latin rupes 'rock, cliff' and -cola 'dweller', refers to the usual habitat of the species

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (5 July 2021). Brief description, Distribution, Habitat, Features and Similar taxa sections sourced from Galloway (1985, 2007).

REFERENCES AND FURTHER READING

- Baron G. 1999: *Understanding lichens*. Slough, Richmond.
- Galloway D.J. 1985: *Flora of New Zealand: Lichens*. Wellington: PD Hasselberg, Government Printer. 662 pp.
- Galloway D.J. 2002: Notes on high-alpine species of *Lecanora* from schist underhangs in southern New Zealand, and a new name for *L. parmelinoides*. *Australasian Lichenology* 51: 20–32.
- Galloway D.J. 2007: *Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi*. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.
- Leuckert C. and Poelt J. 1989: Studien über die *Lecanora rupicola*-Gruppe in Europa (Lecanoraceae). *Nova Hedwigia* 49: 121–167.
- Lumbsch H.T. and Elix J.A. 2004: *Lecanora*. *Flora of Australia* 56A: 12–62.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/lecanora-rupicola/>