Dibaeis absoluta

SYNONYMS
Baeomyces absolutus, Baeomyces absolutus var. novae-zelandiae, Baeomyces novae-zelandiae

FAMILY
Icmadophilaceae

AUTHORITY
Dibaeis absoluta (Tuck.) Kalb & Gierl

FLORA CATEGORY
Lichen – Native

ENDEMIC TAXON
No

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Lichens - Crustose

CURRENT CONSERVATION STATUS
2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION
Characterised by the saxicolous habit; the emerald-green to lime-green, minutely granular to varnish-like, crustose thallus; pale pink, sessile apothecia, the disc minutely wrinkled–scabrid, ±white-pruinose; uniseriate, oblong ellipsoidal, colourless, simple ascospores 7–15 × 4–5 µm; and baeomycesic, squamatic and ±barbatic acids as secondary compounds.

Kepler Track, Fiordland. Photographer: Melissa Hutchison, Date taken: 03/10/2020, Licence: CC BY-NC.

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DISTRIBUTION
North Island: Northland (Whangarei, Little Barrier Island, Tokatoka), South Auckland (Te Aroha) to Wellington (Tararua Ranges). **South Island**: Nelson to Fiordland. **Stewart Island**: (Mt Anglem).
Known also from North, Central and South America, Japan, the Philippines, New Guinea and Australia.

HABITAT
On rock in alpine habitats and in forest, also on clay soils alongside paths and tracks in forest, in moist humid habitats, s.l. to 1000 m.

DETAILED DESCRIPTION
Thallus thin, varnish-like, bright emerald green when wet, dull olive or ashy when dry, saxicolous, rarely terricolous. **Apothecia** sessile, whitish-pink, disc dull, subpruinose, 1-3 mm wide, thinly marginate or immarginate, plane or subconvex. **Ascospores** oblong or fusiform-ellipsoid, uniseriate, or biseriate, simple, 7-15 × 4-5 µm.
Chemistry: Thallus K− or + pale yellow, UV+ white; apothecia K+ yellow, Pd+ yellow-orange; containing baeomycesic (major), squamatic (UV+ white, tr.), consquamatic (tr.), barbatic (±) and ursolic (tr.) acids.

SIMILAR TAXA

It is distinguished from the superficially similar *Icmadophila ericetorum* that has 1-septate ascospores, and a thallus reacting K+ orange (thamnolic and perlatolic acids) and by habitat preference. *Icmadophila ericetorum* grows on peaty soils and on plant debris, whereas *Dibaeis absoluta* occurs on rocks, rarely on clay or sandy soil. According to Rambold *et al.* (1993: 231) "*Dibaeis* subg. *Apoda* shows a relatively basal set of characters: the turbinate shape of the ascocarps, the mostly non-lichenised stipes, the poorly developed thallus horizontalis, in combination with asci showing only weak tendencies of reduction of the amyloid ring, and the simple, ellipsoidal spores. With regard to ascocarp and ascospore shapes, *Dibaeis* subg. *Apoda* may have close affinities with *Icmadophila* and *Knightiella*".

SUBSTRATE

Saxicolous, terricolous

Pink-fruited species of *Baeomyces* s. lat. were referred to *Dibaeis* Clem. (Gierl & Kalb 1993), and placed in the family Icmadophilaceae (Eriksson *et al.* 2004; Pennycook & Galloway 2004; Eriksson 2005), a view that has received support from molecular studies (Platt & Spatafora 1999; Stenroos et al. 2002c). The genus comprises 15 species, one (the type species of the genus) with an holarctic distribution, the remaining taxa occuring most frequently in tropical regions. Two subgenera are recognised, viz. subgen. *Dibaeis*, comprising 11 taxa (*D. arcuata* in New Zeland); and subgen. *Apoda*, comprising four taxa (*D. absoluta* in New Zealand).

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (5 September 2021). Brief description, Distribution, Habitat, Features, Similar taxa, and Extra information sections copied from Galloway (1985, 2007).

REFERENCES AND FURTHER READING

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Stenroos S., Myllys L., Thell A.& Hyvönen J. 2002c: Phylogenetic hypotheses: Cladoniaceae, Stereocaulaceae, Baeomycetaceae, and Icmadophilaceae revisited. *Mycological Progress 1*: 267-282.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/dibaeis-absoluta/