

Heterodermia tremulans

FAMILY

Physciaceae

AUTHORITY

Heterodermia tremulans (Müll.Arg.) W.L.Culb.

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: DP, SO

DISTRIBUTION

Only recently recognised to be present in New Zealand so distribution is poorly known. Current records are from Northland and the Farewell Spit area.

Also in Australia. A pantropical and pantemperate lichen.

HABITAT

Coastal rock

DETAILED DESCRIPTION

Thallus foliose, orbicular to irregularly spreading, adnate to loosely adnate, 2–7 cm wide, often coalescing and forming colonies to 15 cm wide. **Lobes** 0.7–1.5 mm wide, plane to slightly convex, sublinear, ±flexuose, dichotomously to subdigitately branched, usually discrete at the periphery, radiating; apices not ascending, with short lateral lobes, eciliate. **Upper surface** greyish white to grey to brownish grey, ±darker at the apices, pruinose or not, sorediate; soredia whitish or greyish, granular, forming labriform soralia at the tips of the main and lateral lobes. Medulla white. **Lower surface** corticate, whitish to pale brown, rarely dark grey in the centre. Rhizines sparse, marginal, concolorous with the thallus or becoming darker, or even black near the apices, irregularly branched, to 1 mm long. **Apothecia** rare, laminal, sessile to substipitate, 1–3 mm wide; margin initially crenulate, becoming sorediate; disc concave, brown to brown-black, epruinose. **Ascospores** Pachysporaria-type, ellipsoidal, 23–32 × 12–14 μm. Pycnidia immersed or slightly protruding; conidia bacilliform, 4–5 × 1 μm.

Chemistry: Cortex K+ yellow, C–, KC–, P+ yellow; medulla K+ yellow, C–, P– or P+ pale yellow; containing atranorin (major), zeorin (major), 16β-acetoxyhopane-6α,22-diol (major), 6α-acetoxyhopane-16β,22-diol (major), 6α,16β-diacetoxyhopane-22-ol (minor), leucotylin (minor), chloroatranorin (minor).



Saxicolous specimen growing in full sun with *Dufourea ligulata*. Photographer: Marley Ford, Licence: CC BY-NC.



Exposed saxicolous specimen. Photographer: Marley Ford, Licence: CC BY-NC.

SIMILAR TAXA

Although this lichen has commonly been confused with *Heterodermia speciosa*, the latter has linear-elongate lobes and larger spores (25–37 × 14–18 µm), whereas *H. tremulans* has short, often flexuose lobes and smaller spores (23–32 × 12–14 µm).

SUBSTRATE

Saxicolous (coastal rock)

ETYMOLOGY

heterodermia: From the Greek heteros (other, different) and derma (a skin or hide), in reference to the presence or absence of a lower cortex

tremulans: trembling, shaking

ATTRIBUTION

Fact sheet prepared by Marley Ford (3 March 2021). Brief description, Distribution, Habitat and Features sections copied from Elix (2011).

REFERENCES AND FURTHER READING

Elix J.A. 2011: *Heterodermia*. *Australian Physciaceae (Lichenised Ascomycota)*. Australian Biological Resources Study, Canberra. Version 18 October 2011. <http://www.anbg.gov.au/abrs/lichenlist/PHYSICIACEAE.html>

Taylor M., Bielecki 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/heterodermia-tremulans/>