

Ramalina pollinaria

FAMILY

Ramalinaceae

AUTHORITY

Ramalina pollinaria (Westr.) Ach.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Fruticose

CURRENT CONSERVATION STATUS

2018 | Threatened – Nationally Critical | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by the small, saxicolous, solid thallus, with fragile branches. It has large soredia released by the disintegration of the cortex laminally (sometimes reaching the margins but not truly marginal). The species has a dense medulla and contains both evernic and obtusatic acids.

DISTRIBUTION

Known from only two sites in New Zealand. It's possible that the rare New Zealand species is different from the common Northern Hemisphere *R. pollinaria*.

Ramalina pollinaria is widely distributed in the Northern Hemisphere, being known from the British Isles and mainland Europe and North America. It is also known from East Africa. Specimens previously named as *R. pollinaria* in Hong Kong have been renamed as *R. throwerae*.

HABITAT

At the two known sites in New Zealand, the local area is of calcareous cement within greywacke and quartz conglomerate on shaded vertical rock faces under overhanging bluffs in Trotters Gorge, Otago, alt. 70 m.

The other is on marble bedrock on the base of overhanging bluffs at Owen River, Nelson, 600 m.

DETAILED DESCRIPTION

Thallus saxicolous, pale whitish green when fresh, ivory-white when dry, caespitose in small tufts 10–15 mm tall, each tuft formed by a cluster of erect branches growing from the base, no evidence of sward formation (as seen in European material); branching mainly without lateral branches at first, then dichotomous to irregular, with more branching towards the apices; **branches** solid, 0.5–1.0 mm wide, flattened (but not compressed) to subterete towards the tips; branches are very fragile as no intact tips with meristems seen; surface smooth, matt to shiny, in places with shallow depressions; **pseudocyphellae** absent, but loss of areas of cortex from broken branches and where **soredia** are released do expose the medulla in places; lower surface splitting or cracking irregularly, disintegrating to release soredia, occurring mainly near the tips of the main and short lateral branches; soralia spread over the laminal surface, reaching the margins in places; branch tips appearing flattened where soredia are exposed, but no sign of hooded tips (cf. *R. obtusata* (Arnold) Bitter); soredia large, granular, 50–90 µm (average 66 µm) (measured in water) exposed on a thick, white, felty medulla where the cortex has disintegrated. The chondroid layer in the cortex is thin, possibly causing branch fragility and ease of cortical disintegration to release soredia; chondroid tissue is not seen in the medulla; algae are not restricted to a layer beneath cortex, nor in clusters between ridges, but scattered through the medulla. **Pycnidia** not seen. **Apothecia** not seen.

Chemistry: K- C- P-, UV+ white, containing evernic, obtusatic, and usnic acids.



SIMILAR TAXA

Ramalina fimbriata can be superficially similar, but is inflated (most obvious basally), with occasional perforations and an arachnoid medulla. *Ramalina canariensis* is mainly corticolous, the margins split to release smaller soredia, and the medulla is less dense. *Ramalina unilateralis* is also mainly corticolous, has a thicker chondroid layer and is not so fragile. It has smaller soredia and does not have a dense medulla. All three species have divaricatic acid.

SUBSTRATE

Saxicolous. Found on calcareous rocks in New Zealand, and acid rocks and trees in the Northern Hemisphere.

ETYMOLOGY

ramalina: Meaning small branches, twiggy.

ATTRIBUTION

Fact sheet prepared by Marley Ford (21 November 2021). Information in the Brief description, Distribution, Habitat, Features, and Similar taxa sections copied from Blanchon & Bannister (2004).

REFERENCES AND FURTHER READING

Blanchon D.J. and Bannister J.M. 2004: *Ramalina pollinaria* (Westr.) Ach. *New Zealand. Australasian Lichenology* 55: 18-20.

New Zealand Botanical Society Newsletter. 2005: 8: p.13.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/ramalina-pollinaria/>