# Dibaeis arcuata

## SYNONYMS
Baeomyces arcuatus, Baeomyces fungoides, Baeomyces subgranosus

## FAMILY
Icmadophilaceae

## AUTHORITY
Dibaeis arcuata (Stirt.) 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 terricolous habit; a crustose, scurfy, grey-white to white thallus, with or without scattered, efflorescent white soralia; a stalked simple podetium (to 2 cm tall), with terminal, globose, capitate or convolute, pale-pink to orange-pink apothecia; fusiform, ascospores, 12–30 × 2–4 µm; and a chemistry containing baeomycesic and squamatic acids (±barbatic acid). A beautiful lichen!

## DISTRIBUTION
**North Island**: Northland (Maungataniwha Ranges, Kawerua, Puketi Forest, Cavalli Islands, Ririwha Island, Bay of Islands, Tutukaka, Great Barrier Island), South Auckland (Hunua Ranges, Mt Maungatawhiri, Coromandel Peninsula, Cuvier Island, Slipper Island) to Wellington (Volcanic Plateau, Tinakori Hill). **South Island**: Nelson (Cobb Valley, St Arnaud Range), Marlborough (Mt Stokes, Resolution Bay), Westland (Harihari), Canterbury (Arthur's Pass, Banks Peninsula, Mt Peel), Otago (Lake Onslow, Flagstaff), Southland (Fiordland to the Awarua Plains). **Stewart Island**: (Oban to Port Pegasus).
Known also from Australia.

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## HABITAT
Characteristically on clay, often alongside paths and often very common on vehicle tracks in grassland, and a common component in the succession leading to revegetation of clay banks, often also on bare soil in lawns – rarely on rock, bark or litter, s.l. to 1000 m. Colonies on clay in subalpine grassland in Central Otago appear to grow rapidly during winter months.

## DETAILED DESCRIPTION

**Thallus** whitish or greyish-white, scurfy, ecorticate and in parts densely white-sorediate, soredia granular-floury, terricolous. **Podetia** simple, to 2 cm tall, pale, terete or compressed, surface rather scabrid, vertically furrowed, pale whitish-pink. **Apothecia** terminal, globose, capitate often convolute, pale flesh-pink to orange-pink, convex, immarginate, surface rather finely warted. **Ascospores** fusiform, simple, 12-30 × 2-4 µm.
**Chemistry**: Thallus and soralia 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

*Baeomyces heteromorphus* looks similar and often grows in the same habitats at *Dibaeis arcuata*. *Baeomyces heteromorphus* tends to have a greener thallus, paler pink/flesh-coloured apothecia with flatter tops, translucent podetia (stalks), and green algae covering at least the lower parts of that stalk. *Dibaeis arcuata* can have quite long, thin, chalky white, curved stalks, whereas *B. heteromorphus* tends to have shorter, thicker, straight stalks, and sometimes several apothecia per stalk.

## SUBSTRATE

Terricolous. Rarely on rock (saxicolous), bark (corticolous), or litter

## ETYMOLOGY

**arcuata**: From the Latin arcuare 'to arch', referring to a shape that is bent like the arch of a circle

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, and Extra information sections copied from Galloway (1985, 2007).

## REFERENCES AND FURTHER READING

Eriksson O.E. (Ed.) 2005: Outline of Ascomycota – 2005: *Myconet 11*: 1-113.
Eriksson O.E., Baral H.-O., Currah R.S., Hansen K., Kurtzman C.P., Rambold G. & Laessøe T. 2004: Outline of Ascomycota – 2004. *Myconet 10*: 1-99.
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Pennycook S.R. & Galloway D.J. 2004: Checklist of New Zealand "Fungi". *In*: McKenzie, E.H.C. (Ed.) Introduction to fungi of New Zealand. *Fungi of New Zealand/Ngā Harore o Aoteroa* Volume 1. *Fungal Diversity Research Series 14*: 401-488.
Platt J.L. & Spatafora J.W. 1999: A re-examination of generic concepts of baeomycetoid lichens based on phylogenetic analysis of nuclear SSU and LSU ribosomal DNA. *Lichenologist 31*: 409-418.

## MORE INFORMATION

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