

Micarea isabellina

FAMILY

Pilocarpaceae

AUTHORITY

Micarea isabellina Coppins & Kantvilas

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Squamulose

CURRENT CONSERVATION STATUS

2018 | At Risk – Naturally Uncommon | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by the terricolous habit; the creamy white to dull-yellowish (isabelline), warty, areolate thallus; the black, clustered–tuberculate apothecia; and narrowly fusiform to lunate (1–)3-septate ascospores, 19–26 × 3.5–4 µm.

DISTRIBUTION

South Island: Southland (Astronomer’s Point, Dusky Sound). **Stewart Island:** (Port Pegasus, Fraser Peaks, Deceit Peaks). **Campbell Island:** (Mt Lyall).

Known also from southern South America and Tasmania.

HABITAT

On peat hummocks or plant detritus in subalpine to alpine heaths and herbfields, 600–1,800 m.

DETAILED DESCRIPTION

Thallus effuse, of scattered to mostly confluent areolae sometimes clumping to produce an irregularly warty thallus up to 1 mm thick; **prothallus** not apparent. **Areolae** (70–)100–300 (–400) µm diam., convex to ±globose, creamy white to dull-yellowish (isabelline), ecorticate but with a hyaline epinecral layer to 12 µm thick. **Photobiont** cells micareoid, 4–7 µm diam. **Cephalodia** absent. **Apothecia** numerous, (0.2–)0.3–0.6(–0.8) mm diam., or forming tuberculate clusters up to 1.2 mm diam., sessile, adnate or constricted below and sometimes ±turbinate, shallowly convex to hemispherical or ±globose, immarginate, black but sometimes pale at outer edge and sides. **Hymenium** 53–60 µm high, pale-aeruginose, but with a dark-aeruginose epithecium (K–, N+ red), 4–12 µm thick. **Paraphyses** numerous, slender, sparingly branched and anastomosing, 1.3–1.7 µm wide, slightly swollen to 2 µm wide at apices, each with individual gelatinous hoods (best seen in K), sometimes collapsing in old apothecia and depositing a layer of pigment on the surface of the apices. **Hypothecium** 100–200 µm thick, hyaline or pale-aeruginose in upper parts. **Exciple** well-developed, distinct in section, hyaline or pale-greenish or dull-brown in upper and outermost parts, of radiating hyphae, 1–2 µm wide, readily separating in K. **Asci** narrowly clavate, 43–55 × 10–12 µm, in K/I as for *M. austrorernaria*. **Ascospores** narrowly fusiform and ±lunate, (1–)3-septate, 19–26 × 3.5–4 µm. **Pycnidia** unknown. **Chemistry:** Thallus K–, C+ yellowish (faint), KC+ orange, Pd–, UV+ orange-pink; containing thiophanic acid (major), arthothelin (minor), 4,5,7-trichlorolichexanthone (minor), thuringione (tr.), isoarthothelin (tr.), 4,5-dichlorolichexanthone (tr.) and an unidentified xanthone (minor).



Terricolous, Denniston Plateau West Coast.
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Terricolous, Denniston Plateau West Coast.
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SUBSTRATE

Terricolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (11 February 2024). Brief description, Distribution, Habitat, and Features sections copied from Galloway (2007).

REFERENCES AND FURTHER READING

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/micarea-isabellina/>