

Menegazzia castanea

FAMILY

Parmeliaceae

AUTHORITY

Menegazzia castanea P.James & D.J.Galloway

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: RR, Sp, TO

BRIEF DESCRIPTION

Characterised by its saxicolous habit, ±regular thallus rosettes, coarse-granular soredia arising from pustules, and 2-spored asci.

DISTRIBUTION

South Island: Canterbury (Godley Valley, Kirkliston Range) to Southland.

Campbell Island: (Mt Honey). **Macquarie Island.**

Also known from Tasmania where it is uncommon.

HABITAT

East of the Main Divide, alpine or subalpine on rock, occasionally on soil or among mosses on soil, 1000–2000 m in New Zealand, lower in the subantarctic islands.



Saxicolous, North Arm Fiordland. Photographer: Marley Ford, Date taken: 10/03/2023, Licence: CC BY-NC.



Saxicolous, North Arm Fiordland. Photographer: Marley Ford, Date taken: 10/03/2023, Licence: CC BY.

DETAILED DESCRIPTION

Thallus firmly attached at margins, ± loosely attached centrally, forming radiating, regular rosettes, often becoming irregular and coalescing to cover extensive areas of substrate, to 20 cm diam., saxicolous, sometimes spreading over soil and adjacent lichens and mosses. **Lobes** numerous, marginally radiating, rather regular, small to medium, 2–4 mm wide, often obscured centrally by numerous, short, imbricate, congested lobules, **margins** contorted, entire, often notched, often, extensively blackened, pigment spreading to centre of lobes, hollow, markedly inflated, lower side of internal cavity black. **Upper surface** pale grey-brown or fawn, apices and sometimes lateral lobes suffused brownish, ± maculate, with black or dark brown lines or patches, often denser centrally (×10 lens), smooth or puckered (especially centrally), shining and faintly white-maculate or reticulate towards lobe ends, sorediate.

Perforations sparse to scattered, small, 0.2–0.5 mm diam., rounded or irregular, margins not elevated. **Soralia** pustular, arising as swellings on upper surface with eventual rupture and folding back of cortex to form coarse or finely abraded, efflorescent, proliferating, granular-sorediate clusters, coalescing centrally, **soredia** greyish-fawn, pale when abraded. **Lower surface** black, brown or red-brown marginally, extensively puckered. **Apothecia** rare, scattered or contiguous in groups, small, 2 mm diam., adnate, cupuliform, margins elevated, crenulate-striate, disc red-brown to brown, epruinose. **Epithecium** pale red-brown or brown, with numerous small granules. **Hymenium** c. 100–130 µm tall. Asci 2-spored. **Ascospores** ellipsoid, 39–44 × 21–23 µm.

Chemistry: Medulla K+ yellow-orange, C–, KC+ orange, Pd+ orange; containing stictic, constictic and menegazziaic acids and accessory compounds.

SIMILAR TAXA

Menegazzia castanea is the sorediate counterpart of *M. aeneofusca*. The development of soredia resembles that of *M. nothofagi* (which also occurs in similar habitats), in the bursting of coarse swellings from the upper surface, producing coarse, granular soredia surrounded by torn edges of the upgrowth. *Menegazzia nothofagi* has narrower lobes (0.5–0.8 mm), with a plane or concave surface and is mostly green in colour.

SUBSTRATE

Saxicolous

ETYMOLOGY

castanea: Probably derived from the old name for the Sweet Chestnut, either in Latin or Ancient Greek.

ATTRIBUTION

Fact sheet prepared by Marley Ford (4 December 2023). Distribution, Habitat, and Features sections copied from Galloway (1985) & Galloway (2007).

REFERENCES AND FURTHER READING

Galloway D.J. 1985: *Flora of New Zealand: Lichens*. Wellington: PD Hasselberg, Government Printer. 662 pp.

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/menegazzia-castanea/>