

Pannaria pyxinoides

COMMON NAME

Pyxine Pannaria

FAMILY

Pannariaceae

AUTHORITY

Pannaria pyxinoides (Nyl.) Elvebakk

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

Not Evaluated

BRIEF DESCRIPTION

Appressed corticolous lichen, often with numerous apothecia. In forests of northern New Zealand.

DISTRIBUTION

North Island: Northland (Herekino, Warawara, Waipoua), Little Barrier Island, Great Barrier Island, Coromandel Peninsula.

HABITAT

Native forest in northern New Zealand.



Corticolous on kohekohe, Hokianga Far North.
Photographer: Marley Ford, Date taken:
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Corticolous on kohekohe, Hokianga Far North.
Photographer: Marley Ford, Date taken:
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DETAILED DESCRIPTION

Thallus foliose, corticolous, forming adnate rosettes 2–7 cm diam. **Lobes** 100–150 µm thick, 0.5–1 mm wide and up to 15 mm long, convex to flat, margins entire; monopodially to subdichotomously or irregularly and often weakly branched, resulting in lobes with parallel orientation, coalescing centrally where thin and adnate secondary lobules frequently develop. **Upper surface** smooth, weakly glossy, uneven in older parts; when alive, pale greyish green when dry, lettuce-green when moist, turning pale ochraceous or weakly brownish after longterm storage. **Upper cortex** 20–30 µm thick, plectenchymatous, lumina 5–8 µm wide, walls 1.5–2 µm thick. **Photobiont** layer 20–30 µm thick, of either cf. *Myrmecia* or cf. *Trebouxia* cells, globose to subglobose, 2–6 µm diam. **Medulla** lax, 60–80 µm thick, pale brownpigmented on the exposed, ecorticate and erhizinate lower part. Hypothallus/prothallus not observed. **Cephalodia** common, pulvinate to placodioid, 0.5–2 mm diam.; cyanobiont Nostoc, cells deep green, globose to irregularly ellipsoid, 3–7 µm diam., organized within glomerules, without visible chain structures.

Apothecia common, substipitate, 1–2.5 mm diam.; disc pale reddish brown, mostly flat, without concentric rings or thalline granules; thalline excipulum c. 0.2 mm wide, finely striate-crenulate with striae 0.1–0.15 mm broad.

Epithecium pale brown, 20–30 µm thick; hymenium c. 90–100 µm thick, IKI+ deep blue; hypothecium pale brown, 50–60 µm thick. **Asci** clavate, 70–80 × 15 µm, no IKI+ internal structures seen, with 8 ascospores. **Ascospores** entire, regularly ellipsoid to ovoid, ends broadly obtuse, short- to elongate-ellipsoid, 12–15 × 6–9 µm; perispores seen as a few scattered low verrucae on some spores, and without apical extensions, but mostly not visible apart from very small verrucae, 0.5–1 µm wide on immature spores. **Pycnidia** common in some specimens, elevated and verrucose, 0.1–0.25 × 0.1–0.25 µm, ostiole brown, spermatia bacilliform, 2.5 × 0.5 µm.

Chemistry: containing vicanicin.

SIMILAR TAXA

This species differs from *Pannaria sphinctrina* in having more adnate and thinner lobes, which are often more parallel-oriented, and by verrucose pycnidia and smaller spores. Perispores are usually not visible on mature spores, although sometimes a few low verrucae are present, and the large apical extensions characteristic of *P. sphinctrina* are always absent. Immature spores have verrucae, but they are much smaller than those observed in *P. sphinctrina*. Old herbarium specimens do not become dark chestnut-brown in colour as do those of *P. sphinctrina*.

SUBSTRATE

Corticolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (8 August 2022). Information in the Brief description, Distribution, Habitat, Features and Similar taxa sections copied from Elvebakk (2018).

REFERENCES AND FURTHER READING

Elvebakk, A. 2018: *Pannaria pyxinoides* comb. nov., an overlooked lichen from Northern New Zealand. *Australasian Lichenology* 83: 36-41.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pannaria-pyxinoides/>